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Chennai Water Crisis

Every drop of water counts

Marathas Reservation

Reservation as panacea?

Libra

A Global Cryptocurrency

Chagos Archipelago

Dispute between UK and Mauritius

5G

Next Generation Cellular Technology

CSE 2018 Results

Rank 11
Pujya Priyadarshni

Rank 16
Dhodmise Trupti Ankush

Rank 21
Rahul Jain

Rank 24
Anuraj Jain

RANK 31
Mainak Ghosh

RANK 32
Sameer Saurabh

RANK 33
Awhale Manisha Manikrao

RANK 36
Deepesh Kedia

RANK 39
Patil Hemanta Keshav

RANK 41
Alok Kumar

RANK 43
Akshay Agrawal

RANK 52
Prateek Singh

RANK 53
Sumit Kumar

RANK 56
Dileep Mishra

RANK 59
Chahat Bajpai

RANK 60
Anya Das

RANK 61
Girdhar

RANK 63
Vishal Sah

RANK 65
Preeti

RANK 70
Suraj Patel

RANK 72
Dilip Pratap Singh Shekhawat

RANK 76
Akash Bansal

RANK 77
Shivansh Awasthi

RANK 80
Khushboo Gupta

RANK 81
Jay Shivani

RANK 85
Smit Santosh Lodha

RANK 89
Sawan Kumar

RANK 94
Jivani Kartik Nagjibhai

RANK 106
Sushil Kumar

Incredible Results Since 2013

CSE 2017

5 Ranks in top 50	34 Ranks in top 100	236 Ranks in the final list

Rank 3
Sachin Gupta

Rank 6
Koya Sree Harsha

Rank 8
Anubhav Singh

Rank 9
Soumya Sharma

Rank 10
Abhishek Surana

CSE 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

CSE 2015

5 Ranks in top 50	14 Ranks in top 100	162 Ranks in the final list

Rank 20
Vipin Garg

Rank 24
Khumanthem Diana Devi

Rank 25
Chandra Mohan Garg

Rank 27
Pulkit Garg

Rank 47
Anshul Agarwal

CSE 2014

6 Ranks in top 50	12 Ranks in top 100	83 Ranks overall selections

Rank 4
Vandana Rao

Rank 5
Suharsha Bhagat

Rank 16
Ananya Das

Rank 23
Anil Dhameliya

Rank 28
Kushaal Yadav

Rank 39
Vivekanand T.S

CSE 2013

5 Ranks in top 50	62 Ranks in the final list

Rank 9
Divyanshu Jha

Rank 12
Neha Jain

Rank 23
Prabhav joshi

Rank 40
Gaurang Rathi

Rank 46
Udita Singh

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POLITY

1. CAT can exercise same powers as HC

Context

- The Delhi High Court has held that the Central Administrative Tribunal (CAT), which adjudicates service matters, can exercise the same jurisdiction and powers, as a High Court, in respect of its contempt proceedings.

Laws

- Supreme Court in its 2001 judgment has held that Section 17 of the Administrative Tribunals Act, 1985, confers jurisdiction on the CAT to punish for its contempt.
- The Court has iterated that Article 323A of the Constitution of India and Section 17 of the Administrative Tribunals Act, 1985 empowers the CAT itself to exercise the same jurisdiction, powers and authority in respect of its contempt as a high court in terms of the Contempt of Courts Act, 1971.
- Section 15(2) of the Contempt of Courts Act, 1971, however, will not have any application in the context of contempt at CAT, it further held.
- The Court also recorded that the CAT itself has framed the Contempt of Courts (CAT) Rules, 1992 for initiation of criminal contempt as well as suo motu contempt proceedings.

2. CM revokes Naidu's decision, CBI can resume work in A.P.

Context:

- Reversing his predecessor's orders, Andhra Prdesh Chief Minister Y. S. Jagan Mohan Reddy has allowed the Central Bureau of Investigation (CBI) to go ahead with investigations and raids in the State without prior permission of the State government.

Background:

- The previous government through an order issued in November 2018, withdrew the 'general consent,' virtually curtailing the Central agency's powers to conduct investigations in the State.
- The decision came after Chandrababu Naidu and the other Opposition parties alleged that the BJP-led NDA government was misusing Central agencies to target Opposition leaders and their governments.
- The controversial step triggered a chain reaction with West Bengal Chief Minister Mamata Banerjee also withdrawing 'the general consent'.

Details:

- It effectively means the CBI can now enter the State without obtaining permission from the Andhra Pradesh government.

What is General Consent?

- The CBI is governed by the Delhi Special Police Establishment Act that makes consent of a state government mandatory for conducting investigation in that state.
- The general consent is routinely given by State governments for periods ranging from six months to a year to the CBI and all agencies under the Delhi Special Police Establishment (DSPE) Act, 1946.
- The consent is necessary as the jurisdiction of these agencies is confined to Delhi and Union Territories under this Act.
- There are two kinds of consent: case-specific and general. Given that the CBI has jurisdiction only over central government departments and employees, it can investigate a case involving state government employees or a violent crime in a given state only after that state government gives its consent.
- "General consent" is normally given to help the CBI seamlessly conduct its investigation into cases of corruption against central government employees in the concerned state. Almost all states have given such consent. Otherwise, the CBI would require consent in every case.

Does withdrawal of General Consent mean that the CBI can no longer probe any case in the two states?

- The CBI would still have the power to investigate old cases registered when general consent existed.
- Also, cases registered anywhere else in the country, but involving people stationed in state that has withdrawn general consent, would allow CBI's jurisdiction to extend to these states.
- There is ambiguity on whether the agency can carry out a search in either of the two states in connection with an old case without the consent of the state government.
- However, there are legal remedies to that as well. The CBI can always get a search warrant from a local court in the state and conduct searches.
- In case the search requires a surprise element, there is CrPC Section 166, which allows a police officer of one jurisdiction to ask an officer of another to carry out searches on his behalf.
- And if the first officer feels that the searches by the latter may lead to loss of evidence, the section allows the first officer to conduct searches himself after giving a notice to the latter.
- Withdrawal of consent will only bar the CBI from registering a case within the jurisdiction of such states.

3. Increase number of judges, CJI urges PM

Context

- Chief Justice of India Ranjan Gogoi has written letters to Prime Minister Narendra Modi seeking an

    * increase in the strength of judges in the Supreme Court

    * Raising the retirement age of high court judges to 65 years

Timeline of increase in SC Judges

- The original Constitution of 1950 envisaged a Supreme Court with a Chief Justice and 7 puisne Judges - leaving it to Parliament to increase this number.

- Parliament increased the number of Judges from 8 in 1950 to 11 in 1956, 14 in 1960, 18 in 1978 and 26 in 1986.

- Again in 2009, it was increased to 31, including the CJI, to expedite disposal of cases to keep pace with the rate of institution

Memorandum of Procedure (MoP) for the appointment of judges

- The MoP is a document which sets out the procedure for appointment of judges to High Courts and the Supreme Court.

- Judicial appointments is the joint responsibility of the Executive and the Judiciary, with neither body having primacy over the other.

- It was first prepared pursuant to the directions of the Supreme Court in the Second Judges case.

Issues with MoP

- In terms of the Memorandum of Procedure, if the Centre declines to grant its approval for the elevation of a particular person to the apex court, it may send the same back to the collegium for reconsideration. However, if the collegium decides to not reconsider, then the person is confirmed as an appointee.

    * In this case however, the Centre is neither confirming nor rejecting the names proposed. In effect, it is exercising what is known as a Pocket Veto.

    * The Memorandum of Procedure doesn't call for a time limit within which names have to be approved.

    * What this effectively means is that the Centre is free to sit on a recommendation as long as it wants and effectively stall the procedure.

- The present lack of consensus between the Executive and Judiciary, in relation to finalization of the MoP, has led to delays in filling up vacancies in the higher courts.

- National security and public interest: The government in the past have declined the collegium's recommendations for appointment on grounds of 'national security' and 'larger public interest'.

    * IIt might be in terms of corruption, or handling few cases which would have subverted justice.

Increasing the retirement age of HC Judges

- CJI urged Modi to consider introducing a constitutional amendment to increase the retirement age of high court judges from 62 to 65 years.

    * A judge takes time to evolve and by the time he is in a position to put innovative thoughts based on rich experience to the practice, he finds himself nearing retirement.

    * This can be avoided if the age of retirement is raised to an appropriate level so that his vast experience, deeper insight and expertise can be utilised for a longer period.

    * If retired HC judges are considered for appointment in tribunals beyond the age of 62 years, they may continue in HCs up to 65 years

- He listed a shortage of judges in high courts as one of the primary reasons for the "ever-growing" pendency.

- At present, 399 posts, or 37 per cent of sanctioned judge-strength, are vacant. The existing vacancies need to be filled immediately.

- However, despite best efforts put in by all stakeholders, it has not been possible to appoint judges to bring the working judge-strength anywhere close to the sanctioned judge-strength

International Practice

High court judges are forced out at 62, Supreme Court judges at 65, which, by global standards, are low retirement ages.

- In the UK, Supreme Court judges retire at 75, in Australia at 70 and in the US, there is no mandatory retirement age.

- Low retirement ages create short tenures and frequent vacancies.

Steps that needs to be taken

- Appointments to the High Court should be made on a time bound schedule so that the appointments are made well in advance preferably a month before the occurrence of the anticipated vacancy

    * Timelines for appointments to all higher courts should be specified in the MoP, and adhered to by all constitutional authorities.

- They must include the procedures for appointment of High Court (HC) judges from the subordinate judiciary.

- If the government were to reject a candidate on grounds of National Security and Public interest, it would be similar to giving them a veto power, which is against the constitutional mandate.

    * The terms 'national security' and 'larger public interest', and the circumstances that would fall within their purview should be specified.

- The revised MoP must include three essential requirements: transparency, accountability and objectivity.

4. Is NITI Aayog old wine in a new bottle?

Background:

- The first major reform PM Narendra Modi announced in his first term was to abolish the Planning Commission.
- He replaced it with the loftily titled 'National Institution for Transforming India' (NITI Aayog).
- Now, when the country's economy has not performed to the high expectations Mr. Modi had created, the performance of the NITI Aayog is under scrutiny.

Current scenario:

- There are a lot of issues in the Indian Economy that need immediate attention.
    * Employment and incomes must be increased
    * Investments and growth must be revived
    * The financial sector needs to be untangled
    * International trade must be given due attention
    * The perennial problems of poor education and health must be addressed
    * The growing problems of environmental pollution and water scarcity must be paid heed to.
- Even though statistical confusion was created which seemed to deny that problems of unemployment and growth were serious, high-powered Cabinet committees have been formed to tackle them.

Issues:

- Regardless of whether or not India has the fastest growing GDP, it has a long way to go to achieve economic and social inclusion, and restore environmental sustainability.
- India's problems are complex because they are all interrelated. Fixing one part of the system alone can make matters worse. For example, providing skills to millions of youth before there are enough employment opportunities is a bold fix that can backfire. The complexity of the task demands a good plan and a good strategy.
- There is deep concern that NITI Aayog has lost its integrity as an independent institution to guide the government; that it has become a mouthpiece of the government and an implementer of the government's projects.
- Many insist that NITI Aayog must have the ability to independently evaluate the government's programmes at the Centre and in the States.
- Some recall that an Independent Evaluation Office set up in the last days of the UPA-II government was swiftly closed by the NDA government.

- Others counter that the Planning Commission had a Programme Evaluation Organisation all along and which continues.

Details:

- Modi's predecessors, Manmohan Singh and Atal Bihari Vajpayee, had faced similar, large, economic, social, political and global challenges.
- When Vajpayee was presented a nine-point plan by a global think-tank to increase the economy's growth to 9%, he famously retorted, "We know all that. The question is, how will it all be done?" He highlighted that many stakeholders must be involved in the implementation of a plan in a large, diversified and democratic country — the States, the private sector, civil society and even the political Opposition. Therefore, it is not good enough to have a plan, there must also be a strategy for its cooperative implementation too.
- Singh declared that reform of the Planning Commission was long overdue. An intensive exercise was undertaken. Many stakeholders were consulted. International practices were examined. An outline was drawn of a substantially reformed institution which would, have a capability for systems reform rather than making of Five-Year Plans, and which would have the power of persuasion without providing budgets.
- A commission chaired by C. Rangarajan, then Chairman of the Prime Minister's Economic Advisory Council, examined budgetary processes, divisions of responsibilities between the Finance Ministry and the Planning Commission, and distinctions between 'plan' and 'non-plan' expenditures.
- It concluded that budgetary responsibility must be concentrated in the Finance Ministry, and it was no longer desirable for the Planning Commission to have powers for financial provisions.
- Some in the Planning Commission were worried that it would lose its teeth if it did not have any financial power.
- Chief Ministers retorted that the Planning Commission must improve its ability to understand their needs and to develop ideas that they would want to adopt because they accepted the ideas as good for them, not because they would have to if they wanted the money.
- Modi, understood well the limitations in the Planning Commission's capabilities and what it needed to do to reform itself. Therefore the bold charter of NITI Aayog that Mr. Modi announced in 2015 was consistent with Dr. Singh's and Vajpayee's insights.

Way forward:

- Implementation of radical change is never easy. If things don't go well soon, nostalgia will rise for the old order (the planning commission), even though there was dissatisfaction with it. And the change-maker will be blamed for the disruption.

- The NITI Aayog charter is a good starting point for a new journey in transforming the governance of the Indian economy.
- The NITI Aayog and the government would do well to conduct an open-minded review of what NITI Aayog has achieved so far to adopt the new role described in its charter — that of a catalyst of change in a complex, federal, socioeconomic system. And assess whether it has transformed its capabilities sufficiently to become an effective systems reformer and persuader of stakeholders, rather than merely be an announcer of lofty multi-year goals and manager of projects, which many suspect it is.
- The traditional approach of after-the-fact evaluation sits in the old paradigm of numbers, budgets and controls.
- The transformational approach to planning and implementation that 21st century India needs, which is alluded to in NITI's charter, requires evaluations and course-corrections in the midst of action.
- It requires new methods to speed up 'organisational learning' among stakeholders in the system who must make plans together and implement them together.
- There is a need for new methods of cooperative learning and cooperative implementation by stakeholders who are not controlled by any central body of technical experts with political and/or budgetary authority over them.
- The debate about NITI Aayog's efficacy must focus on whether or not it is performing the new role it must, and what progress it has made in acquiring capabilities to perform this role, rather than slipping back into the ruts of yesterday's debates about the need for a Planning Commission.

5. **Leader of Opposition**

- The leader of the opposition is one of the key parliamentary functionaries whose role, though not defined in any rule, is of very great importance in the functioning of a legislature. He or she is invariably a senior leader representing the main opposition party in the legislature.

Law

- The leader of the opposition in the houses of Indian parliament is a statutory post. This post is defined in the Salaries and Allowances of Leaders of Opposition in Parliament Act, 1977 as simply the leader of the numerically biggest party in opposition to the government and recognised as such by the speaker/chairman:
  * Section 2 of this act states: "'Leader of the Opposition', in relation to either House of Parliament, means that [a] member of the Council of States or the House of the People… who is, for the time being, the Leader in that House of the party in opposition to the Government having the greatest numerical strength and recognised as such by the Chairman of the Council of States or the Speaker of the House of the People…"

- Two things are made clear by the act:
  * One, the leader of the party in opposition to the government which has the greatest number becomes the Leader of Opposition.
  * Two, the Speaker needs to recognise him/her as the Leader of Opposition.
  * The law is clear that the Speaker is required to recognise the leader of the numerically largest party in opposition as the leader of opposition. The option of not recognising him/her is just not available.
- The Leaders and Chief Whips of Recognised Parties and Groups in Parliament (Facilities) Act, 1998 also refers to a recognised party in the Lok Sabha as a party that has not less than 55 members.

Leaders of Opposition over time

- Historically, the first officially designated Opposition party in Parliament emerged from the break up of the all-dominant Congress party in power.
- In 1969, when Indira Gandhi was the Prime Minister, the Congress split to form the Indian National Congress (Requisitionists) and the Indian National Congress (Organisation). The Leader of INC(O), Ram Subhag Singh, became the first person to be formally recognised as LoP in the Lok Sabha.
- Until 1977, there were no emoluments and perks attached to the position of LoP. There is no provision in the Constitution or even in the Lok Sabha Rules of Procedure in regard to the recognition of the LoP.
- Right from the first Lok Sabha, the practice has been to recognise the leader of the largest party in Opposition as the LoP provided that party has a strength that is enough to constitute the quorum for a sitting of the House, or one-tenth of the total membership of the House — at present that comes to 55 members.
- The first LoP was designated only in 1969 and there was no such post in the fifth (1971-77), seventh(1980-84) and eighth (1984-89) Lok Sabha.
- From the 9th to the 15th Lok Sabhas, since the requirement of having a minimum strength of 55 members was fulfilled, the Lok Sabha had duly recognised Opposition parties and LoPs

10 per cent of the members of the House for the Speaker to recognise someone as the Leader of Opposition.

- Yes, there is direction 121 issued by the Speaker for recognising a party or group for the purpose of providing certain facilities in the House.
- Under this direction, issued by Speaker G.V. Mavalankar, to be recognised as a legislature party, a party should have at least one-tenth of the strength of the House. This direction relates to the recognition of a party, not the Leader of Opposition.

- Direction 120 reads: "The Speaker may recognise an association of members as a Parliamentary Party or Group for the purpose of functioning in the House and the decision of the Speaker shall be final."

- Direction 121(1)(c) reads: "In recognising a Parliamentary Party...(it) shall have at least a strength equal to the quorum fixed to constitute a sitting of the House, that is one-tenth of the total number of members of the House."

Delhi Example

- In the Delhi assembly, the only opposition party, namely the Bharatiya Janata Party, got the post of leader of the opposition although it had only three members in an assembly of 70 members.

- Speaker Ram Niwas Goyal acted under the Leader of Opposition in the Legislative Assembly of the National Capital Territory of Delhi (Salaries and Allowances) Act, 2001, which has a provision identical to the central law.

- The Delhi speaker was absolutely right in recognising a member of the three-member legislature party of the BJP as leader of the opposition as that party, being the numerically biggest party in opposition to the AAP government in the assembly, was legally entitled to the post.

Why LoP is important?

- LoP is critical to effective functioning of the opposition in the Parliament and its role in bringing bipartisanship and neutrality to the appointments in institutions of accountability and transparency - CVC, CBI, CIC, Lokpal etc. - can't be overlooked or undermined, no matter what the flexibility or ambiguity that exist in the legal frameworks

Westminster Model

- In the British parliament, the leader of opposition is referred to as the 'shadow prime minister', so called because he or she is always in a state of readiness to take over the government if the incumbent government falls.

- There, the leader of opposition forms a shadow cabinet too. Thus, the role of this parliamentary functionary under the Westminster tradition is not only to oppose and criticise the government, but also to take the responsibility of forming an alternate government should it become possible to do so in the event of the fall of the existing one

Way forward

- Since there is no constitutional provision, the 1977 law does not provide for the requirement of 55 members as an essential pre-requisite. As it all depends on the Speaker's directions and discretion, it may be hoped that rightful action will be taken.

- The simple way out is to substitute 'pre-poll alliance' for 'party' or say 'party or pre-poll alliance'.

- In any case, pre-poll alliances are a fact of our political life and are already being extended credibility and legitimacy in the matter of the President and Governors deciding on who to call first for forming the government in cases where no party secures a clear majority support in the House.

6. Marathas Reservation

Context

- The Bombay High Court upheld the Maharashtra government's decision to provide reservation to the Maratha community under the socially and Educationally Backward Classes (SEBC) Act, 2018.

Who are the Marathas?

- They are a Marathi-speaking, politically dominant community in Maharashtra.

- They make up about one-third of the population of the state.

- Historically, they have been identified as a "warrior" caste with large land-holdings.

- While division of land and agrarian problems over the years have led to a decline of prosperity among middle class and lower middle class Marathas, the community still plays an important role in the rural economy.

History of Maratha Quota

- The demand for Maratha reservation was first mooted in the 1980s.

- In 1992, the Maratha Mahasangh had made a representation to the state government to provide reservation to the community.

- The Nationalist Congress Party was the first party that had promised to provide reservation to the community in its 2009 election manifesto.

- In 2014, the Congress-NCP government had brought in an ordinance for 16 per cent Maratha quota, but it failed the legal test.

- After largescale protests by the Marathas in November 2018, the state legislature again passed an Act proposing 16 per cent reservation in education and government jobs for the community, declared as socially and educationally backward class by the government.

- The SEBC Act 2018 was then challenged in the Bombay High Court, terming it as violative of the Supreme Court order that reservations in any state cannot exceed 50 per cent.

Reservation numbers

- The Bombay High Court upheld reservation for Marathas in the State but quashed the 16% quota by calling it "not justifiable".
- The court said it should not exceed 12% for education and 13% for jobs as recommended by the Maharashtra State Backward Class Commission (MSBCC).

What is the existing quantum of reservation in Maharashtra?

- Following the 2001 State Reservation Act, the total reservation in the state is 52 per cent, out of which, the larger quotas are for SC (13%), ST (7%) and OBC (19%), with the rest going to Special Backward Class (2%) Vimukti Jati (3%), Nomadic Tribe (B) (2.5%), Nomadic Tribe (C) (Dhangar) (3.5%) and Nomadic Tribe (D) (Vanjari) (2%).
    * The quotas given to the various Nomadic Tribes and Special Backward Classes, in fact, have been carved out of the total OBC quota.
- In the Indra Sawhney case, a nine-judge bench of the Supreme Court had ruled that total reservation for backward classes could not go beyond 50 per cent.
    * Maharashtra is one of the few states which is an exception to the rule.
- The addition of the 12-13 per cent Maratha quota will take the total reservation in the state to 64-65 per cent.

What did the Court Say?

The SC in an order in July 2010, it allowed states to exceed the 50 per cent limit for reservation, provided they had solid scientific data to justify the increase.

- The statute is Constitutionally valid and it is the legislature of the State, which would better understand the contingencies and the extraordinary circumstances and exceptional situations, and it is thus the best judge to reflect on the needs of a particular class
- The court recorded, "The 50% limit of reservation can be crossed subject to availability of quantifiable and contemporaneous data reflecting backwardness, inadequacy of representation and without affecting the efficiency in administration."
    * The judgment said the classification of the Maratha class into "Socially and Educationally Backward Class" was justified.
- The court also examined reports by previous commissions, which had studied the Maratha community, and concluded that its "erroneous exclusion" from reservation was an "extraordinary" situation that the state government had attempted to change.

* It said that none of the earlier reports had empirical data and therefore could not stand the scrutiny of classifying Marathas as "not backward".

- It said the Maharashtra State Backward Class Commission (MSBCC) had for the first time carried out a "systematic scientific analysis" based on ground surveys, collecting data from households.
    * According to it 93% of Marathas earn less than Rs 1 lakh annually and 37.28% of the community lives below the poverty line (BPL), with 76.86% of Maratha families dependent on agriculture and farm labour to earn their sustenance — this could help the state government's claim of 'scientific data' to support the reservation.
- While the backwardness of the community was not comparable to SCs and STs, it was comparable to several other backward classes, which find place in the list of Other Backward Classes pursuant to the Mandal Commission, the court said.

Socially and Educationally Backward Class

- The law created a group called 'Socially and Educationally Backward Class' and included Marathas as the sole group under the category.
- After all, social and educational backwardness are but an aspect of backwardness and must therefore fall within the OBC classification.
- Even conceding that Marathas are backward and need reservation, they should have ideally been included within the OBC.
- But the High Court upheld the creation of a distinct class of socially and educationally backward class with just one caste (Marathas) included under it.
- The issue of Gujjar reservation was struck down in Captain Gurvinder Singh (2016) though along with Gujjars, four other castes were also given the benefit.
- Jat reservation, in Ram Singh (2015), was declared unconstitutional because only one caste was favoured. Maratha reservation thus borders on class legislation rather than reasonable classification. Article 14 prohibits class legislation.

Issues

- Originally envisaged as a temporary tool to uplift India's most marginalised communities — Dalits and tribals — and create a level playing field, reservations slowly became an instrument of displaying and seeking political power.
    * From social justice, its objectives expanded. It became a policy device against backwardness, for employment creation, even power-sharing.
- In recent years dominant communities — Marathas, Jats, Patidars — launched movements seeking a share of the reservation.

* Instead of addressing the underlying causes of these movements — the crisis in agriculture; limited educational opportunities; the lack of jobs in the formal economy — the political elite decided to take the short-cut and provide quotas.

• Given the fact that government jobs are shrinking, there is overwhelming competition for seats in public educational institutions, and only a few from any community can actually avail the benefits of quotas, reservations are no panacea.

• Ten of Maharashtra's 18 chief ministers since the state was founded in 1960 have been Maratha; for four decades till 2004, 55% of the total MLAs were Maratha.

  * Besides powerful Maratha families have large land holdings, they headed 85 of the state's 105 sugar factories and 23 district cooperative banks.

  * Almost all the state's milk cooperatives and cooperative credit institutions were under their control, as are half of Maharashtra's private educational institutions.

• The Mandal Commission identified Marathas to be a 'forward' community, two State Backward Class Commissions, namely the Khatri Commission (1995) and Bapat Commission (2008), recommended not to include them within the OBC category.

• Every state will quote this order as precedent.

Questions raised about Gaikwad Commission

• After the High Court had stayed the 16% reservation made on the basis of the recommendations of non-statutory Narayan Rane Commission (2015), the matter was referred to the M.G. Gaikwad Commission in 2017, which submitted its report in 2018.

• The Mandal Commission had 11 yardsticks to determine backwardness. On certain parameters, the Gaikwad Commission did go beyond Mandal; some of the yardsticks it adopted were controversial. For example, the Commission noted that of the total farmer suicides of 13,368) 2,152 Maratha farmers had ended their lives. It ignored the fact that these were not due to backwardness but because of agrarian crises.

• The Commission also attached great importance to its finding that while 69% Maratha families sought medical treatment for jaundice, 9.65% sought treatment from tantriks while 0.54% left it 'to the mercy of god'; superstition, and 'blind vows' were factored in as proof of backwardness though such irrational practices or beliefs are prevalent even among the higher castes as well.

• The finding of 71% Marathas owning land of less than 2.5 acres was considered a sign of backwardness but such small holdings are due to fragmentation of land as a result of inheritance laws rather than it being a sign of backwardness.

Other state examples

• Tamil Nadu: Reservation is up to 69 per cent (SC-18 per cent, ST-one per cent, OBC-50 per cent), and was included in the Ninth Schedule.

  * Laws under this schedule are beyond the purview of judicial review, even though they violate fundamental rights enshrined under Part III of the Constitution.

Future Course of action

• Advocates on either sides are working on moving to SC as both feel the limitation of 12% and 13% and those opposing the verdict feel it breaks the 50% mandate of reservation in the State.

Conclusion

• But beyond political compulsions, and beyond legality or constitutionality, this issue poses a larger challenge. That challenge is not merely about semantics, about the meanings of "exceptional" or "adequate representation". It is to realise that such easy routes endanger societal balance (among groups identified as backward) even as they give a false sense that the issue is amicably resolved.

7. Merger in Anti Defection Law

Background

• The anti-defection law was added to the Constitution as the Tenth Schedule by the 52nd amendment during Rajiv Gandhi's tenure as the Prime Minister in 1985

• It lays down the process by which legislators may be disqualified on grounds of defection

• A legislator can be disqualified under the anti-defection law if he either voluntarily gives up the membership of his party or disobeys the directives of the party leadership on a vote. He is then disqualified by the Presiding Officer of a legislature based on a petition filed by any other member of the House.

• The law applies to both Parliament and state assemblies.

Decision of the Presiding Officer is subject to judicial review

• The law initially stated that the decision of the Presiding Officer is not subject to judicial review.

• This condition was struck down by the Supreme Court in 1992, thereby allowing appeals against the Presiding Officer's decision in the High Court and Supreme Court.

• However, it held that there may not be any judicial intervention until the Presiding Officer gives his order.

Is there a time limit within which the Presiding Officer has to decide?

• The law does not specify a time-period for the Presiding Officer to decide on a disqualification plea.

- Given that courts can intervene only after the Presiding Officer has decided on the matter, the petitioner seeking disqualification has no option but to wait for this decision to be made.

- There have been several cases where the Courts have expressed concern about the unnecessary delay in deciding such petitions

- In some cases this delay in decision making has resulted in members, who have defected from their parties, continuing to be members of the House.

- There have also been instances where opposition members have been appointed ministers in the government while still retaining the membership of their original parties in the legislature

Merger

- According to the Tenth Schedule, it requires at least two-third members of a legislature party to form a new political group or 'merge' with another political party without getting disqualified under the anti-defection law.

- Previously, paragraph 3 of the Tenth Schedule recognised a 'split' if at least one-third members of the legislature party decided to form or join another political party. However, this provision was done away with by the 91st amendment to the Constitution in 2003.

- The amendment, which came into force in January 2004, does not recognise a 'split' in a legislature party and instead, it recognizes a 'merger'.

Context

- Speaker endorses merger of 12 Telangana Congress MLAs with TRS Legislature Party

- In a major setback to the Congress in Telangana, the 12 party MLAs who defected to the TRS were recognised as members of the ruling party by Assembly Speaker

- Speaker acceded to the demand of the 12 MLAs, considering the fact that they constituted two-thirds of the total number of 18 MLAs.

8. NPP first from NE to get national party status

Context:

The Election Commission of India has declared the National People's Party. This made the NPP, formed in 2013, the first from the north-eastern region to earn the tag.

Details:

- NPP has also been given the status of a state party in Arunachal Pradesh, where it has won five seats in recently-held election.

- In its order, the ECI said that the NPP was given the national party status for fulfilling conditions such as polling more than 6% of the total votes in the last general election and being recognised as a State party in at least four States.

- The NPP is recognised as a State party in Arunachal Pradesh, Manipur, Meghalaya and Nagaland.

Recognition of a political party as a National party/ State party:

- Section 6C deals with conditions for continued recognition as a national or state party under The Election Symbols (Reservation and Allotment) Order, 1968.

- For a party to be declared a national party it\

  * ought to have 6% of valid votes in the assembly or Lok Sabha in a minimum of 4 states and four MPs from any state or

  * 2% of Lok Sabha seats (11 MPs) from 3 or more states or

  * should be a state party in 4 states

- In the case of state party status, the party

  * must have 6% of the total valid votes polled and two seats in the assembly or

  * 6% of the votes in Lok Sabha from the state and 1 MP from the same state or

  * 3% of the total seats in the assembly or at least three seats whichever is more or

  * 1 MP from every 25 seats in the Lok Sabha or 8% of the total votes in the assembly.

Note:

- In August 2016, the ECI had brought changes in Paragraph 6C of the Election Symbols (Reservation and Allotment) Order, 1968 to review the status of political parties every 10 years, instead of earlier norm of 5 years

- If parties lose the national party status, they can no longer stake claim to their symbol and are not eligible for free airtime on public broadcasters during elections or to an office space in the national capital.

9. One Nation, One Election

Expenditure incurred in Rs Crore (by Lok Sabha election)
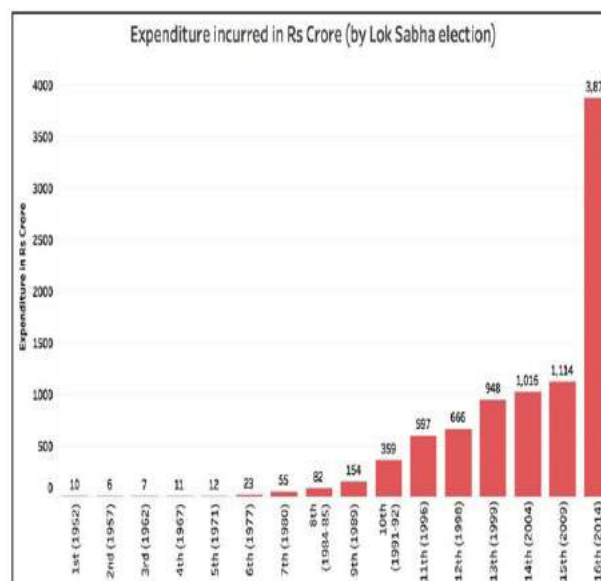
- The average expenditure per voter was less than one rupee till the 6th general election in 1977.

- The average expenditure per voter crossed Rs 10 for the first time during the 11th general election in 1996.

- The average expenditure per voter was around Rs 15 during each of the general elections in 1999, 2004 & 2009.

- Average expenditure per voter was the highest ever, more than Rs 45, during the 16th general elections in 2014.

Yes

- It would save money, resources and manpower.

- Large section of the security forces, bureaucracy and political machinery having to be mobilised for up to 200 days a year on account of electioneering.

- Frequent elections affect the development climate, and hence it is better to have simultaneous elections in the country.

- The Law Commission had recommended simultaneous elections to Lok Sabha, Vidhan Sabha and the local bodies as far back as in 1999.

- The matter was examined by a Parliamentary Standing Committee in December 2015, and was also referred to the Election Commission of India (EC). Both supported it in principle.

Other Merits

- The 2019 general election was the most expensive on record; a whopping ₹60,000 crore was reportedly spent on the whole exercise. Given that there is no cap on the expenditure incurred by political parties, they spend obscene amounts of money in every election. It is argued that simultaneous elections would help reduce this cost.

- Second, frequent elections hamper the normal functioning of the government and disrupt civic life. This happens because the Model Code of Conduct (MCC) comes into operation as soon as the EC announces the election dates.

  * This means that the government cannot announce any new schemes during this period. This results in what is often referred to as a policy paralysis.

  * The government cannot make any new appointments or transfer/ appoint officials. The entire government manpower is involved in the conduct of elections.

- Elections are the time when communalism, casteism and corruption are at their peak. Frequent elections mean that there is no respite from these evils at all

- From the point of view of EC, simultaneous elections make perfect sense because the voters for all three tiers are the same, polling booths are the same and staff/security is the same — the suggestion of "one nation, one election" seems logical.

The hurdles

- First, how will "one nation, one election" work in case of premature dissolution of the Lok Sabha, for instance, as happened in late 1990s when the House was dissolved long before its term of five years was over

  * In such an eventuality, would we also dissolve all State Assemblies? Similarly, what happens when one of the State Assemblies is dissolved? Will the entire country go to polls again? This sounds unworkable both in theory and in the practice of democracy.

- Second, as for the implementation of schemes of the government during the MCC period, only the new schemes are stopped as these could be tantamount to enticing/bribing voters on the eve of elections.

  * All ongoing programmes are unhindered. Even new announcements that are in urgent public interest can be made with the prior approval of the EC

- Additionally, frequent elections are not so bad for accountability after all. They ensure that the politicians have to show their faces to voters regularly.

  * Creation of work opportunities at the grass-root level is another big upside.

  * The most important consideration is undoubtedly the federal spirit, which, inter alia, requires that local and national issues are not mixed up.

Steps that can be taken

- First, the problem of uncontrolled campaign expenditure can be remedied by introducing a cap on expenditure by political parties.

  * State funding of political parties based on their poll performance also is a suggestion worth considering.

  * Private and corporate fund collection may be banned.

- Second, as I have suggested elsewhere, the poll duration can be reduced from two-three months to about 33 to 35 days if more Central armed police forces can be provided.

  * Violence, social media-related transgressions and issues related to the enforcement of the MCC which are unavoidable in a staggered election will vanish if the election is conducted in a single day. All that needs to be done is to raise more battalions. This will also help in job creation.

Conclusion

- To conclude, it is undeniable that simultaneous elections would be a far-reaching electoral reform. If it is to be implemented, there needs to be a solid political consensus, and an agenda of comprehensive electoral reforms should supplement it.

- The pros and cons need to be appropriately assessed and practical alternatives sincerely considered.

- It is good that the government continues to encourage a debate on the subject rather than forcibly pushing it through.

10. Thin-skinned masters

Context

- In a recent development, the honourable Supreme Court of India gave an order granting immediate bail to journalist Prashant Kanojia, who was arrested by the Uttar Pradesh Police for sharing on Twitter a video pertaining to Chief Minister Yogi Adityanath.

Details

- Experts opine that this development was not unexpected.

- It was obvious that the arrest was arbitrary, unwarranted and without any basis in law.

- As a matter of fact, the State government's attempt to justify its action smacked of perversity and malice.

- The vacation Bench, comprising Justices Indira Banerjee and Ajay Rastogi, made the right call in ignoring technical objections by counsel for the State government that the apex court should not intervene as only a regular bail petition could secure relief to someone remanded by the jurisdictional magistrate.

- Importantly, the Bench did not consider the controversial tweets as sufficient grounds for abridging personal liberty.

- Further, in observing that the order of release would not amount to an endorsement of Mr. Kanojia's tweets, the court was only making a minor concession to the police claim that he was making inflammatory comments on social media.

A matter of concern:

- It is difficult to believe that at a time when social media networks are full of rampant abuse and distasteful material, the police can be allowed to choose one or two that appear to target political functionaries and incarcerate those airing such views. Thus, disregarding well-established norms for arrest and remand in the process.

- In Mr. Kanojia's case, defamation, which is a non-cognisable offence, and Section 66 of the Information Technology Act were cited initially.

- The latter (Section 66 of the Information Technology Act) relates to damaging computer systems, and is inapplicable to a social media post. It was quite clear that there was no case for remand.

- There was a more flagrant illegality when Mr. Kanojia was taken out of Delhi without a transit remand from a local magistrate, mandatory when an accused is taken from one State to another.

- Faced with criticism, the U.P. Police added a section dealing with the offence of causing public mischief and disturbing public tranquillity, besides Section 67 of the IT Act, which relates to sharing of obscene or prurient material, with the motive of obtaining a remand order.

- As a matter of fact, a few other journalists have been arrested for discussing the content of the video clip, in which a woman is seen expressing her wish to marry the Chief Minister.

- However, what is disquieting, but unsurprising, is the perfunctory attitude of civil servants towards the personal liberty of citizens.

Concluding Remarks:

- It is one thing to pursue violations through legal action, but quite another to lock up people for posts they deem offensive to their political masters and conjure up justifications for their arrest.

- It is time magistrates who pass mechanical orders without application of mind and officers who carry out illegal instructions from the political leadership are made to face exemplary disciplinary action.

11. Triple Talaq Bill

Context

- The Triple Talaq Bill criminalising instant divorce by Muslim men was passed in the Lok Sabha

Basics

- Talaq-e-biddat refers to a practice of divorce under Muslim personal laws simply by pronouncing the word 'talaq' thrice in one sitting by a Muslim man to his wife.

- Unlike in Christianity or Hinduism, the view of marriage is different for Muslims. Under Muslim law, marriage is not seen as a sacrament but as a civil contract.

- The contract is accepted between the two parties on the basis of mutual consent, after the utterance of 'qabul'.

Supreme Court

- It set aside the decade-old practice of instant triple talaq saying it was violative of Article 14 and 21 of the Indian Constitution.

Features in the bill

- The triple talaq bill seeks to make instant triple talaq a criminal offence punishable with three years in jail.

  * The bill is aimed at Muslim men who divorce their wives by pronouncing "talaq" three times in one go.

- The bill declares instant triple talaq a cognisable offence.

    * Apprehensions have been raised over the cognisable nature of the instant triple talaq saying that it provides the ground for misuse.

- Under the law, only an aggrieved woman or a close relative can file a police complaint against her husband.

- The Bill provides that the Magistrate may grant bail to the accused. The bail may be granted only after hearing the woman (against whom talaq has been pronounced), and if the Magistrate is satisfied that there are reasonable grounds for granting bail.

- The offence may be compounded by the Magistrate upon the request of the woman (against whom talaq has been declared). Compounding refers to the procedure where the two sides agree to stop legal proceedings, and settle the dispute.

    * The terms and conditions of the compounding of the offence will be determined by the Magistrate.

- Allowance: A Muslim woman against whom talaq has been declared, is entitled to seek subsistence allowance from her husband for herself and for her dependent children.

    * The amount of the allowance will be determined by the Magistrate.

- A Muslim woman against whom such talaq has been declared, is entitled to seek custody of her minor children. The manner of custody will be determined by the Magistrate.

Significance

- The Bill would ensure gender equality and gender justice to Muslim women.

- The Bill would also help in protecting the rights of married Muslim women and prevent divorce by practice of 'talaq-e-biddat' by their husbands.

- The pro-criminalisation progressives maintain that the prime intent behind enacting a stringent law is not to punish the offender but to act as a deterrent.

    * The prospect of three years in jail is necessary, they argue, to warn the Muslim husband that the sword he had so far held over his wife's head will henceforth hang over his own.

    * Simple: No one gives triple talaq, no one gets hurt, no one goes to jail.

- It also provides for payment of subsistence allowance to married Muslim women and dependent children.

Concerns

- The Bill is a "textbook example of class legislation" as it was pointed at one community — the Muslims.

- The Bill violated constitutional rights as it stipulated a three-year jail term for men, whereas a similar offence by non-Muslim men attracted only a year in jail.

- If amendments are to be made, it can be made in IPC and CPC. This bill is counterproductive and against criminal jurisprudence. This penalty of three years is against the doctrine of proportionality. It may aggravate the already status of alienation of Muslim Women. There is no definition for subsistence here because when the husband who is in jail cannot maintain the wife.

- Irrespective of the government's intent three years in prison of the convicted husband will end up penalising the already aggrieved wife and children too. He will be fed, clothed and housed by the jail authorities. But minus his income, who will pay for the needs of his wife and children?

An alternate to the bill

- All things considered, what would be in the best interests of justice to Muslim women is to invoke a secular law that already exists: Protection of Women from Domestic Violence Act (PWDVA), 2005.

- If justice to Muslim women rather than punishing Muslim men is the real objective, Parliament should pass a law unambiguously stating that the very utterance of the words "talaq, talaq, talaq" would amount to "domestic violence" as defined in the PWDVA.

- The PWDVA was conceived as a law that ensures speedy relief — ideally within three months — to an aggrieved woman: Right to stay in the marital home, protection against violence, right to maintenance etc. What's more, she is provided the free services of a government-appointed "protection officer". This saves her lawyer's fees for which she often has no money.

- The real beauty of the PWDVA lies in the fact that while civil in nature, it has a reasonably stringent penal provision built into it. Compliance with the magistrate's order will ensure speedy relief for the wife and children. For the husband, too, it will mean saving on lawyer's fees and avoiding the stigma of jail. Non-compliance with the magistrate's orders will mean imprisonment of up to one year, or fine up to Rs 20,000, or both (Section 31 of the Act).

12. Unleashing the potential of urban India

Introduction

- The Global Metro Monitor 2018 released by the Brookings Institution, a Washington-based think tank reports that 36% of employment growth and 67% of GDP growth were contributed by the 300 largest global metros, with those in emerging economies outperforming those in advanced economies.

- Metropolitan areas concentrate and accelerate wealth as these are agglomerations of scale that concentrate higher-level economic functions.

India

- Nine Indian metros feature in the top 150 ranks of the economic performance index.

- Delhi has been ranked on the sixth place in terms of best performing metropolitan economies in the world.
- Other Indian metropolitan cities that have been able to secure the place in top 100 metro cities include Hyderabad (ranked 14), Surat (19), Mumbai (23), Bengaluru (46), Kolkata (59), Ahmedabad (86), and Pune (88).
- By 2030, India will have 71 metropolitan cities, of which seven would have a population of more than 10 million.
- Clearly metropolises are going to be a key feature of India's urbanisation and will play a crucial role in fuelling growth.

Laws for Urban Management

- Article 243P(c) of the Constitution defines 'metropolitan areas' as those having "population of ten lakhs [a million] or more, comprised in one or more districts and consisting of two or more municipalities/panchayats/ other contiguous areas, specified by the governor through public notification to be a metropolitan area".
    * It recognises metropolitan areas as multi-municipal and multi-district entities.
- It mandates the formation of a Metropolitan Planning Committee (MPC) for preparing draft development plans, considering common interests between local authorities, objectives and priorities set by Central and State governments, and investments likely to be made in the area by various agencies.
- To ensure the democratic character of the MPC, it is mandated that at least two-thirds of the members of the committee must be elected by and from among the elected members of the municipalities and chairpersons of the panchayats in the metropolitan area, proportionate to the ratio of their respective populations.
    * The size and manner of filling such seats are left to the State's discretion.

Concerns

MPCs were expected to lay frameworks for metropolitan governance, but on the ground they do not exist in most cases.

- Janaagraha's Annual Survey of India's City-Systems (ASICS) 2018 found that only nine out of 18 cities mandated to form MPCs have constituted them.
- Where constituted, their functionality is questionable, with the limited role of local elected representatives raising further questions on democratic decentralisation.
- Thus, the provision for an MPC has not introduced robust governance of metropolises, as the metropolises continue to be a collection of parastatals and local bodies in an entirely fragmented architecture.

- State governments are reluctant to concede power.

UK Model- City Deals

- The U.K. has rolled out 'City Deals', an agreement between the Union government and a city economic region, modelled on a 'competition policy style' approach. The city economic region is represented by a 'combined authority'.
    * It has shifted control of decisions away from the federal government to local authorities
    * It was designed to give more power and freedom to localities so they could do what they thought best to achieve growth in their area.
- This is a statutory body set up through national legislation that enables a group of two or more councils to collaborate decisions, and which is steered by a directly elected Mayor.
    * London established the Greater London Authority and held its first mayoral election in 2000.
    * The London Assembly elects 25 members based on proportional representation.
- This is to further democratise and incentivise local authorities to collaborate and reduce fragmented governance, drive economic prosperity, job growth, etc.
    * Ex: Belanduru Lake-
    * Bangalore Development Authority (BDA) is the present custodian of the lake with regard to rejuvenation. But, the BDA is not ready to take up restoration work, until and unless Bengaluru Water Supply and Sewerage Board (BWSSB) ensures that sewage water does not enter the lake. BDA claims that restoration will be a futile exercise, if sewage water continues to enter the lake.
- 'City Deals' move from budget silos and promote 'economic growth budget' across regions. The U.K. has established nine such combined authorities.

Other Countries

- Australia adopted a regional governance model along these lines in 2016 and has signed four City Deals.
- Meanwhile, China is envisioning 19 seamlessly connected super city clusters.

India

- India, however, is yet to begin the discourse on a governance framework for the future of its metropolises.
- It is yet to recognise that disaster management, mobility, housing, climate change, etc. transcend municipal boundaries and require regional-level solutions.

Way forward

- The Central government must create a platform to build consensus among State governments.

- Perhaps, the Greater Bengaluru Governance Bill, 2018, drafted by the Expert Committee for Bruhat Bengaluru Mahanagara Palike Restructuring, could offer direction.

- It proposes for a Greater Bengaluru Authority headed by a directly elected Mayor, responsible for the overall planning of Greater Bengaluru with powers for inter-agency coordination and administration of major infrastructural projects across the urban local bodies within the area.

- However, this Bill is yet to see the light of day.

ECONOMY

1. Aluminium Scrap Dumping

Context:

- India has overtaken China as the preferred destination for aluminium scrap with imports growing 18.8% in the January-March 2019 quarter compared with the same quarter of the previous year.

Stats

- India imported 3,34,725 tonnes of aluminium scrap in the January-March 2019 quarter compared with China's 3,30,567 tonnes in the same period, according to a report by S&P Global Platts.

- While India's imports grew 18.8% over this period, China's declined by 32.1%.

- This means that the scrap is being diverted and dumped in India. Imports of scrap from the U.S. have gone up by about 148% from 2017-18 to 2.6 lakh tonnes in 2018-19.

Background

- The U.S. had imposed an import duty of 10% on aluminium in March 2018 and in response, China had implemented a 25% duty on the import of aluminium scrap from the U.S.

China's Policy

- China has not only put the duty on U.S. scrap, but they are also classifying aluminium scrap as a restricted import

- They also have a plan to ban all scrap by 2020. This will only increase the dumping in India.

Concerns

- Scrap is eating into the primary market

- Impure scrap is being used in place of pure primary scrap in consumer-facing sectors such as consumer durables, utensils and also in sectors of national importance such as power transmission

- The dumping of aluminium scrap in India is due to the duty structure in place

    * While other metals like zinc, copper, lead, and nickel all have the same import duties for their primary and scrap variants, this is not so for aluminium.

    * Aluminium scrap imports are taxed at just 2.5%, while primary aluminium is taxed at 7.5%.

2. Assistance to Farmers for Dairy Development Programme

Context:

- To increase the income of farmers, the Dairy Division has been helping the state governments to develop dairy infrastructure all over the country by offering financial support to increase farmers' incomes.

The schemes are:

National Programme for Dairy Development (NPDD)

- NPDD focuses on creating/strengthening of infrastructure for Production of quality milk, Procurement, Processing and Marketing of Milk & Milk Products by the State Implementing Agency i.e. State Cooperative Dairy Federations/ District Cooperative Milk Producers' Union.

Dairy Entrepreneurship Development Scheme (DEDS)

- DEDS is implemented through NABARD.

- Objective: To provide self-employment opportunities and promote entrepreneurship in dairy sector, especially in rural areas.

- Under this, back ended capital subsidy is provided to eligible end borrowers under bankable projects as per norms of the scheme.

National Dairy Plan-I (NDP-I)

- Objective: to increase productivity of milch animals and thereby increase milk production to meet the rapidly growing demand for milk and to help to provide rural milk producers with greater access to the organized milk processing sector.

- Started in March 2012, and is assisted by the World Bank.

Dairy Processing and Infrastructure Development Fund (DIDF)

- Launched in 2017 to accelerate Dairy Development in the country.

- The scheme aims to benefit 95 lakh milk producers in 50000 villages.

- It will also create employment directly or indirectly for skilled, semi-skilled and unskilled workers.

- Under this scheme, milk cooperatives will be provided financial assistance.

Supporting Dairy Cooperatives and Farmer Producer Organizations engaged in dairy activities

- The scheme is being implemented by (National Dairy Development Board) NDDB with the objectives:

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* To assist the State Dairy Cooperative Federations by providing soft working capital loan to tide over the crisis on account of severely adverse market conditions or natural calamities.

* To provide stable market access to the dairy farmers.

* To enable State Cooperative Dairy Federations to continue to make timely payment of dues to the farmers.

* To enable the cooperatives to procure milk at a remunerative price from the farmers, even during the flush season.

3. **Banks' association tweaks inter creditor agreement**

Context:

• To stay in line with the RBI's announced guidelines on stressed assets resolution, The Indian Banks' Association has tweaked the inter-creditor agreement (ICA).

Details:

• The Inter Creditor Agreement was framed by the Sashakt Committee.

• The revised norm had mandated that if there was a default by any lender, all lenders should review the borrower account within 30 days of the default, which is termed 'review period', and to chalk out a resolution plan. It has been made mandatory for all the lenders to enter into an ICA within the review period.

• RBI had said ICA must "provide that any decision agreed to by lenders representing 75% by value of total outstanding credit facilities and 60% of lenders by number shall be binding upon all the lenders."

• IBA has now drafted the ICA in consultation with Cyril Amarchand Mangaldas, who also advised on the ICA recommended by the Sashakt Committee.

• As many as 36 banks and financial institutions had endorsed the Sashakt Committee recommendations.

• The revised ICA has been circulated by the IBA to the member banks and financial institutions.

4. **Beekeeping Development Committee**

Context

• The Economic Advisory Council to the Prime Minister set up a Beekeeping Development Committee under the Chairmanship of Professor Bibek Debroy. The Beekeeping Development Committee (BDC) has released its report.

Recommendations in the report include

• Recognizing honeybees as inputs to agriculture and considering landless Beekeepers as farmers.

• Plantation of bee friendly flora at appropriate places and engaging women self-help groups in managing such plantations.

• Institutionalizing the National Bee Board and rechristening it as the Honey and Pollinators Board of India under the Ministry of Agriculture and Farmers' Welfare. Such a body would engage in advancing beekeeping through multiple mechanisms such as setting up of new Integrated Bee Development Centres, strengthening the existing ones, creating a honey price stabilization fund and collection of data on important aspects of apiculture.

• Recognition of apiculture as a subject for advanced research under the aegis of Indian Council for Agricultural Research.

• Training and development of beekeepers by state governments.

• Development of national and regional infrastructure for storage, processing and marketing of honey and other bee products.

• Simplifying procedures and specifying clear standards for ease of exporting honey and other bee products

5. **Beyond Mayday: On bankruptcy code for aviation sector**

• Two months after Jet Airways halted all flight operations, lenders to the beleaguered full service airline have decided to refer it to the National Company Law Tribunal and initiate insolvency proceedings.

• This is being done in a bid to recover the money owed to them.

• The lenders' consortium arrived at this conclusion after unsuccessfully trying to rope in a white knight.

Who is a 'white knight'?

• A 'white knight' an investor who would have helped put the airline's flights back in the air, thus saving thousands of jobs and potentially helping turn around the carrier.

• It is important to note that while, theoretically, the Insolvency and Bankruptcy Code was conceived to help achieve a resolution that could potentially protect a running business and help revive it through capital restructuring under a new promoter, in Jet's case the chances of a resolution seem rather remote now.

Why does Jet's chances of revival seem remote?

• The lenders have to shoulder a fair share of the blame as the delay in initiating the insolvency process has drastically eroded some of the airline's key assets, including customer goodwill, its aircraft fleet, routes and landing slots and even its experienced flight crew.

• Ironically, while the banks may have viewed Jet's request for emergency lines of credit in the run-up to the suspension of operations as 'good money chasing bad money', nothing could potentially kill an airline more effectively than protracted grounding.

- As a matter of fact, one doesn't even need to look too far back in time to recall what happened to Kingfisher Airlines.

An International Perspective:

- Experts point out that it would surely have been instructive for the creditors to revisit the Chapter 11 bankruptcies that a clutch of U.S. legacy airlines opted for in the early 2000s.

- As a matter of fact, this protection helped Delta and United to not only survive the crisis of confidence in aviation triggered by the terrorist attacks of September 11, 2001, the surge in jet fuel and labour costs and the intense competition from low-cost carriers, but emerge stronger and rank among the top five contemporary American carriers.

Looking at a key metric:

- A look at some of Jet's industry-specific operational metrics, at least until the recent cash-starved implosion, show an airline that had consistently posted growth in terms of revenue passenger kilometres and cargo tonnage till the 2017-18 financial year.

- Thus, it wasn't a lack of business that led to Jet's stall and crash.

Need for reviewing several key issues:

- For the health of India's airline industry, it will be crucial for policymakers to review several issues that affect viability: from the way aviation turbine fuel is taxed, to the charges airports levy.

- The carriers too need to reappraise their pricing strategies and ensure that in the quest for market share they don't end up in a race to the bottom.

Concluding Remarks:

- The government must take a closer, harder look at the IBC and examine the viability of a framework that may ultimately be more suited to industries like aviation.

6. Bond Vigilante

- This refers to any of the large bond market investors who aggressively sell government bonds in the open market as a mark of protest against the policies adopted by the government or the central bank of a country.

- The huge selling of government bonds can cause the price of these bonds to witness a sharp drop in price, thus leading to a significant rise in their yields.

- In other words, bond investors can cause a considerable rise in the borrowing rates of governments, thus exerting significant pressure on them.

- While some view bond vigilantes as harmful speculators, others see them as an essential force disciplining governments that spend beyond their means.

7. Building confidence, BIT by BIT

Context

- As Minister of Finance and Corporate Affairs Nirmala Sitharaman gets ready to present the first budget of the 17th Lok Sabha, she faces enormous challenges.

Lost opportunity in FDI

Foreign direct investment (FDI) equity inflows to India in 2018-19 contracted by 1%, according to the government's own data. After an increase of 22% and 35% in 2014-15 and 2015-16, respectively, FDI equity inflows began tapering off since 2016-17 with the growth rate falling to 9% and then to 3% in 2017-18.

- This contraction in FDI inflows comes at a time when global supply chains are shifting base as a result of the ongoing trade war between the U.S. and China.

- India has failed to attract firms exiting China. Many of these supply chains have relocated to Vietnam, Taiwan, Malaysia and Indonesia.

- India is clearly not the natural/first option for these firms for a host of reasons, such as poor infrastructure, rigid land and labour laws, a deepening crisis in the banking sector and a lack of structural economic reforms.

FDI is a two-way street

- Investor protection is critical for ensuring FDI inflows.

- A stable political and legal environment, assurances against taking away of the investment value through legislative or administrative acts, transparent public policy measures, and speedy access to justice are strong guarantees for foreign investors.

Termination of Bilateral Investment Treaties (BITs)

- The decline in the FDI growth rate, despite the well-advertised improvement in India's ease of doing business rankings, interestingly, has coincided with India's decision, in 2016, to unilaterally terminate Bilateral Investment Treaties (BITs) with more than 60 countries; this is around 50% of the total unilateral termination of BITs globally from 2010 to 2018.

- Unilateral termination of BITs on such a mass scale projects India as a country that does not respect international law.

- India also adopted a new inward-looking Model BIT in 2016 that prioritizes state interests over protection to foreign investment.

  * The decision to terminate BITs and adopt a state-friendly Model BIT was a reaction to India being sued by several foreign investors before international arbitration tribunals.

  * The government concluded that these claims were an outcome of India's badly designed BITs, signed in the 1990s and 2000s that were based on a laissez faire template.

*   The move aims to introduce a new, standardised BIT model where Indian courts regain supremacy over international arbitration courts and foreign investors are no longer able to resort to other protection mechanisms

What could have been done?

- True, India's BITs gave extensive protection to foreign investment with scant regard for state's interests — a characteristically neoliberal model.

- This design flaw could have been corrected by India negotiating new balanced treaties and then replacing the existing ones with the new ones instead of terminating them unilaterally, which has created a vacuum.

- Studies have shown that BITs positively impacted foreign investment inflows to India, an examination of the link between the two should be a high priority for the Ministry of Finance and Corporate Affairs — the nodal body dealing with BITs.

Reason for the increasing number of BIT claims

- A large number arose either because the judiciary could not get its act together (an example being inordinate delays in deciding on the enforceability of arbitration awards) or because it ruled in certain cases without examining India's BIT obligations such as en masse cancellation of the second generation telecom licences in 2012.

- Likewise, the executive — the Manmohan Singh government — got the income tax laws retrospectively amended in 2012 to overrule the Supreme Court's judgment in favour of Vodafone and cancelled Devas Multimedia's spectrum licences in 2011 without following due process, thus adversely impacting Mauritian and German investors.

- These cases are examples of bad state regulation. They also reveal an absence of full knowledge of India's obligations under BITs by different state entities.

Way forward

- 'Progressive capitalism' (channeling the power of the market to serve society, as explained by Nobel laureate Joseph Stiglitz) provides the right template.

- Indian BITs should strike a balance between interests of foreign investors and those of the state.

- A certain degree of arrogance and misplaced self-belief that foreign investors would flock to India despite shocks and surprises in the regulatory environment should be put to rest.

- Clarity, continuity and transparency in domestic regulations and a commitment to a balanced BIT framework would help India project itself as a nation committed to the rule of law, both domestically and internationally, and thus shore up investor confidence.

- As the 2019 World Investment Report confirms, since India is fast becoming a leading outward investor, balanced BITs would also help in protecting Indian investment abroad.

8. Central ATFM Complex

Context

- Minister of State (I/c) for Civil Aviation today inaugurated the Air Traffic Flow Management – Central Command Centre

What is C-ATFM?

- The C-ATFM system is primarily meant to address the balancing of capacity against the demand to achieve optimum utilization of the major resources viz., airport, airspace and aircraft at every Indian airport where there is a capacity constraint.

- The C-ATFM system integrates flight data from various subsystems like ATC Automation System, flight updates and flight update messages

- The system also displays weather information along with static information about airports, airspaces and air routes.

- The system processes the demand and capacity information and provides decision-making tools to the ATFM Flow Manager for collaborative decision making and to ensure regulated flow of traffic at each airport in India.

Significance of C-ATFM

- The C-ATFM system is supported by 36 Flow Management Positions (FMP) at various airports including eight defence airports.

- After successfully implementing the Air Traffic Flow Management System, India has become the seventh country after the US, Europe, Australia, South Africa, Japan, Brazil.

9. Centre expands terms of reference of direct tax law body

Context:

- 'The Central Board of Direct Taxes (CBDT) has expanded the terms of reference (ToR) of the task force set up to come up with a new Direct Tax Code.

Details:

- The committee would now have to consider five more areas while drafting their recommendation.

- The expansion of terms of reference shows the tax department's focus to expand the tax base and at the same time make a non-adversarial tax regime for taxpayers.

- These additional aspects are significant in shaping up a better compliance-oriented administration and increasing taxpayers' trust.

- July 31, 2019 is the deadline for the submission of the task force's recommendations.

Recommendations:

- 'To bring in faceless and anonymized verification, scrutiny and assessments,

- Reduction of litigation and expeditious disposal of appeals from Commissioner of Income tax (Appeals) stage right upto Supreme Court,

- Sharing of information between different verticals like Goods and Service Tax, Customs, CBDT teams and so on.

- Simplification of procedure to reduce compliance burden on income tax assesses

- System based cross verification of financial transactions.

10. Complaint Management System (CMS)

- It is a software application to facilitate RBI's grievance redressal processes.

- Members of public can access the CMS portal at RBI's website to lodge their complaints against any of the entities regulated by RBI.

- It provides features such as acknowledgement through SMS/Email notification(s), status tracking through unique registration number, receipt of closure advises and filing of Appeals, where applicable.

- It also solicits voluntary feedback on the customer's experience.

- The CMS also has facilities for RBI officials handling the complaints to track the progress of redressal.

- The information available in CMS could also be used for regulatory and supervisory interventions, if required. With the launch of CMS, the processing of complaints received in the offices of Banking Ombudsman (BO) and Consumer Education and Protection Cells (CEPCs) of RBI has been digitalized.

11. Counter Vailing Duty (CVD) on radial tyres imported from China

Context

- In a boost to the domestic tyre industry, the government has imposed a countervailing duty (CVD) on large radial tyres imported from China, for a period of five years

Details

- The notification said in the case of radial tyres used in buses and lorries/trucks imported from China, the designated authority "has come to the conclusion that imposition of definitive countervailing duty is required to offset subsidisation and injury and has recommended the imposition of definitive countervailing duty on the imports of the subject goods from China PR".

- The countervailing duty imposed under this notification shall be levied for a period of five years (unless revoked, superseded or amended earlier)

- The CVD ranges from 9.55-17.57% of the value of the tyres, including costs, insurance and freight.

- The countervailing duty follows the imposition of an anti-dumping duty on cast aluminium alloy wheels or Alloy Road Wheels (ARW), used in motor vehicles, ranging from 12 inches to 24 inches in size and originating from China, South Korea, or Thailand.

Why was this decision take by the Govt?

- The government's decision may have come in the wake of a slowdown in the domestic auto industry. With auto sales falling sharply, it is bound to impact original equipment sales of tyre firms

- Also, given the slowdown in the auto industry globally, it is likely that Chinese firms would resort to more dumping thus aggravating the pain for domestic manufacturers.

- However, while the government's step is positive, the potential threat of Chinese firms using Thailand and Vietnam for stepping up exports to India continues unabated

Significance

- It is likely to be incrementally positive for tyre manufacturers, as the replacement market would see higher inflow of tyres from the listed/organised players

It will not make much impact

- Since tyre companies were facing headwinds, such a move was expected by the government. They were unable to compete with Chinese companies; hence the government took this step to protect the interests of the domestic players. However, to protect the industry doesn't necessarily mean these firms will increase their profit manifold. It is just that they will not make losses, but will sustain. With slowdown in auto sector, the incremental sales will be tough to come by. Therefore, it won't be a game changer for the tyre sector, but at least competition will not erode their margin from here on

12. Dispute Resolution Mechanism for solar/wind sector

Context

- In a major decision to facilitate the solar and wind energy projects the government has approved a proposal to set up a Dispute Resolution Committee to consider the unforeseen disputes between solar/ wind power developers and SECI/NTPC, beyond contractual agreement.

- The mechanism of Dispute Resolution Committee (DRC) will be applicable for all solar/ wind Schemes/ Programmes/ Projects being implemented through/ by SECI/ NTPC.

Composition

- A three member Dispute Resolution Committee (DRC) will be set up with the approval of Hon'ble Minister (NRE), consisting of eminent persons of impeccable integrity.

- The upper age for the DRC members shall be 70 years.

- The Committee members of DRC shall be chosen from the eminent persons located in NCR of Delhi so as to avoid expenditure on Air Travel & accommodation. The selection of DRC Members would be such that there is no conflict of interest involved.

Significance

- The move will give further fillip to the smooth implementation of solar/wind energy projects in India.

- It fulfills a long pending demand of the industry to resolve expeditiously, unforeseen disputes that may arise beyond the scope of Contractual Agreements.

13. Food Corporation of India

It was setup under the Food Corporation's Act 1964, in order to fulfill following objectives of the Food Policy:

- Effective price support operations for safeguarding the interests of the farmers.

- Distribution of food grains throughout the country for Public Distribution System.

- Maintaining satisfactory level of operational and buffer stocks of food grains to ensure National Food Security

- To provide Farmers Remunerative Prices

- To make food grains available at reasonable prices, particularly to vulnerable section of the society

- To intervene in market for price stabilization

14. Government revamps WPI revision team

Context:

- The government has reconstituted the working group tasked with revising the current wholesale price index (WPI).

Details:

- The terms of reference (ToR) of the working group include selecting the most appropriate base year for the preparation of a new official series of index numbers of wholesale price (WPI) and producer price index (PPI) in India.

- The working group will also have to review the commodity basket of the current WPI series and suggest additions or deletions of commodities in the light of structural changes that occurred in the economy since 2011-12.

- The ToRs also include a review of the existing system of price collection and suggesting improvements, along with coming up with a computational methodology to be adopted for the monthly WPI and PPI.

- The working group will be chaired by NITI Aayog Member and will have members from the Central Statistical Office, the Ministries of Finance, Petroleum and Natural Gas and also from the departments of agriculture and consumer affairs. Apart from this, the working group would include other representatives.

Wholesale Price Index:

- The WPI measures the price of a representative basket of wholesale goods.

- It provides estimates of inflation at the wholesale transaction level for the economy as a whole.

- In India, the wholesale price index (WPI) is the main measure of inflation.

- The Government periodically reviews and revises the base year of the WPI as a regular exercise to capture structural changes in the economy and improve the quality, coverage and representativeness of the indices.

- The Wholesale Price Index (WPI) series in India has undergone six revisions in 1952-53, 1961-62, 1970-71, 1981-82, 1993-94 and 2004-05 so far.

- The base year of All-India WPI was revised from 2004-05 to 2011-12 on 12 May 2017 to align it with the base year of other macroeconomic indicators like the Gross Domestic Product (GDP) and Index of Industrial Production (IIP).

15. IMD Competitiveness Rankings

- The IMD World Competitiveness Rankings, established in 1989, incorporate 235 indicators from each of the 63 ranked economies to evaluate their ability to foster an environment where enterprises can achieve sustainable growth, generate jobs and increase welfare for its citizens.

- The ranking takes into account a wide range of "hard" statistics such as unemployment, GDP and government spending on health and education, as well as "soft" data from an Executive Opinion Survey covering topics such as social cohesion, globalisation and corruption.

- The economies were judged in four categories: economic performance, infrastructure, government efficiency and business efficiency.

India's Ranking

- India has moved up one place to rank 43rd most competitive economy in the world on the back of its robust economic growth, a large labour force and its huge market size

- India's ranking has improved by one place in past one year to 43rd, driven by a robust rate of growth in real GDP, improvements in business legislation and an increase in public expenditure on education.

- India was ranked 45th in 2017, but higher at 41st in 2016.

- The IMD study said the challenges before India remain maintaining high growth with employment generation, digital literacy and internet bandwidth in rural areas, managing fiscal discipline, as also issues related to the implementation of Goods and Services Tax and resource mobilisation for infrastructure development.

- In the 2019 rankings, India has scored well on several economic parameters and tax policies but has lagged in terms of public finance, societal framework, education infra ..

Global Ranking

- Singapore has toppled the US to grab the top position

- Venezuela remained anchored to the bottom of the ranking, hit by inflation, poor access to credit and a weak economy.

16. India needs a Solar Manufacturing Strategy

Introduction

- India has made significant progress in creating capacity for solar energy generation in the last few years. The Prime Minister's emphasis since 2014 has given a new fillip to solar power installation.

- The unit costs of solar power have fallen, and solar energy has become increasingly competitive with alternative sources of energy.

- India expanded its solar generation capacity eight times from 2,650 MW in 2014 to over 28.18 GW in March 2019.

- The government had an initial target of 20 GW of solar capacity by 2022, which was achieved four years ahead of schedule. In 2015, the target was raised to 100 GW of solar capacity by 2022.

Concerns

- India is energy deficient, yet blessed with plenty of sunlight for most of the year. It should have taken a lead in solar panel manufacture to generate solar energy long ago. This rapid progress should have been made earlier.

- Despite the new policy focus on Solar Plant Installation, India is still not a solar panel manufacturer.

  * Pavagada Solar Park, Karnataka

  * Kurnool Ultra Mega Solar Park, Andhra Pradesh

- India is regarded by the Global Solar Industry as one of the most promising markets, but low-cost Chinese imports have undercut its ambitions to develop its own solar technology suppliers.

  * Imports, mostly from China, accounted for 90% of 2017 sales, up from 86% in 2014.

How does solar industry work?

Substituting for imports requires human capabilities, technological capabilities and capital in the form of finance.

- On the first two capabilities, the supply chain of solar photovoltaic panel manufacturing is as follows:

  * silicon production from silicates (sand);

  * production of solar grade silicon ingots;

  * solar wafer manufacturing;

  * PV module assembly.

- The capital expenditure and technical know-how needed for these processes decreases from the first item to the last, i.e. silicon production is more capital-intensive than module assembly.

- Most Indian companies are engaged in only module assembly or wafer manufacturing and module assembly. No Indian company is involved in silicon production, although a few are making strides towards it.

- According to the Ministry of New and Renewable Energy (2018), India has an annual solar cell manufacturing capacity of about 3 GW while the average annual demand is 20 GW.

- The shortfall is met by imports of solar panels.

Steps that can be initiated

- While the safeguard duty now puts locally made panels on par with imported ones in terms of cost, the domestic sector needs to do a lot more to be effective.

- For instance, it will have to go down the supply chain and make the input components locally instead of importing them and putting the modules together here. Public procurement is the way forward.

- The government is still free to call out bids for solar power plants with the requirement that these be made fully in India.

  * This will not violate any World Trade Organization commitment.

- However, no bids will be received as manufacturing facilities for these do not exist in the country.

- But if the bids were large enough with supplies spread over years, which gives enough time for a green field investment to be made for manufacturing in India, then bidders will emerge and local manufacturing can begin.

Lessons from China

China's cost advantage derives from capabilities on three fronts.

1. The first is core competence.

- The six largest Chinese manufacturers had core technical competence in semiconductors before they turned to manufacturing solar cells at the turn of the century.
- It takes time for companies to learn and put in action new technologies.
- When the solar industry in China began to grow, Chinese companies already possessed the know-how.
- Indian companies had no learning background in semiconductors when the solar industry in India began to grow from 2011.
- State governments need to support semiconductor production as part of a determined industrial policy to develop this capacity for the future.

2. The second source of cost advantage for China comes from government policy.

- The Chinese government has subsidised land acquisition, raw material, labour and export, among others.
- None of this is matched by the Indian government.

3. The third is the cost of capital.

- The cost of debt in India (11%) is highest in the Asia-Pacific region, while in China it is about 5%.

What has India done?

- In the Solar Panel Manufacturing Sector, the Indian government allows 100% foreign investment as equity and it qualifies for automatic approval.
- The government is also encouraging foreign investors to set up renewable energy-based power generation projects on build-own-operate basis.

Way forward

- With China Aggressively promoting exports to India, it has to reinvent.
- As a counter, India needs a Solar Manufacturing Strategy, perhaps like the Automotive Mission Plan (2006-2016), which is credited with making India one of the largest manufacturers of two-wheelers, three-wheelers, four-wheelers and lorries in the world.
- This would also be a jobs-generating strategy for an increasingly better educated youth, both rural and urban.
- If the continuation of the current approach continues India's energy sector will be in the same condition as its defence industry, where enormous amounts of money have been spent procuring weaponry — so much so that India has been the world's second largest importer of defence equipment for years.

17. India to actively curb 'conflict' diamonds

- India has committed to strengthening the Kimberley Process Certification Scheme (KPCS), in order to curb the circulation of 'Blood Diamonds' or 'Conflict Diamonds'.
- India is committed to play an active role in the evolution and transformation of the Kimberley Process (KP) and in the transition from conflict diamonds to peace diamonds.
- India is the Kimberley Process chair for the year 2019.
- Blood diamonds: also called conflict diamonds, wardiamonds, hot diamonds, or red diamonds) is a term used for a diamond mined in a war zone and sold to finance an insurgency, an invading army's war efforts, or a war lord's activity.

18. India's Global Trade

Context:

- India's share in global trade was 2.1% for exports and 2.6% for imports in 2017
- Exports have been growing on a regular basis since 2016-17 for almost three years and total exports reached a new peak of more than half a trillion dollars, for the first time in 2018-19.

Steps taken by government to improve exports

- A new Foreign Trade Policy (FTP) 2015-20 was launched
    * The policy, inter alia, rationalised the earlier export promotion schemes and introduced two new schemes: one for Merchandise Exports for improving export of goods and Service exports.
- The Mid-term Review of the FTP 2015-20 was undertaken
- A new Logistics Division was created in the Department of Commerce to co-ordinate integrated development of the logistics sector.
- Various measures for improving ease of doing business were taken. India's rank in World Bank 'Ease of doing business' ranking improved from 142 in 2014 to 77 in 2018 with the rank in 'trading across borders' moving up from 122 to 80.
- A new scheme called Trade Infrastructure for Export Scheme (TIES) was launched
- A comprehensive Agriculture Export Policy was launched, with an aim to double farmers' income by 2022
- A new scheme called Transport and Marketing Assistance (TMA) scheme has been launched for mitigating disadvantage of higher cost of transportation for export of specified agriculture products.
- A new scheme called Scheme for Rebate of State and Central Taxes and Levies (RoSCTL) covering export of garments and made-ups providing refund of duties/taxes at higher rates.

Challenges faced by exporters

- Technical and non-technical barriers to trade such as Sanitary and Phyto-Sanitary (SPS) standards imposed on agricultural items and quality standards on manufactured goods.

- Tariff advantages to the exporters of competing countries in key export markets due to trade agreements between their countries and destination countries/regions.

- Higher logistics and financing costs for Indian exporters.

19. Jet Airways Crisis

Context:

- As six months of efforts to save one of the country's leading airlines, Jet Airways, failed, the lenders have now decided to take it to the bankruptcy court, which will decide the future course of action.

Background

- Jet Airways was founded by ticketing agent-turned-entrepreneur Naresh Goyal after India ended a state monopoly on aviation in the early 1990s.

- Jet Airways also flies to international destinations including London and Singapore.

Why Jet airways is in trouble?

- Many aviation experts believe the start of Jet's financial troubles can be traced back to the 2006 purchase of Air Sahara for Rs 1450 crore

- India's aviation sector is fiercely competitive and Jet has taken a battering from a number of hugely successful low-cost airlines, including IndiGo, SpiceJet and GoAir. Experts said the people running Jet failed to take the trio seriously when they were founded between 2005 and 2006, offering cut-price fares and previously unserved routes.

- Poor management: Experts put a lot of the blame on Goyal's management style. They say his decision to have a single management team, headed by himself, running all Jet's operations was a crucial mistake. Analysts say he should have had one team running the full-service carrier and another running the budget flyer.

- Fluctuating crude: All of India's carriers are particularly sensitive to fluctuations in global crude prices because the Asian giant is a major importer of oil. When the rupee is weak, which it has often been over the past year or so, fuel -- the biggest cost burden for airlines -- becomes more expensive. Soaring oil costs and the Indian rupee hitting record lows last year affected all Indian carriers.

  * IndiGo and SpiceJet reported massive losses but analysts say their books were resilient enough to weather the quarterly losses. Jet's, however, were saddled with debts.

Current Status

- Jet Airways has been reported to have a negative financial outlook due to increasing losses.

- It was reported that nearly a fourth of Jet Airways' aircraft were grounded due to unpaid lease rates

- Jet Airways shut down its operations on April 17 following the refusal by its lenders to advance any funds for its operations.

- After getting no acceptable offers from Etihad Airways and Hinduja Group, State Bank of India filed an application with the National Company Law Tribunal (NCLT) to initiate insolvency proceedings against the airline company.

20. JNPT awarded 'Best Port of the year (Containerised)' at the 4th India Maritime Awards

- The Jawaharlal Nehru Port Trust (JNPT) won the 'Best Port of the Year- Containerised' award at the 4th India Maritime Award '19.

- The category 'Best Port of Year' evaluates the Ports across various parameters like Volume Handled, Year on Year Growth, Expansion Plans, New Initiatives, Variety of Cargo Handled, Handling Equipment, E-Business and Customer Satisfaction, etc.

21. Kaleshwaram Irrigation Project

Context:

- Kaleshwaram Lift Irrigation Project (KLIP), claimed as the world's largest multi-stage and multi-purpose lift irrigation scheme, was inaugurated by Telangana Chief Minister at Medigadda where the first barrage of the project is located in Jayashankar-Bhupalapally district

Details

- It starts at the confluence point of Pranahita River and Godavari River i.e, at Kaleshwaram village in Telangana.

- Pranahita River in itself is a confluence of various other smaller tributaries like Wardha, Penganga and Wainganga Rivers.

- The project is intended to irrigate over 37 lakh acres of new and existing ayacut, providing drinking water to Hyderabad and villages en route and supplying water for industrial needs by lifting 195 tmc ft of water from the Godavari at 2 tmc ft a day during the flood season.

  * By lifting one more tmc ft water a day later, the government plans to bring another 8 lakh acres under irrigation.

- The cost of the project is Rs 80,000 crores but is expected to rise to Rs 1 lakh crore by the time it is completely constructed.

- The total length of Kaleshwaram project is approximately 1,832 kms, of which 1,531 kms is gravity canals and 203 kms comprise water tunnels. There are 20 water lifts and 19 pump houses in the project.

Why Kaleshwaram irrigation project is unique?

- This project is unique because Telangana will harness water at the confluence of two rivers with Godavari by constructing a barrage at Medigadda in Jayshankar Bhoopalpally district and reverse pump the water into the main Godavari river and divert it through lifts and pumps into a huge and complex system of reservoirs, water tunnels, pipelines and canals.

- The project has set many records with the world's longest water tunnels, aqua ducts, underground surge pools, and biggest pumps.

22. Libra Cryptocurrency

- Facebook is leaping into the world of cryptocurrency with its own digital money, designed to let people save, send or spend money as easily as firing off text messages.

    * Cryptocurrency is a digital currency built with cryptographic protocols that make transactions secure and difficult to fake.

    * The most important feature of a cryptocurrency is that it is not controlled by any central authority: the decentralized nature of blockchain makes cryptocurrency theoretically immune to the old ways of government control and interference.

- It will be run by the Libra Association, a Geneva-based entity that has over two dozen founding partners, including Facebook, Mastercard, Visa, Uber and the Vodafone group.

Why does the world need Libra?

A white paper released by the Libra Association says its mission "is to enable a simple global currency and financial infrastructure that empowers billions of people".

- The point it makes is this: in a world with cheap data and smartphones, about 1.7 billion adults are still outside the organised financial system in the world. This, despite a billion of them having mobile phones and nearly half a billion having Internet access.

- The reasons for this are high fees, lack of access, and absence of documentation. Libra is being pitched as a solution to this.

- The promise is of financial inclusion on a global scale.

It is apparently being built on the block chain technology. How similar is it to Bitcoin?

- It is true that Bitcoin and Libra are both based on block chain technology, which refers to a form of distributed ledger — not centralised — of transactions.

- These are created by complicated math functions that make them almost incorruptible.

But beyond this, there is very little in common between Bitcoin and Libra.

- Libra is an initiative of 28 influential corporate entities.

* Bitcoin, which the world first came to know of in 2008, is seen as a product of libertarian values. Its founder, whose identity remains a mystery to this day, is referred to as Satoshi Nakamoto.

Though Bitcoin has come a long way, it has remained a niche currency. Why should Libra's fate be any different?

- Bitcoin, though built on a sound technological base, has had to encounter challenges relating to regulation across the world.

- Governments of the world, including India, have been wary of it functioning outside the ambit of organised finance.

- With huge swings in value, it remains one of the most volatile currencies.

Libra immediately has a few things working in its favour.

- A currency, to be a success, needs to have acceptability amongst many people.

- Facebook, with its over 2 billion users, and its partners could tick this box.

- Also, the Libra Association is promising to play by the regulatory rule book.

- Plus, to make it a relative stable currency, not prone to wild fluctuations, the creators of Libra are backing this up with a reserve of real assets.

Significance

- If adopted by companies and users, Libra can become a more convenient way to pay online.

- Facebook likely plans to sell products on Instagram and WhatsApp, but other websites could also use the cryptocurrency for e-commerce.

- But beyond e-commerce, especially for people in developing countries that lack a banking infrastructure, Libra could be useful for storing and transferring money, without paying high fees. So, if you want to send money to another country, Libra may be a cheaper way to do it than what's currently available.

Why is Libra being opposed?

- French Finance Minister Concerns include privacy, money laundering and terrorism finance

- Facebook could become a "shadow bank" and that regulators should be on high alert.

- It is a shift of power from central banks towards multinational corporations.

Conclusion

- Facebook's entrance into the financial industry is a threat to democracies and their citizens around the world, on the same scale as disinformation and information warfare, which also depend on social media for their effectiveness.

- It may be hard for world leaders to understand that this is an emergency, as they cannot see the virtual powers aligning against them. But they must huddle quickly to ensure they have– and keep – the power to protect their people from technology companies' greed.

- In the wake of the not too distant global financial crisis, and the "fake news" and disinformation culture that is developing, people must slow down and fully evaluate disruptive technology of this magnitude. Society cannot withstand a launch of a cryptocurrency in Facebook's infamous "move fast and break things" style.

23. Loss Leader in Business

- This refers to a common pricing strategy that is used by businesses wherein certain products are sold at a minimal profit or even at a price that is well below their cost price in order to boost the sale of other products that are more profitable.

- A supermarket chain, for instance, might decide to sell certain common household goods at a low profit so that more customers feel attracted to its store.

- It may believe that customers coming to the store to buy these commonly used items may in turn decide to purchase other goods in the store which can add to profits.

- If a store chooses not to sell these loss leader items, customers may simply decide not to shop at the store.

24. MCA & SEBI sign MOU

Context:

- A formal Memorandum of Understanding (MOU) was signed between the Ministry of Corporate Affairs (MCA) and the Securities and Exchange Board of India (SEBI) for data exchange between the two regulatory organizations.

Significance of MOU

- The MoU comes in the wake of increasing need for surveillance in the context of Corporate Frauds affecting important sectors of the economy.

- As the private sector plays an increasingly vital role in economic growth, the need for a robust Corporate Governance mechanism becomes the need of the hour.

About MOU

- The MoU will facilitate the sharing of data and information between SEBI and MCA on an automatic and regular basis.

- It will enable sharing of specific information such as details of suspended companies, delisted companies, shareholding pattern from SEBI and financial statements filed with the Registrar by corporates, returns of allotment of shares, audit reports relating to corporates.

- The MoU will ensure that both MCA and SEBI have seamless linkage for regulatory purposes.

- In addition to regular exchange of data, SEBI and MCA will also exchange with each other, on request, any information available in their respective databases, for the purpose of carrying out scrutiny, inspection, investigation and prosecution.

25. Mechanism to Deal with the Misleading Advertisements

Context:

- Considering the emerging situation of misleading advertisements, Ministry of AYUSH signed an MoU with Advertising Standards Council of India (ASCI) for two years to undertake monitoring of AYUSH-related advertisements in the print and television media and bring the cases of contravention of legal provisions to the notice of the State Regulatory Authorities for necessary action.

Key points:

- Department of Consumers Affairs has set up an online system called GAMA (Grievances Against Misleading Advertisements) portal for registering public complaints of misleading advertisements of various commodities including AYUSH medicines and allied products.

About GAMA:

- GAMA is under the Department of Consumer Affairs (Ministry of Consumer Affairs, Food and Public Distribution).

- It is an online portal for registering public complaints of misleading advertisements of products under AYUSH.

26. Namma Kolhapuri chappal gets GI boost

- The approval for GI tag was jointly received by Karnataka and Maharashtra recently for making these chappals.

- There is a perception that these artisans are from Maharashtra alone, but a large number of them are from Karnataka, and have been making these chappals for centuries

- These leather chappals are hand-crafted and tanned using vegetable dyes. The art of making them is passed down one generation to another. The traditional chappal making will get a modern touch.

27. Nilekani Panel

- The RBI constituted the five-member committee to review the status of digitization of payments, identify gaps in the ecosystem, and suggest ways of plugging them.

- It was tasked to suggest a medium-term strategy for deepening digital payments and measures to strengthen safety and security.

Suggestions

- To encourage digital payments, the Nandan Nilekani committee has suggested a host of measures, including elimination of charges, round-the-clock RTGS and NEFT facility, and duty-free import of point-of-sales machines.

- The panel has suggested that there should be no convenience fee on payments made to government agencies by customers

- It recommended that payment systems use machine-driven, online dispute resolution systems to handle complaints.

- Keeping in mind that digital transactions result in larger balances with the bank, the panel felt customers must be allowed to initiate and accept a reasonable number of digital payment transactions with no charges.

- The committee has also made recommendations to the National Payment Council of India to allow digital payments systems such as RuPay and BHIM UPI in other countries to facilitate easy remittance to India.

- The panel also recommended the creation of a No-KYC wallet with a maximum value of ₹2,000 in the wallet and maximum spending capped at ₹10,000 per month, with the aim of boosting digital payments.

28. Payments data must be saved locally: RBI

Context:

- The Reserve Bank of India (RBI) has clarified that payment system providers need to store entire payments data in a system only in India.

Background:

- The RBI had released data-localisation guidelines in 2018, and gave payments providers six months for complying with the norms.

- Payment providers have been lobbying at various levels for free flow of data across borders in order to ensure that customer benefits and fraud analysis are not affected.

Details:

- RBI has said that the data should be deleted from the systems abroad and brought back to India not later than one business day or 24 hours from the payment processing, whichever is earlier.

- It also said that the data stored in India can be accessed or fetched whenever required for handling customer disputes as well as for any other related processing activity, such as chargeback.

- The data may be shared with the overseas regulator, if so required, depending upon the nature/origin of a transaction with due approval of the RBI.

- The RBI allows a copy to be stored abroad in case of cross-border transactions.

- The clarification comes a week after the government said the RBI would examine concerns around its strict data-localisation guidelines.

- While the government has been pushing for softer data-localisation guidelines by allowing data mirroring, the RBI has held its ground, maintaining that India's payments data can only be stored locally.

29. PM to head committee on economic growth

Context:

- To address the twin problems of sluggish economic growth and rising unemployment, the government has constituted two Cabinet committees to be chaired by Prime Minister Narendra Modi

Laws that let PM create Cabinet Committee

- Government of India's, Transaction of Business Rules, 1961, empower the Prime Minister to set up, add, reduce or modify the numbers and functions of cabinet committees.

- They are extra-constitutional in nature and are nowhere mentioned in the Constitution.

- PM Modi in his first term scrapped four cabinet committees management of natural calamities, prices, WTO matters and Unique Identification Authority of India.

- Currently, there are eight Cabinet committees. These are on appointments, accommodation, security, economic affairs, investment, parliamentary affairs, political affairs and skill development.

  * Cabinet Committee on Political Affairs (CCPA): It is responsible for all issues related to domestic and foreign affairs. It is most powerful cabinet committee and is described as Super Cabinet.

30. Committee on Investment and Growth

- It consists of Home Minister, Finance Minister, Minister for Road Transport and Highways and MSME and Railways Minister.

- The fall in growth is result of dip in the performance of the core sectors of the economy, as the eight core sectors — Fertilizers, Electricity, Refinery Products, Natural Gas, Steel, Cement, Crude Oil and coal

- This committee will be a focused group to take measures to bring investments and spur growth in the critical sectors including infrastructure, manufacturing and agriculture, as the economy is passing through a highly volatile period.

Cabinet committee for Employment and Skill Development

- Employment data for 2017-18 said India's unemployment rate rose to 6.1% in the period, the highest in 45 years.

- In addition to the Prime Minister, the committee includes Home Minister, Finance Minister, Railway Miinister, Minister of Agriculture, Human Resource Development Minister, Petroleum and Natural Gas Minister, Minister Skill and Entrepreneurship and Ministers of State labor and Housing and Urban Affairs.

31. RBI revises stressed asset resolution norms

Context:

- After the Supreme Court struck down the controversial February 12, 2018 circular of Reserve Bank of India (RBI) on stressed asset resolution, RBI has released revised set of norms which are substantially less stringent from the previous one.

Background:

- The February 12, 2018 circular of Reserve Bank of India (RBI) had forced banks to recognise defaults by large borrowers with dues of over Rs.2,000 crore within a day after an instalment fell due; and if not resolved within six months after that, they had no choice but to refer these accounts for resolution under the Insolvency and Bankruptcy Code.

- The Supreme Court of India, later quashed the circular issued by the RBI on the resolution of bad loans.

Details:

- In particular, neither there is a mandate to start resolution which results in higher provisioning if there is a single day default nor a mandate for initiating insolvency proceeding if resolution plan is not implemented for large accounts within a time frame.

- However, the RBI has sought to nudge banks towards the insolvency courts by introducing a disincentive in the form of additional provisions for delayed resolution.

- At the same time, the central bank said it would issue directions to banks for initiation of insolvency proceedings against borrowers for specific defaults 'so that the momentum towards effective resolution remains uncompromised.'

- The new circular asked lenders to undertake a prima facie review of the borrower account within 30 days from a default, which is termed as "review period."

- During this review period, lenders may decide on the resolution strategy, including the nature of the resolution plan (RP), the approach for implementation of the RP etc.

- The lenders may also choose to initiate legal proceedings for insolvency or recovery.

- If the RP is to be implemented, lenders have been asked to enter into an inter-creditor agreement (ICA), within the review period, to provide for ground rules for finalisation and implementation of the RP.

- The RP will have to implemented within 180 days from the end of review period.

- There is a disincentive for banks if they delay implementing a viable resolution plan. In case the plan is not implemented within 180 days from the end of review period, banks have to make additional provision of 20% and another 15% if the plan is not implemented within 365 days from the start of the review period.

- The additional provisions would be reversed if resolution is pursued under Insolvency and Bankruptcy Code (IBC).

- Half of the additional provisions could be reversed on filing of insolvency application and the remaining additional provisions may be reversed once case is admitted for insolvency proceedings.

- Debt recast tools like corporate debt restructuring scheme and strategic debt restructuring scheme are withdrawn.

- Apart from banks, these new norms are also applicable for non-banking financial companies, small finance banks and other financial institutions.

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32. <u>SEBI sets up panel to review margins on derivatives</u>

Context:

- The Securities and Exchange Board of India (SEBI) has decided to review the current framework of margins in the futures and options segment, based on the feedback that the existing margin requirements in the derivatives segment is pushing the cost of trading – up, while not managing risk in the most efficient manner.

Derivative:

- A derivative is a financial instrument that derives its value from an underlying asset or group of assets.

Details:

- In India, initial margin in equity Futures and Options segment consists of SPAN margin, exposure margin and other additional margins.

- A recent study highlighted the fact that trading in derivatives in India costs much more when compared with most of the other leading markets due to a variety of margins that are imposed on the traders.

- It was further found out that Indian bourses levy a variety of margins during the normal course thereby pushing up the overall cost of trading, while other markets apply event based margins temporarily during instances of increased volatility.

- SPAN is an upfront margin like a deposit that traders should have in their account at the time of placing a trade in futures and options.

- The collection of exposure margins from clients was made compulsory last year.

- A working group has now been constituted to look into the issue and submit its recommendations to the Secondary Market Advisory Committee.

- The motto is to rationalize the excessive marginal requirement existing in the Indian system.

- SEBI is likely to tighten margin rules for futures and options trades and restrict introduction of strike prices in options intra-day as it looks to curb wild speculation by traders.

- SEBI also intends to bring more securities under its various surveillance measures.

- Currently, there are three different surveillance measures being implemented by SEBI Graded Surveillance Mechanism (GSM), Additional Surveillance Mechanism (ASM) and short-term ASM.

- Of these, ASM and short-term ASM are applicable to derivatives.

33. <u>Sinha-led panel proposes 5,000 crore stressed asset fund for MSMEs</u>

Context:

- A committee formed by the Reserve Bank of India (RBI), headed by former SEBI Chairman U.K. Sinha, has recommended a ₹5,000 crore distressed asset fund for micro, small and medium enterprises (MSMEs).

- RBI constituted the expert committee on MSMEs to undertake a comprehensive review of the sector and to identify causes and propose long-term solutions.

Details

- The fund will assist units in a cluster where there is a change in the external environment such as plastic ban, which had resulted in large number of such entities becoming non-performing.

- The committee also suggested forming a government-sponsored Fund of Funds of ₹10,000 crore to support venture capital and private equity firms investing in MSMEs.

- The report said that small industries face problems of delayed payments and hesitate to enforce legal provisions available to them under the MSME Development Act due to their weak bargaining power.

    * It recommended an amendment to the Act, requiring all MSMEs to mandatorily upload from time to time all their invoices above an amount to be specified by the government to an information utility.

    * This mechanism will entail automatic display of the names of defaulting buyers and also act as moral suasion on them to release payment to these suppliers, said the report.

- The committee said group policies for death and accident cover for MSME entrepreneurs need to be developed with insurance cover significantly higher than the cover currently offered by the Pradhan Mantri Suraksha Bima Yojana and the Pradhan Mantri Jeevan Jyoti Bima Yojana, two government-backed insurance schemes.

- The panel also suggested that the RBI should increase the limit for non-collateralised loans to ₹20 lakh, and this would address a significant proportion of the sector needs.

- In addition, it also suggested revision in loan limit sanctioned under MUDRA by the Finance Ministry to ₹20 lakh from ₹10 lakh.

- Commercial banks have been suggested that they should develop customised products to assess the financing requirements based on expected cash flows moving away from traditional forms of assessment.

Priority Sector

- The committee has also recommended banks that wish to specialise in MSME lending, their sub-targets for farm loans under the priority sector lender could be waived off, and instead can be given a target for loans to the SME sector.

- At present, the overall priority sector lending target for a universal bank is 40% of their net bank credit and 75% for small finance bank.

PSBLoansIn59Minutes.com

- It is an online marketplace that enables in-principle approval of MSME loans up to ₹1 crore in 59 minutes from public sector banks.

- The committee suggested that the PSBLoansIn59Minutes.com portal also cater to new entrepreneurs, who may not necessarily have information like GSTIN, income-tax returns and bank statement.

- The report said the committee has learnt from entrepreneurs that obtaining regular sanctions from the banks post in-principle approval had not been smooth.

Stats

- India's 63.38 million MSMEs contribute significantly to the country's economic growth.

- The sector accounts for about 45% of manufacturing output, more than 40% of exports, over 28% of gross domestic product and employs about 111 million people.

34. Technology Route to help Coffee growers boost yield

Introduction

- For the 3.5 lakh coffee growers in India, 98% of whom are small-scale, challenges affecting production include labour shortage, climate change and pest attacks.

- One way to manage these is by adopting technology, which the Coffee Board is trying to bring about for the growers.

Details

- Tech Companies are now trying machine learning based apps which would help in addressing the white stem borer problem, weather forecasting, and the third, predicting leaf rust.

- It is based data collection, photos provided, companies have created machine learning algorithm to forecast each of these issues (for a grower).

White Stem Borer (WSB)

- It is a blackish brown coloured beetle measuring about 2 cm in size with three pairs of white stripes running obliquely across the wings.

- Alternate host plants of this beetle include rose sandal wood, teak etc.

Signs of infestation

- The larvae enters the hard wood and burrows up to the roots.

- Infested plants show yellowing and wilting of leaves, presence of ridges on the stem, wilting of branches and occasional drying.

- In severe infestation a plant may have 20-25 grubs. Young plants succumb completely to the attack and older plants get damaged.

Measures for growers

- Building good shade is important as the adults prefer coffee plant exposed to sunlight for egg laying.

- Growers are directed to take up preventive and remedial measures to control the spread of the pest by identifying the infested plants, uprooting and burning them on the spot.

- Storing of infested stem in the estate will result in a continuous infestation.

- Spray once in April-May and another spray at the end of October with chlorpyrifos 20EC at 600ml in 200 litre of water along with 200ml of wetting agent.

  * Alternatively stems may be swabbed with carbaryl 50WP at 4kg diluted in 200 litres of water.

35. UN MSME Day

- The UN General Assembly in its 74th Plenary 2017 declared 27th June as Micro, Small and Medium-sized Enterprises Day, recognizing the importance of Micro, Small and Medium-sized Enterprises in achieving sustainable development goals and in promoting innovation, creativity and sustainable work for all.

- According to the data provided by the International Council for Small Business (ICSB), formal and informal Micro-, Small and Medium-sized Enterprises (MSMEs) make up over 90% of all firms and account on average for 60-70% of total employment and 50% of GDP.

- The General Assembly, recognizing the importance of these enterprises, decided to declare 27 June the Micro-, Small and Medium-sized Enterprises Day to raise public awareness of their contribution to sustainable development.

36. What does the merger of NSSO and CSO entail?

- The government recently announced that the National Sample Survey Office (NSSO) will be merged with the Central Statistics Office to form the National Statistical Office (NSO).

- Many believe that this move will undermine the autonomy of the NSSO which has been at the centre of various public controversies over data on economic growth and unemployment.

- Further, the NSO will be headed by the secretary of the Ministry of Statistics and Programme Implementation (MOSPI).

- This is in contrast to the original plan proposed by experts to merge various statistical bodies such as the NSSO and others to create a unified statistics body that is accountable to Parliament, rather than the government.

Background

- In May, 2019 the NSSO came out with a report which cast serious doubt on the reliability of raw data that is used to calculate India's Gross Domestic Product (GDP).

- The NSSO stated that it could not either trace or classify 38.7% of the companies included in the MCA-21, a database of private companies that is maintained by the Ministry of Corporate Affairs, whose financial numbers the government currently uses to calculate GDP figures.

- Many believe that the poor quality of raw company data could heavily skew the measurement of private sector business growth, which is a part of the overall GDP of the economy.

  * When data gathered from the MCA-21 database was first used to revise earlier growth figures, sectors such as manufacturing showed significant growth in size in 2013-14.

- This was in stark contrast to the earlier estimates that showed an actual contraction in the size of manufacturing.

What is the government stand?

- MOSPI, however, has defended the use of the MCA-21 database to calculate GDP numbers stating that appropriate adjustments are made to make sure there is no overestimation of GDP.

- In a clarification the government stated that companies classified as "out-of-coverage" by the NSSO still contributed to the economy even though they may not fall strictly under the services sector.

- It further stated that the weightage given to companies that report their financial numbers is far greater and that, in reality, only about 16.4% of companies in the MCA-21 are either closed or non-traceable.

- The NSSO's apprehension over the MCA-21 database still adds to concerns that already exist about the reliability of GDP data that is put out by the government due to recent changes in methodology.

How is MCA-21 important to GDP?

- Experts feel that the financial accounts of several shell companies that are included in the MCA-21 database could be fictitious, and thus cannot be considered as a good proxy for real economic activity.

  * For instance, under the revised GDP series that was introduced in 2015, financial data from companies that filed their accounts with the government even just once in three years were considered sufficient to help make GDP growth estimations.

- Supporters of the new methodology believe that, in reality, the accounts of most shell companies reflect the financial activities of actual businesses which remain camouflaged behind these fictitious entities.

- So, they believe, the non-inclusion of shell companies will actually lead to a significant underestimation of the true size of the economy.

- It is important to note that Government statisticians have for long used small surveys to gather the raw data that are required to make "blown up" estimations about the growth of the wider economy.

- This, however, changed in 2015 when the government introduced a new GDP series with 2011-12 as the base year (from the previous base year of 2004-05) and introduced the MCA-21 database as the mainstay for calculating GDP figures.

- The fact that even data for the organized sector of the economy were unreliable has raised doubts about the reliability of other data.

- Data on the large unorganized sector, for instance, are even cruder and can be extremely unreliable. It is worth noting that policymakers within the government depend heavily on official GDP figures to frame their policies.

Is the data collected reliable?

- The field of economic statistics largely involves the estimation of trends in the economy based on sample data that is collected through surveys and other means.

- This usually gives rise to disagreements even among experts within the field that could have a genuine difference in opinion about how raw economic data should be collected, and about the various assumptions that should go into the calculation of GDP and other economic estimations.

- Further, what has caused a rise in concerns about the reliability of India's GDP figures in the last few years, however, is the belief that the government may be increasing its interference in the process of the production of economic data.

- Also, the divergence between official GDP figures which show that growth has fallen below 6% in the fourth quarter and high-frequency economic data which reveal how various sectors are facing a serious slowdown has cast further doubt on the reliability of government data.

- In January, 2019, two non-government members of the National Statistical Commission resigned over, among other reasons, the government's reluctance to release jobs data collected by the NSSO. The NSSO's periodic labour force survey, which was leaked in January, 2019 had reported that the unemployment rate was at a 45-year high of 6.1% in 2017-18.

Will the merger impact the credibility of government data?

- The move will give the government greater leverage over production of key data.

- The lack of transparency in the production of economic data can over time cause the users of such data to discount its value.

- This has been the case in countries such as China where the constant tinkering with official economic data has caused analysts to lose trust in them.

37. Yamuna Water Taxi Project

Context

- The Minister of State (I/C) for Shipping inspected the Sonia Vihar site of the proposed Yamuna Water Taxi Project of Inland Waterways Authority of India (IWAI)

About the project

- IWAI proposes to develop River Yamuna in Delhi for the purpose of tourism in a sustainable way.

- The Yamuna Water Taxi Project has been conceived as an integrated development project combining several functions like terminal development and vessels operation.

- The project covers a total length of 16 km and comprises five locations on the banks of River Yamuna in Delhi, including Fatepur Jat, Tronica City, Jagatpur, Sonia Vihar and Wazirabad.

- It is proposed to be developed in two phases – Pase I: Sonia Vihar to Tronica City and Phase II: Wazirabad to Sonia Vihar and Tronica City to Fatehpur Jat.

- The project also proposes to operate vessels on multi-fuel sources on the river, making it more environment friendly.

INTERNATIONAL RELATIONS

1. A clear arc from India to Nigeria

Introduction

- The leaders of India and Nigeria both have begun their respective second terms
- Prime Minister Narendra Modi and Nigerian President Muhammadu Buhari have finished their first term and the public mandate will ensure they continue with second

Similar Personality and common challenges

- Each of the two leaders are admired for their personal probity, hard work and discipline
- They have to now cleanse a system riddled with corruption and nepotism
- The challenges faced by these leaders during their first terms were uncannily similar: security against terror, monetary and fiscal conundrums, a communal and sectarian divide, chronic unemployment, rampant corruption, rural distress and a fragile neighbourhood being the recurrent themes.

Importance of Nigeria to India

Nigeria being Africa's most populous country (191 million) and economy ($376 billion) as well as the world's sixth largest oil exporter (about 2 million barrels per day) is evidently important to us.

- According to the latest Indian Department of Commerce statistics, Nigeria is India's largest trading partner in Africa (19th overall) with total trade estimated at $13.5 billion in 2018-19.
- As official Nigerian data show, thanks to our booming oil imports, India is Nigeria's largest trading partner
  - * For the same reason, Nigeria enjoys 4:1 surplus in bilateral trade.
- Nevertheless, it is still a sizeable market for India's manufactured exports, such as (2018-19 figures) miscellaneous machinery ($500 million), vehicles ($495 million), pharmaceutical products ($447 million), textile items ($299 million), iron and steel articles ($152 million) and plastics ($109 million).
  - * In contrast to the stagnancy in India's global exports, its exports to Nigeria surged by 27% last year to reach around $2,880 million.
- Indian investments in Nigeria are estimated at around $15 billion with a further $5 billion in the pipeline.
  - * In o There are at least 180 Indian companies operating in Nigeria with pharmaceuticals, steel, power, retailing, fast-moving consumer goods and skilling as their mainstay.

- * Approximately 50,000 Indians reside in Nigeria, some of them for decades. Most of them are professionals, such as engineers, accountants, bankers, trainers and health-care experts.

Issue Area

- First, all these achievements are the outcome of valiant attempts by individual stakeholders with scant official encouragement or support.
  - * For instance, some simple tweaking in our visa procedure can help thousands of Nigerians avail of our medical and educational facilities, benefiting all sides and creating huge people-to-people goodwill.
  - * Despite the encouraging numbers, the two governments have not yet been able to facilitate direct connectivity of air travel, banking and shipping — steps which could have promoted the ease of doing bilateral business.
- Despite their growth, Indian exports to Nigeria are still around a quarter of China's.
  - * Second, enormous potential still waits to be leveraged in such sectors such as upstream hydrocarbons (despite India being the largest buyer of Nigerian crude), agriculture, health care and skilling.

Way forward

- Though some ministerial-level visits took place in the past five years, these were mostly for multilateral events in India
- It could evolve a multi-pronged strategy to leverage evident economic complementarities in sectors such as hydrocarbons, infrastructure, institution-building, defence and agriculture.
- A purposive follow-up session of the joint economic commission soon thereafter could provide an incremental and sustainable road map empowering the relevant bilateral stakeholders.
- If handled skillfully and with political will, it could usher in an India-Nigeria economic synergy that has been untapped for some decades.

2. Chagos Archipelago

Background

- Chagos Island has passed from one colonial power to colonial power – Holland then France – the islands fell under British control in the early 19th century.
- During this time Britain brought several hundred people from Mozambique and Madagascar to the islands to work on British-owned coconut plantations.

- Britain continued its administration of the islands – as part of the greater colony of Mauritius – until the 1960s, by which time the decolonisation process had begun to gain momentum.
- With the adoption of the 1960 Colonial Declaration, Britain readied itself for the inevitable independence of Mauritius.

How UK took over the Islands?

- In 1964, the UK began to discuss the future of the Chagos Islands with the US, which had expressed an interest in establishing military facilities on the island of Diego Garcia.
    * The Chagos Islands are home to the U.S. military base, under lease from the United Kingdom
- The agreement to allow Britain to administer the Chagos islands came in 1965, three years before Mauritius gained independence.
    * Mauritius achieved independence in 1968
    * Mauritius says Britain had made it a pre-condition for independence
    * Then using a combination of diplomatic pressure and bullying, Britain convinced the government of Mauritius to hand the islands over to British control, something the Mauritian government claimed it had "no choice" over.
- Between 1967 and 1973, the entire population of the Chagos Archipelago was either prevented from returning or forcibly removed and prevented from returning by the UK.
    * the U.K. forcibly moved around 1,500 Chagossians to Mauritius Main land and Seychelles
    * The U.K. depopulated Diego Garcia by expelling all its inhabitants, to facilitate the building of the military base, paying just £4 million as compensation to Mauritius.
- With time UK has refused to return the Chagos archipelago, claiming sovereignty over the islands.

International Court of Justice

- The International Court of Justice in Hague ruled that the United Kingdom must cede control over the Chagos Islands

Judgment

- The 13-1 verdict, while nonbinding, was an embarrassing defeat for the U.K
- The International Court of Justice was almost unanimous in its finding that the actions by the British government were in breach of the islanders' right to self-determination under international law.
- The continued British administration of the islands is therefore "a wrongful act", and the UK has an obligation to return control of the Islands to Mauritius "as rapidly as possible".

UK's Response

- UK said the ICJ's is an advisory opinion
- The U.K. had invented a new category called the British Indian Ocean Territory and argued at the ICJ that it had sovereignty over the Chagos.
- The U.K. also stated, in support of its position, that the military base at Diego Garcia was essential to provide maritime security against terrorists, organised crime and piracy.
- The U.K. did not act on the ICJ ruling
- In 2016, Britain extended the lease to the U.S. till 2036 even as it said it would return the islands to Mauritius when no longer needed for defence purposes.

UN

- The U.K. did not act on the ICJ ruling, compelling Mauritius to take the case to the UN, which has now accepted its sovereignty over the whole archipelago.
- The United Nations General Assembly (UNGA) voted by a huge majority (116 out of 193 members) to demand that the U.K. "withdraw its colonial administration" within six months over the Chagos archipelago in the Indian Ocean in favour of Mauritius.
- The ruling highlights the isolation of the U.K. and the U.S. on this issue.

Role of India

- India has played an important role, away from the public glare, in this whole affair. India's relations with Mauritius are unique and it was a foregone conclusion that India would solidly back Mauritius's claims, given India's active role in decolonisation.
- The U.S. and the U.K. tried to influence India to restrain Mauritius. Both countries conveyed to Mauritius they could not hand over the Chagos as long as it is required for defence purposes.

- The realistic view is that nothing will change but some accommodation or agreement can be worked out. India is likely to play a not too insignificant role in working out a modus vivendi.

China's Presence in IOR

Though India was a strident critic of military bases in the Indian Ocean during the Cold War, geo-strategic changes in the last three decades have thrown up new challenges

- China making inroads into the Indian Ocean and occupying islands illegally in the South China Sea.
- So India can seek and help US where Mauritius will agree to lease out the island for a long period to the U.S. for maintaining the military base.

Conclusion

- It would be best for London to step back and hand over sovereignty to Mauritius and simultaneously work out the leasing arrangement with the U.S.
- India can play a pivotal role in bringing such an agreement to fruition.

3. **G 20 Summit**

Context:

- The 2019 G20 Summit, the fourteenth meeting of the G20 recently concluded in Osaka, Japan.

G 20:

- The G20 is an international forum for the governments and central bank governors from 19 countries and the European Union (EU).
- Founded in 1999 with the aim to discuss policy pertaining to the promotion of international financial stability.
- Membership of the G20 consists of 19 individual countries plus the European Union.
- The G20 economies account for around 90% of the Gross World Product (GWP), 85% of the world's nominal GDP, 80% of world trade, two-thirds of the world population, and approximately half of the world land area.
- India is a member of G20.
- The G20 operates as a forum and not as an organisation. Therefore, it does not have any permanent secretariat or management and administrative structure.
- One of the G20 countries is selected to hold the Chair in rotation, also known as 'G20 presidency'. The presidency establishes a temporary secretariat for the duration it holds the Chair. The secretariat coordinates all work and organizes G20 meetings.
- The immediate past, present and next Chair constitutes a 'troika' and ensures continuity in the G20 work.

Details:

- As a forum, the G-20 is often watched more closely for the meetings the event affords on its sidelines, than for substantive outcomes.
- The countries that make up the G-20 have pressing issues it wishes to discuss with other members on bilateral, plurilateral and multilateral levels.
- Prime Minister Narendra Modi used the occasion of the G-20 summit at Osaka for as many as 20 such meetings, including nine bilaterals, eight pull-aside engagements, and of the Russia-India-China, Japan-U.S.-India and Brazil-Russia-India-China-South Africa groupings.
- The most anticipated were President Donald Trump's meetings with his Chinese counterpart Xi Jinping and Mr. Modi, given the escalation in trade tensions.
  * Both ended on a cordial note, but with no breakthrough or "big deals".

Issues discussed:

- Several Indian concerns were raised at the G-20 deliberations, including the need for cooperation on dealing with serious economic offenders and fugitives, as well as climate change funding, which found its way into the final declaration.
- Prime Minister Narendra Modi invited the G20 countries to join a global coalition on disaster resilience, saying disasters require quick and effective remedial measures as they invariably affect the poor the most.
- On issues such as ocean pollution management, gender equality and concerted efforts to fight corruption, the G-20 found consensus more easily.

Conclusion:

- With Saudi Arabia hosting the next G-20 in 2020, followed by Italy in 2021, all eyes will soon turn to the agenda India plans to highlight when it holds the G-20 summit in 2022.
- Many global challenges, such as climate change and its impact, the balance between the needs for speed and national security with 5G networks being introduced, as well as technology-driven terrorism, will become even more critical for the grouping, and the government must articulate its line.
- India should lead the exercise in making the G-20 more effective in dealing with some of the inequities in its system.
- It must be ensured that it is not detracted from its original purpose of promoting sustainable growth and financial stability by grandstanding by one or two members.

- It is a framework to promote cross-border data flow with enhanced protections, launched at the G20 summit in Japan. It formulate rules on digital governance under the concept of "Data Free Flow with Trust".

- The initiative seeks to standardise rules of global movement of data with enhanced protection for personal information, intellectual property and cybersecurity

- Along with the United States, the European Union (which represents 28 countries at the WTO), Australia, and Singapore among others, Japan pushed hard for the plurilateral negotiations on digital trade with the avowed intention of crafting sweeping rules on data flows, removal of prohibitions on data localization, and cloud computing among others

India

- India, South Africa, and Indonesia have boycotted the "Osaka Track" on the "digital economy" at the G20 leaders' summit in Osaka, as it overtly undermined "multilateral" principles of consensus-based decisions in global trade negotiations, and denied "policy space" for digital-industrialization in developing countries

- India is among the many countries that have stressed on data localization, with the Reserve Bank of India issuing a directive last year that mandated foreign firms to store their payments data within the country for "unfettered access...for supervisory purposes"

4.   Hong Kong suspends extradition Bill

Opium War 1

- Nineteenth-century Britain had an appetite for Chinese tea, but the Qing Dynasty and its subjects did not want to buy anything that the British produced and demanded that the British instead pay for its tea habit with silver or gold.

- The government of Queen Victoria did not want to use up any more of the country's reserves of gold or silver to buy tea, and the tea importation tax generated during the transactions was a major percentage of the British economy.

- Victoria's government decided to forcibly export opium from the British-colonized Indian subcontinent to China. There, opium would then be exchanged for tea.

- China's government, objected to the large-scale importation of narcotics into their country by a foreign power. At the time, most of Britain didn't view opium as a particular danger; to them, it was a medicine. China, however, was experiencing an opium crisis, with its military forces suffering direct impacts from their addictions.

- When they discovered that banning opium imports outright did not work—because British merchants simply smuggled the drug into China—the Qing government took more direct action. In 1839, Chinese officials destroyed 20,000 bales of opium. This move provoked Britain to declare war in order to protect its illegal drug-smuggling operations.

- The First Opium War lasted from 1839 to 1842.

- Britain invaded the Chinese mainland and occupied the island of Hong Kong on Jan. 25, 1841, using it as a military staging point. China lost the war and had to cede Hong Kong to Britain in the Treaty of Nanking. As a result, Hong Kong became a crown colony of the British Empire.

Second Opium War

- The Treaty of Nanking did not, however, resolve the opium trade dispute, and the conflict escalated again, into the Second Opium War.

- The settlement of that conflict was the first Convention of Peking, ratified on Oct. 18, 1860, when Britain acquired the southern part of the Kowloon Peninsula and Stonecutters Island

- It was further extended when Britain obtained a 99-year lease of the New Territories in 1898.

- The territory was transferred to China in 1997.

- As a special administrative region, Hong Kong maintains separate governing and economic systems from that of mainland China and its people overwhelmingly identify as Hongkongers rather than Chinese

Administrative set up in Hong Kong

- When Hong Kong was handed over to China in 1997 by Britain, both sides agreed that the city would remain a semi-autonomous region under the Basic Law, its mini-Constitution, for 50 years.

- The Basic Law provides people in Hong Kong more political freedoms than their counterparts in mainland China.

- There is a relatively free press, an unregulated Internet and a less-controlled judiciary in Hong Kong.

- Also, mainland authorities are not allowed to operate directly in Hong Kong.

Protests from the past

Hong Kong has seen several protests since it was handed over to China by the British colonialists in 1997.

- In 2003, then Chief Executive Tung Chee-hwa's attempt to pass stringent security legislation, which Beijing had pushed for, was successfully resisted by tens of thousands of protesters.

- In 2014, the city saw weeks-long protests against proposed changes in the electoral system, which came to be known as the Umbrella Movement.

Current Bill

- The bill would have allowed the city government to extradite any suspect to places with which Hong Kong does not have extradition accords.

- When Hong Kong's extradition agreements were finalised, mainland China and Taiwan were left out because those regions had fundamentally different criminal justice systems from that of the city.

- This "loophole", according to the Hong Kong government, allows suspected criminals to avoid trial elsewhere by taking refuge in the city.

- It is feared that the bill would cause the city to open up to mainland Chinese law and that people from Hong Kong could become subject to a different legal system.

- The extradition plan applies to 37 crimes, including murder, sexual offences, abduction, drug peddling and corruption, with retroactive effect. The Chief Executive can decide on extradition requests on a case-by-case basis which would then be reviewed by the city's courts.

Concerns

But Beijing has increasingly tried to exert its influence on the city in recent years, raising concerns of the city's pro-democracy groups which are largely Beijing-sceptics.

- There have been instances of China critics being abducted from Hong Kong with the city government doing nothing to resist such actions.

- Furthermore, the Hong Kong government itself has shown growing authoritarian tendencies in recent years.

- There have been instances of lawmakers being disqualified, activists banned from running for office, a political party prohibited and a foreign journalist expelled.

- So civil society groups are fighting two odds — growing instances of Beijing's meddling in Hong Kong's affairs and rising authoritarian traits of the city's rulers

They say the bill is another blow against the rights those in Hong Kong currently enjoy, noting that it would empower the city government to send critics of Beijing to the mainland where the criminal justice system is tightly controlled by the establishment. It will practically break the existing legal barriers between Hong Kong and mainland China that are guaranteed under the "One Country Two Systems" model

5. Hormuz Strait

Context

- There is a growing dangerous contest between the United States and Iran for influence in the Middle East escalated dramatically as two tankers were targeted in suspected attacks near the strategic Strait of Hormuz, a vital waterway for global oil shipments.

Details

- The blasts appeared to be a coordinated attack, damaging the hull of a Japanese-owned tanker and striking a Norwegian-owned vessel

- The blast on the Japanese ship appeared timed to undermine diplomatic efforts by Japan's Prime Minister, Shinzo Abe, who was wrapping up a high-stakes visit to Tehran.

Concerns

- Crude prices climbed 4% after the attacks
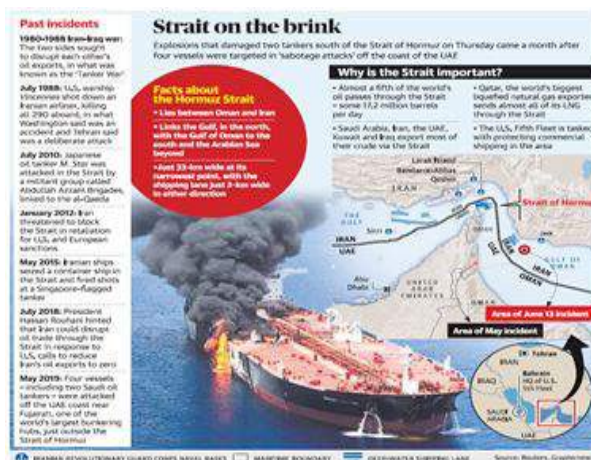
6. Kailash Mansarovar Yatra

It is an "important step" towards promoting people-to-people exchanges, and strengthening friendship and understanding between India and China.

- Lipulekh is a Himalayan pass on the border between Uttarakhand, India and Tibet, China

- It is a mountain pass in the Himalayas in East Sikkim district

7. 'Neighbourhood First'

Introduction

- In a reaffirmation of New Delhi's 'Neighbourhood First' policy, Prime Minister Narendra Modi's first visit abroad is to the Maldives and Sri Lanka, while S. Jaishankar wraps up his first visit abroad as Foreign Minister to Bhutan.

- Leaders of several neighbouring countries were invited to Mr. Modi's swearing-in ceremony.

- This is the first state visit by Mr. Modi to Male, which he had visited briefly for the swearing-in of President Solih in November 2018.

Maldives and Srilanka Visit

- The Prime Minister's visit to the Maldives aims to send a three-pronged message:
  * To continue high-level contacts between close neighbors,
  * Assist as development partners, and
  * Strengthen people-to-people ties.

- For Sri Lanka, Mr. Modi's message is one of solidarity in the aftermath of the Easter Sunday terror attacks
  * He will be the first international leader to visit Colombo since the attacks, and his visit sends a powerful message as Sri Lanka tries to recover from the trauma.
  * India will also continue the bilateral cooperation on joint development projects agreed before

How should India invest in its immediate neighbourhood?

- The "neighbourhood first" policy needs to invested with both human and material resources far beyond what has been deployed so far.

- This should be done even if it means reduced engagement in other parts of the world.

- In the face of Chinese intrusion India must maintain its dominance in its own neighbourhood, with priority to the Himalayan states, Bangladesh and the maritime states of Sri Lanka and the Maldives. Relations with Pakistan will continue to be adversarial but it should not become an obsessive concern. India cannot be a leading power if it hyphenates itself repeatedly with Pakistan.

Complex External Environment

- One, the confrontation between the United States (US) and China will sharpen and there will be steady intensification of pressures on countries to side with one or the other.

- Two, China will continue on its march towards superpower status even though there will be a slowdown in its hitherto relentless accumulation of economic and military power.

- * The asymmetry of power between India and China will expand as will Chinese influence in India's immediate subcontinental neighbourhood. The China-Pakistan nexus will not only endure but become more salient.

- Three, the situation in the Gulf and West Asia will worsen with the US ratcheting up pressure on Iran, Saudi-Iran tensions escalating and the likelihood of oil prices going up as a consequence.
  * The welfare of six million Indians living and working in the region will be adversely impacted. Worse, any outbreak of hostilities, by accident or design, will be a serious setback to India's energy security and pose a huge burden in evacuating even a fraction of its citizens in the region.
  * The Modi government and its foreign policy team led by the external affairs minister, S Jaishankar, will have to deal with a much more Complex External Environment as compared to Modi's first term.

Economic Vision

- India's foreign policy options relate directly to its economic prospects. In the period 2003-2007, India's regional and international profile increased because its economy was growing at 9% per annum, its economic and commercial engagement with the rest of the world was expanding and its technological capabilities were being acknowledged the world over.

- The country was behind China but seen as shrinking the gap with the latter. It is this perception of a rising India in the same league as China which significantly expanded India's diplomatic space.

- This enabled India to conclude a game changer deal like the Indo-US civil nuclear agreement.

- The lesson to be drawn is that India must change its economic narrative drastically through speedy adoption of second generation economic reforms, expand rather than retard the globalisation of the Indian economy,
  * conclude the Regional Comprehensive Partnership Agreement,
  * renew its application for membership of the Asia-Pacific Economic Cooperation community and
  * Play an active and constructive role in the reform of the World Trade Organization.

- A leading role for India cannot be built on weak economic foundations. More diplomacy may be required at home than abroad to infuse decisions on domestic reforms with a critical global perspective. As external affairs minister Jaishankar is uniquely placed to undertake this.

Way forward

New Delhi has clearly indicated that the neighbourhood will continue to be a priority, but four subtle elements are being introduced in the policy matrix.

- First, without always insisting on reciprocity, India may get into a proactive mode and adopt measures "to incentivise cooperation in the neighbourhood",

- Second, India will prefer to work on quick impact projects that bring socio-economic benefits to the people.

- Third, recognizing its "limited capabilities", as Foreign Secretary Vijay Gokhale disclosed, New Delhi would have no objection in forging a trilateral development partnership, involving India and Japan in a neighbouring country

  * Sri Lanka, Japan, India sign deal to develop East Container Terminal at Colombo Port

  * Sri Lanka will hold a 51 per cent-stake in the project and the joint venture partners will retain 49%.

- Fourth, SAARC's drawbacks have caused India's conscious shift to BIMSTEC. It could also consider bringing the Maldives into BIMSTEC, at least as an observer.

  * The Pakistan problem has repeatedly sucked the oxygen out of the policy, with minimal rewards.

  * Bimstec is an important overlay to the neighbourhood policy. India has practised a protectionist trade policy for decades, ensuring that its Bay of Bengal neighbours have tended to look elsewhere for their external economic relations.

  * Over the coming years, it must be transformed into a genuine free trade and investment agreement.

8. New Strategic Arms Reduction Treaty (New START)

- It was signed in 2010 in Prague by Russia and the United States and entered into in 2011

- The treaty was signed by US President Barack Obama and his Russian counterpart Dmitry Medvedev

- New START replaced the 1991 START I treaty, which expired December 2009, and superseded the 2002 Strategic Offensive Reductions Treaty (SORT), which terminated when New START entered into force.

- The accord, which expires in 2021, limits each country to no more than 1,550 deployed nuclear warheads and 700 deployed missiles and bombers.

Context

- Russian president accuses US of shunning talks on extending the nuclear arms reduction treaty, which expires in 2021.

Concerns

- The potential implications of letting the New START treaty expire would be huge, suggesting its demise could fuel a nuclear arms race.

9. Pakistan's blasphemy ordeal

- Blasphemy refers to saying, speaking, showing disrespect towards God. It is about saying offensive things about God or religion

- In Pakistan its Pakistan Penal Code, the main criminal code of Pakistan, punishes blasphemy

- It imposes penalties ranging from a fine to death

History of the Law

- The offences relating to religion were first codified by India's British rulers in 1860, and were expanded in 1927.

- Between 1980 and 1986, a number of clauses were added to the laws by the military government of General Zia-ul Haq

- In 1980, making derogatory remarks against Islamic Personages was made an offence, carrying a maximum punishment of three years in jail.

- In 1982, another clause prescribed life imprisonment for "wilful" desecration of the Koran, the Muslim holy book

- In 1986, a separate clause was inserted to punish blasphemy against the Prophet Muhammad and the penalty recommended was "death, or imprisonment for life", in that order.

Why do the authorities not amend them?

- Amending the blasphemy laws has been on the agenda of many popular secular parties. None has made much progress - principally because of the sensitivities over the issue, but also because no major party wants to antagonise the religious parties.

- Salmaan Taseer, Governor of Pakistan's Punjab province, was killed by his own bodyguard in 2011 for supporting reconsideration of blasphemy laws;

- The judge who convicted his murderer had to flee the country; and a shrine was built for the assassin after his execution.

Example

- Asia Bibi case

- A Hindu veterinary doctor, Ramesh Kumar, was arrested in Sindh province, after a local cleric filed a police complaint accusing him of committing blasphemy.

Concerns

- Between 1987 and 2012, Pakistani authorities prosecuted 1,170 people for blasphemy. That number has only increased over the years.

- The Pakistani legal system offers little protection to someone charged with blasphemy and mere accusation is tantamount to punishment.

- Judges and lawyers fear religious vigilantes who violently attack anyone they deem to be supporting a blasphemer.

- Christians, Hindus, and Ahmadi Muslims continue to face persecution and the country's blasphemy laws,

- Blasphemy charges are filed routinely by Islamist extremists for political gain, by neighbours for revenge over a slight, and sometimes even by corrupt landlords for advantage in property disputes.

Way forward

- For Pakistan's religious minorities to feel safe, Pakistan's blasphemy laws must be tackled, amended or removed as a crucial first step.

- That would involve an effort of mammoth proportions starting with the defanging of terrorist groups, changing school curriculum, and banning hate speech in all public venues.

- Political and religious leaders as well as the mass media must become a partner in confronting hate.

10. Palestinians reject economic part of US peace plan

Context

- The United States has revealed a proposal to create a $50bn global investment fund for the Palestinians and neighbouring Arab states, designed to be the economic engine of the long-awaited US Middle East peace plan.

- The "peace to prosperity" plan, set to be presented by White House senior adviser Jared Kushner

Details

- The economic scheme included 179 infrastructure and business projects, a billion-dollar investment to build up the Palestinians' tourism sector, and a $5bn transportation corridor to connect the West Bank and the Gaza Strip.

- More than half of the $50bn would be spent in the economically troubled Palestinian territories over 10 years, while the rest would be split between Egypt, Lebanon and Jordan, according to the plan.

- Some of the projects would take place in Egypt's Sinai Peninsula, where investments could benefit Palestinians living in adjacent Gaza, a crowded and impoverished coastal enclave blockaded by Israel and Egypt for 12 years.

- The 10-year plan would create a million jobs in the West Bank and Gaza

Issues

- Fundamental political issues such as the occupation of Palestinian territories, the right of return for refugees and their descendants (of which roughly five million live in refugee camps in neighbouring Arab countries) and border sovereignty were not mentioned in the plan.

Position Taken up by Palestine and Hamas

- Senior Palestine Liberation Organization (PLO) official Hanan Ashrawi said Mr. Kushner's plans were "all abstract promises" and said only a political solution would solve the conflict.

- Hamas was more blunt, saying: "Palestine isn't for sale".

11. Panda Diplomacy

- It is China's use of giant pandas as diplomatic gifts to other countries

- The pandas are given as gifts to countries or regions that have good relations with China and which China hopes to establish relations with.

12. Realising grand objectives

Introduction

- It is common to assess a country's foreign policy by examining individual bilateral relationships or specific outcomes. But this risks missing the forest for the trees.

- While the broad directions of India's foreign relations — with the neighbourhood, Afghanistan, the U.S., China, Indo-Pacific, Russia, and Europe — have been set over the past several years, the main factors inhibiting India's performance are ultimately domestic in nature. Three stand out.

The first is trade.

- It often surprises people that India's trade-to-GDP ratio is higher than China's or the U.S.'s. India's market, and access to it, remains a valuable lever with other countries.

- But much of India's commerce involves raw materials and low value-added goods, and is still insufficiently integrated into global supply chains.

- With global trade stagnant and the World Trade Organization at a standstill, the only way for India to seize a larger share of exports is through well-negotiated preferential trade agreements.

- India's past record in this department has been poor, leaving some sectors exposed to dumping and others unnecessarily cloistered.

- A smarter trade agenda will not only create jobs and drive reforms at home, it could become a potent strategic tool in international affairs.

**The second concerns defence.**

- India has the world's fifth largest defence budget but is also the world's second largest arms importer.

- Not only does this compromise national security, it means that India cannot offer an alternative as a defence supplier to countries in its region.

- Defence indigenisation will require financing for defence capital expenditure; assessments of costs, technology transfer capabilities, and export potential early in the procurement process; and fair competition between the Indian private and public sectors.

**The third concerns overseas project implementation.**

- India's outgoing aid budget has been relatively flat, reflecting a skepticism of grant aid from India's own experience as a recipient. Instead, it has now started to explore other financing options.

- Indian overseas credit has increased significantly, with over $24 billion extended primarily to South Asia, Southeast Asia, and Africa. But building on several recent steps will significantly increase the country's delivery and regional credibility.

- These include better project planning, more attractive and competitive financing terms, more reliable disbursal of funds, and enhanced coordination and communication with the private sector for implementation.

**Way forward**

- Many regional policy challenges would be addressed with these three major fixes.

- None will be easy as they will require tackling vested interests as key policy interventions in these three areas will now be necessary for India to realise its grander objectives.

13. **St. Petersburg consensus: On Russia-China bonhomie**

**Context**

- The bonhomie between China's and Russia's leaders at the St. Petersburg International Economic Forum was demonstrable.

**St. Petersburg International Economic Forum**

- It is an annual Russian business event for the economic sector, which has been held in St. Petersburg since 1997, and under the auspices of the Russian President since 2005

- Each year, more than 10,000 people from over 120 different countries take part.

- The Forum brings together the chief executives of Major Russian and international companies, heads of state, political leaders, prime ministers, deputy prime ministers, departmental ministers, and governors.

In a sign of the heightened tensions between the U.S. and the two countries, Russia's annual investment gathering was boycotted by the U.S. Ambassador to Russia.

**Issues between USA and Russia**

- The rift with Russia began with Moscow's annexation of Crimea in 2014 and the stand-off in eastern Ukraine that continues.

- Far more sensitive has been U.S. Special Counsel Robert Mueller's inquiry into possible Russian meddling in the 2016 U.S. presidential election.

**The Nord Stream 2**

- It is a new undersea gas pipeline being built by Russia's energy firm Gazprom

- The 1,225km pipeline will run under the Baltic Sea from Russia to Germany.

- Russia's tensions with the U.S. and some EU countries stem also from their opposition to the 1,200-km-long Nord Stream 2 gas pipeline from Russia to Germany.

    * U.S. objections draw in part from its eagerness to export Liquefied Natural Gas to Europe,

    * Besides thwarting Moscow's ambition to dominate the region's energy market.

    * The construction of a new Nord Stream-2 gas pipeline will cause Ukraine significant losses, which may amount to 3% of GDP.

**USA- China Brawl**

- Conversely, the Chinese telecommunications equipment manufacturer Huawei signed an agreement with Russia's principal mobile operator to start 5G networks, in a rebuff to Washington's attempts to isolate the firm internationally.

    * Washington's blacklisting of Huawei, prohibiting it from selling technology to the U.S. and barring domestic firms from supplying semiconductors to Beijing, falls into a class of its own among international trade disputes.

Increased Cooperation between Russia and China

- Russian President Vladimir Putin and his Chinese counterpart Xi Jinping made it clear in St. Petersburg that the tensions with the West had only drawn them closer marked by increased diplomatic and strategic cooperation

- China participated in Russian military exercises on its eastern border last September, marking a watershed.

- Moscow and Beijing, hostile rivals of the Cold War era, have for a while been adopting common positions at the UN Security Council on critical international issues.

- Bilateral relations are also guided by pragmatism. Russia appears realistic about the growing Chinese economic clout in Central Asia, once firmly in its sphere of influence, thanks to China's massive infrastructure investments under the Belt and Road Initiative.

- Chinese cooperation would moreover prove critical for Russia's elaborate plans to exploit the Northern Sea Route along the Arctic as an alternative transportation hub.

Conclusion

- International sanctions have not been very effective in isolating Russia.

- European states, notably Germany, recognise the importance of engaging with Russia to contain Mr. Putin's expansionist aims.

- Equally, President Donald Trump's "America first" policy is compelling potential rivals to make common cause.

14. Tiananmen Square/ June Fourth Incident/ Six four

15. U.S. visa process needs social media profiles now

Context

- In a significant move to increase surveillance of those seeking to enter the United States, Washington will require most individuals applying for visas to provide details of their social media handles going back five years.

Details

- The U.S. Department of State introduced a change in online visa forms for immigrant (form DS-260) and non-immigrant visas (form DS-160) requiring applicants to register their social media handles over a five-year period.

- In the drop-down menu on the Consular Electronic Application Center (CEAC) site, applicants will be expected to choose from 20 online platforms, including Facebook, Flickr, Google+, Instagram, LinkedIn, Myspace, Pinterest, Reddit, Tumblr, Twitter, Vine and YouTube, and provide their usernames on the platforms.

    * Among the social media platforms based outside the United States on the list are Tencent Weibo, Twoo, and Youku.

- Online visa forms that require social media account history became operational at the end of last week and will cover all applicants except those applying for certain official and diplomatic visas.

- It was an outcome of President Donald Trump's desire to put in place a policy of "extreme vetting" of foreigners entering the country, a theme articulated during his campaign and via executive orders in 2017 to enhance national security.

- Earlier, social media information was asked of only certain individuals whose applications required further review.

    * This new requirement marks a shift away from the voluntary disclosure of social media profile information under the Barack Obama administration.

Issue Area

- Processing times for visas to the United States are likely to go up significantly following the implementation

- Applicants have the option of saying they do not use social media but lying could have "serious immigration consequences"

    * It also poses question how will USA verify it?

- There is also no evidence that such social media monitoring is effective or fair, especially in the absence of criteria

    * There would be deletion or editing just to get visa approved, how this is going to be monitored leaves many grey areas.

- Social media is an intricate map of its users' contacts, associations, habits and preferences.
  * Full information on accounts will give the US government access to a visa applicant's pictures, locations, birthdays, anniversaries, friendships, relationships, and a whole trove of personal data that is commonly shared on social media, but which many may not like to share with agencies of state.
- The bluntness of the policy and its vast scope raise serious concerns around civil liberties including questions of arbitrariness, mass surveillance, privacy, and the stifling of free speech.
- There is a significant degree of discretion involved in determining what constitutes a visa-disqualifying social media post and this could stifle free speech.
  * For instance, is criticising the President of the United States or posting memes about him (there are plenty of those on social media these days) grounds for visa denial?
  * What about media professionals? Is criticising U.S. foreign policy ground for not granting someone a visa?

Elsewhere in the world

- In 2015, Indians faced further scrutiny in Schengen visas, after it was made mandatory to provide biometric data through fingerprints and a digital photo.
- That requirement was already in place in the US and Britain.
- Currently, the UK and Canada — popular destinations for Indian visitors and immigrants — do not have any policy of collecting social media information form visa applicants.

What lies ahead?

- Most Indians applying for U.S. visas will be covered by this policy. Over 955,000 non-immigrant visas (excluding A and G visas) and some 28,000 immigrant visas were issued to Indians in fiscal year 2018. So at least 10 lakh Indians — and these are just those who are successful in their visa applicants and not all applicants — will be directly impacted by the policy.
- The new policy is expected to impact 14 million travellers to the U.S. and 700,000 immigrants worldwide according to the administration's prior estimates.

16. UNSC non-permanent seat

Context

- India has won the unanimous support of all countries in the 55-member Asia-Pacific Group at the United Nations in support of its bid for a non-permanent seat at the UN Security Council (UNSC) for a two-year term in 2021-22.

- The development is particularly significant given that Pakistan and China, both countries with which India has had diplomatic challenges at the UN, supported the move.

How it works?

- The five permanent members of the Council are China, France, Russia, UK and the US.
- Each year the 193-member General Assembly elects five non-permanent members for a two-year term at the UN high-table.
- The 10 non-permanent seats are distributed on a regional basis: five for African and Asian States; one for Eastern European States; two for the Latin American and Caribbean States; and two for Western European and other States.

Details

- Elections for five non-permanent members of the 15-nation Council for the 2021-22 term will be held around June next year.
- The 55-member Asia-Pacific Group gets to nominate one of its members for the June 2020 elections to a non-permanent seat on the UNSC.
- India will need the vote of two-thirds of the 193 UN General Assembly members to win a non-permanent seat on the UNSC.
- India has been keen to hold the seat in 2021-22 to coincide with the 75th anniversary of Independence in 2022.
- Currently the 10 non-permanent members are Belgium, Cote d'Ivoire, Dominican Republic, Equatorial Guinea, Germany, Indonesia, Kuwait, Peru, Poland and South Africa.

In the past

- India has already held a non-permanent seat on the UNSC for seven terms: 1950-1951, 1967-1968, 1972-1973, 1977-1978, 1984-1985, 1991-1992 and 2011-2012.
- It announced its candidacy for the 2021-22 seat at the end of 2013, with Afghanistan, a potential contender, withdrawing its nomination to accommodate India's candidacy based on the "long-standing, close and friendly relations" between the two countries

What should India do?

- India has a unique role to play at the UNSC, given the near-complete polarisation among the permanent members (P-5 nations), with the U.S., the U.K. and France on one side, and Russia and China on the other. India's ability to work with both sides is well known.
- Given the twin challenges of a rising China, and the U.S. receding from its UN responsibilities, India must consider how it will strengthen the multilateral world order amid frequent unilateral moves by both the world powers.

- An even bigger challenge will be to nudge all five permanent members on the one issue they have unitedly resisted: towards the reform and expansion of the UNSC, which would include India's claim to a permanent seat at the high table.

17. Why South Asia must cooperate

- It is important to note that South Asia covers only about 3.5% of the world's land surface area but hosts a fourth of its population.
- This fact makes South Asia a region of significant importance for international development.
- However, in spite of the geographic proximity that countries in this region enjoy and their common socio-cultural bonds, this is one of the world's least integrated regions.
- Intra-regional trade is a meagre 5% of the total trade these countries do globally, while intra-regional investment is less than 1% of the region's overall global investment.
- South Asia's average GDP per capita is only about 9.64% of the global average.
- Accounting for more than 30% of the world's poor, the region faces myriad economic and environmental challenges.

Lack of initiatives:

- While the countries share a host of common development challenges, economic cooperation remains less than adequate.
- While a few noteworthy regional initiatives such as the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) and the Bangladesh-Bhutan-India-Nepal (BBIN) Initiative have been undertaken to bring the countries closer together, economically and socially, there is scope for much more.
- As a matter of fact, for a region with common development challenges of inequality, poverty, weak governance and poor infrastructure, a shared vision of attaining the 2030 Agenda for Sustainable Development Goals (SDGs) provides enormous opportunities for cooperation, collaboration, and convergence (3C).
- It is important to note that compared to the Millennium Development Goals (MDGs), which were a set of eight objectives to be achieved by developing nations with support from developed nations by 2015, the SDGs are more universal, inclusive and integrated in nature.
- The 17 goals and their 169 targets are inter-connected and cannot be implemented by countries working in isolation.
- Many are transnational in nature and require regional efforts.
- As a matter of fact, South Asian countries could benefit a lot by adopting a regional framework of cooperation that can support, strengthen and stimulate the SDGs.

- The SDGs highlight not only the importance of regional approach towards achieving the goals but also the regional synergy and resulting positive value additions towards achieving the SDG 2030 Agenda.
- In the SDG Index 2018, which is an assessment of countries' progress, among 156 countries only two South Asian countries, Bhutan and Sri Lanka, are in the top 100. India is ranked 112th.
- Most South Asian countries have made good progress in ending extreme poverty, but they face persistent challenges to goals related to industry, innovation and infrastructure, zero hunger, gender equality, education, sustainable cities and communities and decent work and economic growth.
- These apart, most of South Asia continues to be vulnerable to climate change and climate-induced natural disasters.

Varying performances:

- A closer look at the country-level data shows that India is performing well in Goal 1 (no poverty), Goal 6 (clean water and sanitation), Goal 12 (sustainable consumption and production), Goal 13 (climate action) and Goal 16 (peace, justice and strong institutions).
- However, India is doing poorly in goal 2 (zero hunger), Goal 5 (gender equality) and Goal 9 (industry, innovation and infrastructure).
- Like India, Bangladesh is doing well in Goals 1, 6, 12 and 13 but poorly in Goals 2 and 9, and lagging behind in Goal 7 (affordable and clean energy).
- Further, while doing well in Goals 1 and 12, Pakistan needs improvement in Goals 2, 4, 5 and 9, similar to India and Bangladesh. It also needs improved performance with respect to Goal 8 (decent work and economic growth).
- Furthermore, it is important to point out that there are a lot of similarities among these three big economies of South Asia with respect to achieving some specific SDGs as well as exhibiting poor performance in some common goals.
- A regional strategic approach to tackle common development challenges can bring enormous benefits to South Asia.
- SDGs related to energy, biodiversity, infrastructure, climate resilience and capacity development are transnational, and here policy harmonisation can play a pivotal role in reducing duplication and increasing efficiency.

Case in Point: Bangladesh

- In a study titled 'SDGs Needs Assessment and Financing Strategy: Bangladesh Perspective', Bangladesh has undertaken exemplary initiatives for analysing its available resources and additional funding requirements for SDG implementation, suggesting that the country requires an additional $928 billion to fully implement the SDGs.

- The study identifies five possible sources for SDGs financing: public sector, private sector, public-private partnership, external sector and non-government organisations.

- On the other hand, data for many of the SDG targets and indicators for the Maldives are unavailable.

- Similarly, India has formulated some pragmatic plans and initiatives to improve food and nutrition security from which many of the neighbouring countries can benefit.

- Experts point out that to address institutional and infrastructural deficits, South Asian countries need deeper regional cooperation.

- On financing the SDGs in South Asia, countries can work towards increasing the flow of intra-regional FDI. The private sector too can play a vital role in resource mobilisation.

Concluding Remarks:

- The South Asian Association for Regional Cooperation (SAARC), the platform for regional economic cooperation in this region, has become moribund and remains unsuccessful in promoting regional economic cooperation.

- As a matter of fact, if the countries of South Asia, the fastest growing region of the world, can come to a common understanding on regional integration and cooperation in achieving the SDGs, it can unleash a powerful synergistic force that can finally make South Asia converge.

- In conclusion, a convergence towards achieving a common socio-economic agenda gives hope that no one in South Asia will be left behind in the journey towards eradicating poverty and enduring dignity to all.

18. 'Zero Chance' - Australia

Context

- The Australian government is launching a campaign 'Zero Chance' to raise awareness among people trying to enter the country illegally by boats.

- The message of Zero Chance is simple. Anyone who tries to come illegally to Australia by boat has zero chance of success

Details

- Australia has so far turned back 847 people on 35 vessels trying to enter Australia illegally, as part of the Operation Sovereign Borders that has been implemented since 2013

- Those who wish to enter the country must apply through refugees resettlement programmes, and Australia works with the UNHCR to identify those people.

- The campaign will be undertaken through NGOs that have some partnerships with Australia to educate people on not taking up these illegal and dangerous boat journeys

SOCIAL ISSUES

1. A stable planet

- It is important to note that India is projected to become the most populous country by 2027 surpassing China, and host 1.64 billion people by 2050.

- As a matter of fact, the world as a whole could be home to 8.5 billion people in just over a decade from now, and the number could go up to 9.7 billion by mid-century.

- The projections should be viewed in perspective, considering that alarmist Malthusian fears of inability to provide for more than a billion people on earth did not come true.

- Yet, there are strong arguments in favor of stabilizing population numbers by raising the quality of life of people, and achieving sustainable development that will not destroy the environment.

What does the UN Report show?

- The UN report shows migration to countries with a falling ratio of working-age people to those above 65 will be steady, as those economies open up to workers to sustain economic production.

- Japan has the lowest such ratio, followed by Europe and the Caribbean; in over three decades, North America, Eastern and Southeastern Asia will join this group.

Looking at the Indian National Scene:

- India meanwhile will have a vast number of young people and insufficient natural resources left for exploitation.

- However, preparing for the changes and opportunities migration offers will depend on a skills revolution.

- At the national level, achieving a reduction in fertility rates in States such as Bihar, Uttar Pradesh, Haryana, Madhya Pradesh, Jharkhand and Chhattisgarh — which are high as per Sample Registration System data — is a challenge for India as it seeks to stabilise population growth.

- This is possible if the State governments set their minds to it.

- They must singularly focus on improving education and health access for women, both of which will help them be gainfully employed.

- On the other hand, a rise in life expectancy has brought with it a policy imperative that is bound to become even more important in coming decades.

- A growing population of older adults is a certainty, and it opens up prospects for employment in many new services catering to them.

- Next, urban facilities have to be reimagined, with an emphasis on access to good, affordable housing and mobility.

Concluding Remarks:

- The Sustainable Development Goals framework provides a roadmap to this new era.

- But progress in poverty reduction, greater equality, better nutrition, universal education and health care, needs state support and strong civil society institutions.

- Making agriculture remunerative and keeping food prices stable are crucial to ensure nutrition for all. India is set to become the most populous nation. For its leaders, improving the quality of life for its people will be a test of political will.

2. Cyber Crime Prevention against Women and Children (CCPWC)

Context

- Incidents of misuse of social media to commit cybercrimes including online abuse and stalking of women are reported. But "Police" and "Public Order" are State subjects under the Seventh Schedule to the Constitution of India. To bring a framework and reduce the unpleasant turn of events Ministry of Home Affairs is implementing a scheme namely CCPWC

About the scheme

- The main objective of CCPWC Scheme is to have an effective mechanism to handle cybercrimes against women and children in the country.

- Under the scheme an online cybercrime reporting portal, (www.cybercrime.gov.in) has been launched to enable public to report complaints pertaining to Child

- The Portal facilitates the States/UTs to view complaints of cyber-crime online and take appropriate action.

- Since inception of the portal, more than 16000 complaints, including other cybercrimes, have been received through this Portal.

- Steps have also been taken to spread awareness, issue of alerts/advisories, training of law enforcement agencies, improving cyber forensics facilities, etc.

- These steps help to prevent such cases and speed up investigation.

3. Global Disability Summit

- The Summit aims to transform the lives of people with disabilities by raising global attention and focus on a hugely neglected area, mobilizing new global and national commitments to meet and implement the ambition set out in the global goals and UN Convention on the Rights of Persons with Disabilities, and showcasing best practice and evidence from across the World.

The objective of the summit is to

- Deliberate on issues across the world concerning empowerment and inclusion of Persons with Disabilities (PwDs) and
- To work out a mechanism for enabling them to live an independent and dignified life.

Background

- In 2018, the UK Department for International Development (UK DFID), along with co-hosts the International Disability Alliance and the Government of Kenya hosted the first-ever Global Disability Summit in London, UK.

Context

- A delegation headed by Union Minister for Social Justice and Empowerment to participate in the "2nd Global Disability Summit to be held at Buenos Aires, Argentina.

4. Go Tribal Campaign

- The campaign has been launched to widely promote the use of tribal products.
- TRIFED is an organization under Ministry of Tribal Affairs and is engaged in marketing development of tribal products including tribal art and craft under the brand name "TRIBES INDIA".

5. Govt has taken several steps to increase enrolment of girls

Context

- The Government is committed towards encouraging girl students for taking up higher studies. Various schemes, as detailed below, are being implemented for the same:

Steps taken

- The University Grants Commission (UGC) has two specific schemes for promotion of Women's Studies in Universities & Colleges namely:
  - * Development of Indian Studies in Indian Universities & Colleges and
  - * Capacity Building and Women Managers in Higher Education.
- For supporting single girl child, special scholarship schemes are there namely:

- * Post-Graduate Indira Gandhi Scholarship for Single Girl Child and
- * Swami Vivekananda Single Girl Child Scholarship for Research in Social Science.

- UGC has special schemes for promotion of women hostels in Universities and Colleges and establishment of Day Care Centres therein.

- UGC has provided support for eight exclusive women universities.

- The All India Council for Technical Education is implementing the PRAGATI scholarship scheme for assistance of girls pursuing technical education.

- To improve female enrolment in the Indian Institute of Technology (IITs), the Government has decided to increase female enrolment in B. Tech. Programmes of IITs from the current 8% to 14% in 2018-19, 17% in 2019-20 and 20% in 2020-21 by creating supernumerary seats.

- The Government has also decided to increase female enrolment from existing 14% to 20% over a period of 2-4 years by creating supernumerary seats in undergraduate programmes.

6. Human Trafficking Report

Context

- The U.S. State Department has released its 2019 Trafficking in Persons (TIP) report, highlighting the need for action against domestic trafficking in human beings.

- India continued to be placed in Tier 2 on the country trafficking scale.

Categorisation on efforts to meet minimum standards

TVPA stands for Trafficking Victims Protection Act of 2000, which is a Congressional legislation that requires an annual report from the State Department on status of human trafficking in countries across the world.

The report categorises countries into three groups based on the Trafficking Victims Protection Act (TVPA), U.S. legislation enacted in 2000. The categorisation is based not on the magnitude of a country's trafficking problem but on efforts to meet minimum standards for the elimination of human trafficking.

- The report contains country narratives and category designations for all countries, including the U.S. (Tier 1).

- India was placed (i.e., remained) in Tier 2, which comprises "countries whose governments do not fully meet the TVPA's minimum standards but are making significant efforts to bring themselves into compliance with those standards."
  - * There are more than 90 countries in Tier 2.

Details

- The 2019 report highlights the national nature of trafficking: in 77% of the cases, victims are trafficked within their own countries of residence, rather than across borders.

- The number of victims trafficked domestically was high compared to foreign victims being trafficked in all regions of the world except Western and Central Europe, the Middle East, and certain East Asian countries, as per the report.

- Victims of sex trafficking were more likely to be trafficked across borders while

- Victims of forced labour were typically exploited within their own countries, the report says, citing International Labour Organisation (ILO) data.

What needs to be done?

- The TIP report's conclusion stresses that while much has been done since the Palermo Protocol (an international framework to tackle trafficking, established in 2000) in terms of countries building legal frameworks to prosecute traffickers and provide care for survivors, more needs to be done, especially in terms of tackling domestic trafficking.

- Addressing human trafficking at home also takes political courage — in inspecting local sectors and industries, investigating official power structures that may condone or facilitate such activities, and ending impunity for crimes that have long been seen as accepted local and cultural practice

- The recommendations for India include amending the definition of trafficking in Section 370 of the Penal Code to "include forced labour trafficking and ensure that force, fraud, or coercion are not required to prove a child sex trafficking offence," and to establish Anti-Human Trafficking Units in all districts with dedicated funding and clear mandates.

7. **Kathua Rape Case**

Background

- An innocent eight-year-old minor girl has been kidnapped, wrongfully confined, drugged, raped and ultimately murdered.

- The heinous crime was committed in Kathua in Jammu and Kashmir. The rape-and-murder strategy was probably planned and deliberate, part of a larger plan to drive out the minority nomadic community from their land.

Transfer of case

- The Supreme Court (SC) had to step in and transfer the trial from the Kathua District Court to a court in neighbouring Punjab after a series of unprecedented developments

- The lawyers obstructed the filing of the chargesheet and cast communal slurs on the investigating team, protests were held in support of the accused and two BJP ministers in the then PDP-BJP coalition government in J&K demanded a CBI investigation.

- The apex court, aptly, refused to accede to the demand for such a probe. Doing so would have undermined the sanctity of due process and, more dangerously, amounted to accepting the argument that the investigating officers were influenced by religious considerations.

- The parents of the girl and other citizens concerned that no matter what the economic and social standing of girl's parents is, the legal system will stand by the truth and justice will be delivered.

Judgment by Trial Court

- It is a triumph for the justice system, as the Pathankot district and sessions court has lived up to the faith reposed in it by the Supreme Court

- Six of the seven men accused in the 2018 rape and murder of an eight-year-old girl in Kathua were convicted

  * In the case of the seventh accused, the defence lawyers produced material evidence that he was in Meerut at the time of the crime to appear for his examination.

- They have been sentenced to life for murder and 25 years in prison for gang-rape.

- The investigation had been fairly quick, and the charge-sheet was prepared in two months. The trial lasted a year, and the verdict has been delivered within 17 months of the occurrence.

Conclusion

- The verdict — and the investigation process — is a reassurance that the country's criminal justice system can hold its own in a communally-charged and politically-fraught moment.

- The Kathua case should be a template for many other cases where solid investigation and the delivery of justice within a specific time-frame are critical; it is equally important for political parties to desist from politicising such cases.

8. **Major initiative to make life easy for Pensioners**

Context

- The Union Minister inaugurated the Integrated Grievance Cell & Call Center for Pensioners set up by the Department of Pension and Pensioners Welfare.

Significance of the initiative

- In addition to resolving grievances of the pensioners, it will help in value addition to the whole process, as the pensioners will gradually provide inputs and suggestions in the form of feedback that will help the Department in the long run.

- This centre will also act as pressure on the departments to resolve the problems of the elderly pensioners.

Digital Life certificate From Home

- Life Certificate: Life certificate or certificate of existence is a document signed by a responsible person to assure that Pensioner is still alive to receive the pension.

- Keeping in view the great discomfort experienced by very senior and ailing Pensioners in queuing up outside Banks in the month of November to give their Life Certificate, the Department undertook a path breaking initiative.

- Involve Pensioners' Associations in 8 cities on a pilot basis and obtain 'Digital Life certificate From Home' of such Pensioners. This was a pilot program conducted in 8 cities, this year, this facility would be extended from 8 to 20 cities.

9. MEA rejects U.S. report on state of religious freedom in India

Context:

- The Ministry of External Affairs has rejected the U.S state department's annual report on religious freedom pointing to India's failure to protect minority communities stating that there is locus standi for a 'foreign entity/government' to pronounce on the rights of the citizens of India.

Details:

- The report pointed out that though India's Constitution guarantees the right to religious freedom, it has come under attack in recent years with the growth of exclusionary extremist narratives".

- In its annual report on religious freedom, the U.S has made references to multiple instances of the government at the Centre and various State governments of the Bharatiya Janata Party having taken steps that hurt the Muslim community.

- It has highlighted the growing instances of the murders and lynching by cow vigilante groups.

- Several attempts to undermine minority institutions and change the names of cities also find mention in the report, terming it the pluralistic nature of India.

India's response:

- The centre has questioned the locus standi of a foreign agency to comment on Indian citizens' rights.

- It was further added that it is widely acknowledged that India is a vibrant democracy where the Constitution provides protection of religious freedom, and where democratic governance and rule of law further promote and protect the fundamental rights.

- The Ministry of External Affairs has refused to accept the report saying that India is proud of its secular credentials and is committed to tolerance and inclusion.

10. Nirbhaya Fund

- The Ministry of Finance, had set up a dedicated fund called Nirbhaya Fund, for implementation of initiatives aimed at enhancing the safety and security for women in the country with Government contribution of Rs. 1000 Crores

- It is a non-lapsable corpus fund.

- The Fund is administered by Department of Economic Affairs of the finance ministry.

- Ministry of Women and Child Development is the nodal Ministry to appraise schemes under Nirbhaya Fund and also to review and monitor the progress of sanctioned Schemes

Schemes of Ministry of Women and Child Development under Nirbhaya Fund

Keeping in mind the need to have schematic interventions and proper mechanism for handholding of women in distress, 3 schemes i.e.

- ' One Stop Centre'
  * It aims at establishing Centres to facilitate women affected by violence. It provides First aid, Medical aid, Police assistance, Legal aid and counselling support.

- 'Universalization of Women Helpline'
- 'Mahila Police Volunteer'

Ministry of Home Affairs:

- Emergency Response support System
  * It aims to integrate all emergency numbers to 112 with state of art technology.
  * ERSS envisages an integrated computer aided emergency response platform to respond to distress calls and ensure speedy assistance to the distressed persons.

- Central Victim Compensation Fund
  * Section 357A in the Code of Criminal Procedure 1973 provides for compensation to victims of crime
  * Victims of sexual crimes including rape, acid attacks, crime against children, and human trafficking will be entitled to compensation

Context

- The States and Union Territories have utilised less than 20% of the budget allocated to them under the Nirbhaya Fund for safety of women by the Central government between 2015 and 2018

Details

- As per the data, of the ₹854.66 crore released by the Centre, a mere ₹165.48 crore has been spent by various States and UTs on different schemes launched by the Centre as well as other schemes for which the local governments sought funds.

- As many 21 States have not used any money under the Central Victim Compensation Fund for providing support to victims of rape, acid attacks, human trafficking and women killed or injured in cross border firing; ₹200 crore was allocated to 36 States and UTs for the programme with the aim to supplement State governments' funds as well as to reduce disparity in quantum of compensation.

When safety **is secondary**

While Mizoram, Uttarakhand and Andhra Pradesh have utilised the maximum amounts , Maharashtra, Manipur and Lakshadweep have not used a single penny released under any scheme of the Nirbhaya fund.

DELHI (UT) | 0.84
UTTARAKHAND | 51.68
USE OF NIRBHAYA FUNDS (%)
0.00   59.83
MANIPUR | 0
MIZORAM | 56.32
WEST BENGAL | 0.76
MAHARASHTRA | 0
ANDHRA PRADESH | 43.23
KARNATAKA | 34.07
TAMIL NADU | 22.40

1 No State has used any fund released for the Cyber Crime Prevention Against Women and Children scheme

2 Delhi has utilised ₹30 lakh from the Central Victim Compensation Fund but has not used any money released for other schemes

3 18 States have not utilised anything from their Emergency Response Fund

- The top five States ranked in terms of utilisation of money across various schemes under the Nirbhaya Fund were Chandigarh (59.83%), Mizoram (56.32%), Uttarakhand (51.68%), Andhra Pradesh (43.23%) and Nagaland (38.17%).

  * However, the government data shows more money was utilised by Chandigarh than what was allocated to it under Central Victim Compensation Fund as well as Women Helpline Scheme.

- The worst five States include Manipur, Maharashtra, Lakshadweep – which didn't spend even a single penny – and were followed by West Bengal (0.76%) and Delhi (0.84%).

Delhi

- Delhi, which was at the centre of nation-wide protests following the 2012 gang rape setting the wheels in motion for introducing the Fund, didn't use any money for three of the four schemes under which it was allocated a total sum of ₹35 crore.

- These include schemes for emergency support, women helpline, and cyber-crime prevention. The national capital used a mere a mere 3.41% of the money it received for compensating victims of gender based violence.

11. Squandering the gender dividend

Introduction

- If labour force survey data are to be believed, rural India is in the midst of a gender revolution in which nearly half the women who were in the workforce in 2004-05 had dropped out in 2017-18.

- The 61st round of the National Sample Survey Office (NSSO) recorded 48.5% rural women above the age of 15 as being employed either as their major activity or as their subsidiary activity — but this number dropped to 23.7% in the recently released report of the Periodic Labour Force Survey (PLFS).

Incremental decline

Before we turn to examining these changes, it is important to note that the drop in work participation by rural women is not sudden.

- The latest data from the PLFS simply continue a trend that was well in place by 2011-12. Worker to population ratio (WPR) for rural women aged 15 and above had dropped from 48.5% in 2004-5 to 35.2% in 2011-12, and then to 23.7% in 2017-18.

- In contrast, the WPR for urban women aged 15 and above declined only mildly, changing from 22.7% in 2004-5 to 19.5% in 2011-12, and to 18.2% in 2017-18.

Worker Population Ratio

- Worker population ratio is defined as the number of persons employed per thousand persons.

- WPR= (No. of employed persons x 1000) /Total population

One can view this drop in the rural female WPR both positively and negatively.

- If rising incomes lead households to decide that women's time is better spent caring for home and children that is their choice.

  * If the WPR is declining due to rising incomes, we would expect it to be located in richer households — households with higher monthly per capita expenditure and among women with higher education.

- However, if women are unable to find work in a crowded labour market, reflecting disguised unemployment, that is a national tragedy.

  * More importantly, most of the decline in the WPR has taken place among women with low levels of education.

  * For illiterate women, the WPR fell from 55% to 29.1% while that for women with secondary education fell from 30.5% to 15.6%.

  * The decline in work on family farms and allied activities contributed the most (14.8 percentage points), followed by casual wage labour (8.9 percentage points) and in work on family enterprises in other industries (2.4 percentage points).

* st of the decline — 23.1 percentage points out of 24.8 — came from reduced participation in agriculture and allied activities.

- Men's participation in agriculture has also declined. Among men aged 15 and above, 56.1% participated in agriculture in 2004-5, while only 39.6% did so in 2017-18.

  * However, men were able to pick up work in other industries whereas women reduced their participation in other industries as well as agriculture — resulting in a lower WPR.

  * Mechanisation and land fragmentation have reduced agricultural work opportunities for both men and women.

  * Other work opportunities, except for work in public works programmes, are not easily open to women.

Possible solutions

- Establishment of the Cabinet Committee on Employment and Skill Development is a welcome move by the new government.

- It is to be hoped that this committee will take the issue of declining female employment as seriously as it does the issue of rising unemployment among the youth.

- One of the most powerful ways in which public policies affect rural women's participation in non-agricultural work is via development of transportation infrastructure that allows rural women to seek work as sales clerks, nurses and factory workers in nearby towns.

- If the cabinet committee were to focus on multi-sectoral reforms that have a positive impact on women's work opportunities, the potential gender dividend could be far greater than the much celebrated demographic dividend

12. Sustainable Development Goals (SDG) Gender Index

- The SDG Gender Index includes 51 indicators across 14 of the 17 official SDG.

- The indicators include those that are gender specific, as well as those that are not but have an effect on girls and women.

- It has looked at aspects such as poverty, health, education, literacy, political representation and equality at the workplace.

- The overall index scores are based on a scale of 0–100.

  * A score of 100 indicates the achievement of gender equality in relation to the underlying indicators.

  * A score of 50 would indicate that a country is about halfway to meeting its goal.

- The index has been developed by UK-based Equal Measures 2030, which is a partnership among global and regional organisations from the civil society and the development and private sectors.

  * It includes The African Women's Development and Communication Network, Bill and Melinda Gates Foundation, International Women's Health Coalition and Plan International.

India's ranking

- India has been ranked 95th out of a total 129 countries in the first-ever SDG Gender Index, which measures strides made in achieving gender commitments against internationally set targets.

- Some of the factors based on which the ranking of India has been decided include

  * proportion of seats held by women in national parliaments (score of 23.6, 16th in region, women made up 11.8 per cent of parliament in 2018),

  * extent to which a national budget is broken down by factors such as gender, age, income, or region (score of 0.0, tied for worst in region) and

  * percentage of seats held by women on a country's Supreme Court or highest court

- India's score of 56.2 means that it is among 43 countries that fall in the 'very poor' category.

- India scores the highest in health (79.9), followed by hunger (76.2) and energy (71.8). Among the SDGs, on which the country performs poorly are patnerships (18.3), industry, infrastructure and innovation (38.1) and climate (43.4).

Global Ranking

- Denmark, Finland, Sweden, Norway, Netherlands, Slovenia, Germany, Canada, Ireland, and Australia rank as the top 10 countries in the index

- The bottom 10 comprise Sierra Leone, Liberia, Nigeria, Mali, Mauritania, Niger, Yemen, Congo, DR Congo and Chad.

Consequences

- The index finds that no country has fully achieved the promise of gender equality and that the global average score of 65.7 out of 100 is "poor".

- This means that almost 1.4 billion, or 40%, of the world's girls and women live in countries failing on gender equality and another 1.4 billion live in countries that barely pass.

13. Uptick for India on sanitation in UN reportj

Context:

- A monitoring report by United Nation organisations released recently shows that there has been absolutely no growth in the population with access to piped water facilities over the period where India's progress with respect to providing basic sanitation facilities accounts for almost two thirds of the 650 million people globally who have stopped practising open defecation between 2000 and 2017.

Details:

- India has made great gains in providing basic sanitation facilities since the start of the millennium.
- The percentage of households getting piped water has remained stagnant at 44% over the 17-year period.
- As for drinking water, the Joint Monitoring Programme report by UNICEF and WHO shows that India has increased the percentage of its population with access to a protected drinking water source less than 30 minutes away, from 79% in 2000 to 93% in 2017.
- In addition, large inequalities remain between rural and urban areas in terms of access to piped water facilities.

Progress:

- With regard to sanitation, India's record has been better.
- India is responsible for almost single-handedly dragging the world towards achieving Sustainable Development Goal of ending open defecation.
- Including India, the South Asian region, accounted for almost three-fourths of the population who stopped defecating in the open between 2000 and 2017.
- Of the 2.1 billion people who gained access to basic sanitation services over this time period globally, 486 million live in India.
- India's Swacch Bharat Mission has set an example to many other regions of the world.
- Political leadership, public financing, partnerships and people's participation are believed to be the four reasons for the success of the program.

Issues:

- The millions of new toilets which mark the progress of the Swachh Bharat mission are, producing large amounts of solid and liquid waste and India does not have the ability to treat and dispose it off safely.
- According to the report, only 30% of the country's wastewater is treated at plants providing at least secondary treatment, in comparison to an 80% global average.

Way forward:

- The human right to sanitation implies that people not only have a right to a hygienic toilet but also have a right not to be negatively affected by unmanaged faecal waste.
- It is most relevant to poor and marginalized groups who tend to be disproportionately affected by other people's unmanaged faecal sludge and sewage.
- Solid and liquid waste management must be the focus of Swachh Bharat phase 2.
- A roadmap and strategy must be carefully designed to achieve the desired objectives and ensure its penetration to the length and breadth of the country.

14. World Day Against Child Labour

- It will be observed on 12 June to raise awareness about the plight of child labourers worldwide.
- India has ratified two key ILO conventions on child labour concerning the elimination of child labour, the
    * Minimum Age Convention (No 138)
    * The Worst Forms of Child Labour Convention (No 182).
- This year marks 20 years since the adoption of the ILO's Worst Forms of Child Labour Convention, 1999 (No. 182).
- This year's theme is 'Children shouldn't work in fields, but on dreams'.

Definition

- ILO defines child labour as "work that deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development".
- Activities that contribute to the positive development of children like doing their share of household chores or earning pocket money in the summer are not to be targeted for elimination.

The ILO specifies a number of conditions that make the task child labour. If the job:

- is mentally, physically, socially or morally dangerous and harmful to children;
- interferes with their schooling;
- deprives them of the opportunity to attend school;
- obliges them to leave school prematurely;
- requires them to attempt to combine school attendance with excessively long and heavy work.

Stats

- Although comprehensive data on child labour are not available for India, as per the 2011 Census, in the age group 5-14 years, 10.1 million of 259.6 million constituted working children.

- Even though there was a decline in the number of working children to 3.9% in 2011 from 5% in 2001, the decline rate is grossly insufficient to meet target 8.7 of the UN Sustainable Development Goals (SDGs), which is to end child labour in all forms by 2025.

What should India do?

India therefore needs to embark on new and innovative approaches in its fight against child labour. It now has to double its efforts to ensure that the benefit of those conventions reach the most vulnerable children.

- Strengthening policy and legislative enforcement, and building the capacities of government, workers' and employers' organisations as well as other partners at national, State and community levels.

- India should invest in enhancing its body of knowledge on child labour, emphasizing quantitative information.

- While there are many common factors across the spectrum, each sector and each demographical segment will have its own set of factors and drivers that push children into the labour market. These have to be addressed.

- Such factors and drivers can only be identified and analysed through proper research, surveys and assessments.

- The growing interest of the private sector is a great opportunity that has to be further utilised, particularly to leverage key influencers in domestic and multinational supply chains.

  * It is also a matter of competitive advantage for multi-nationals to ensure that child labour is effectively eliminated in their supply chains.

  * A sector-wide culture of child labour-free businesses has to be nurtured.

Conclusion

- As the world of work is transforming and new actors are emerging, one cannot underestimate the importance of creating a sound and vibrant platform to bring together these actors. The fight against child labour is not just the responsibility of one, it is the responsibility of all.

15. **31.4% of Indian children will be stunted by 2022: report**

Context:

- The report prepared by the UN World Food Programme in collaboration with the Ministry of Statistics and Programme Implementation states that almost one in three Indian children under five years will still be stunted by 2022 going by current trends.

Details:

- The report highlights the need for India to double its rate of progress to reach the target of 25% by 2022.

- It is an analysis of the country's food and nutrition security.

- It states that over the last decade, child stunting which is a measure of chronic malnutrition has reduced at a rate of about 1% per year, the slowest decline among emerging economies. At this rate, 31.4% of children will still be stunted by the 2022 deadline.

- The report highlights the need for India to double its rate of progress to reach the target of 25% by 2022.

- Food grain yields have risen 33% over the last two decades, but are still only half of 2030 target yields.

- Despite Indian farmer is producing more food grains than ever before, the consumer's access to rice, wheat and other cereals has not increased at the same rate, due to population growth, inequality, food wastage and losses, and exports.

- As a result, the average per capita consumption of energy among the poorest 30% of the population is 1811 kilo calories, much lower than the norm of 2155 kilo calories per day. The signs of unequal access are starkest among children.

- In States like Bihar and Uttar Pradesh, almost one in two children are stunted, while it is only one in five children in Kerala and Goa.

SCIENCE AND TECHNOLOGY

1. **Apollo 15 Mission**

   - It was the fourth mission to land men on the Moon

   - This mission was the first flight of the Lunar Roving Vehicle which astronauts used to explore the geology of the Hadley Rille/Apennine region.

   - Its primary scientific objectives were to

     * observe the lunar surface,

     * survey and sample material and surface features in a preselected area of the Hadley-Apennine region,

     * setup and activate surface experiments, and

     * Conduct inflight experiments and photographic tasks from lunar orbit.

   Background

   - Apollo 11 was the spaceflight that landed the first two people on the Moon.

   - Commander Neil Armstrong and lunar module pilot Buzz Aldrin, both American, landed the Apollo Lunar Module Eagle on July 20, 1969

   Context

   - For the first time in decades, NASA is about to open some of the pristine samples and let geologists take a crack at them with new technology.

   - It would mark the 50th anniversary of humanity's first footsteps on the moon

   Details

   - Some of the soil and bits of rock were vacuum-packed on the moon and never exposed to Earth's atmosphere or frozen or stored in gaseous helium following splashdown and then left untouched.

   - The lab's staff is now trying to figure out how best to remove the samples from their tubes and other containers without contaminating or spoiling anything.

   - Compared with Apollo-era tech, today's science instruments are much more sensitive

   - Scientists can do more with a milligram than one could done with a gram back then

2. **Artificial Intelligence, the law and the future**

   The editorial talks about the necessity of a legal framework to regulate the AI-driven technology, failing which, it will become counterproductive.

   Context:

   - In February, the Kerala police inducted a robot for police work. The same month, Chennai got its second robot-themed restaurant, where robots not only serve as waiters but also interact with customers in English and Tamil.

   - In Ahmedabad, in December 2018, a cardiologist performed the world's first in-human telerobotic coronary intervention on a patient nearly 32 km away.

   - All these examples symbolise the arrival of Artificial Intelligence (AI) in our everyday lives.

   - AI has several positive applications, as seen in these examples. But the capability of AI systems to learn from experience and to perform autonomously for humans makes AI the most disruptive and self-transformative technology of the 21st century.

   Issue:

   - If AI is not regulated properly, it is bound to have unmanageable implications.

   - For instance, that electricity supply suddenly stops while a robot is performing a surgery, and access to a doctor is lost? And what if a drone hits a human being? These questions have already confronted courts in the U.S. and Germany.

   - All countries, including India, need to be legally prepared to face such kind of disruptive technology.

   - While there are many developments taking place on the technological front, no comprehensive legislation to regulate this growing industry has been formulated in the country till date.

   Challenges:

   - Predicting and analysing legal issues and their solutions, is not that simple. For instance, criminal law is going to face drastic challenges. What if an AI-based driverless car gets into an accident that causes harm to humans or damages property? Who should the courts hold liable for the same? Can AI be thought to have knowingly or carelessly caused bodily injury to another? Can robots act as a witness or as a tool for committing various crimes?

   - Except for Isaac Asimov's 'three laws of robotics' discussed in his short story, 'Runaround', recently has there been interest across the world to develop a law on smart technologies.

   Details:

   - In the U.S., there is a lot of discussion about regulation of AI.

   - Germany has come up with ethical rules for autonomous vehicles stipulating that human life should always have priority over property or animal life.

   - China, Japan and Korea are following Germany in developing a law on self-driven cars.

- In India, NITI Aayog released a policy paper, 'National Strategy for Artificial Intelligence', in June 2018, which considered the importance of AI in different sectors.

- The Budget 2019 also proposed to launch a national programme on AI.

3. Carbon Quantum Dots (CQDs)

Context:

- A biomedical 'dot' to help detect cancer cells has been developed by a team of scientists in Assam.

Details:

- A chemical process has been developed – which turns 'dirty' coal into a biomedical 'dot'.

- The method produces CQDs from cheap, abundant, low-quality and high-sulphur coals.

- Carbon quantum dots are carbon-based nanomaterials. Their size is less than 10 nm, or nanometre.

Advantages of the CQD developed:

- The CQD developed by the team is fluorescent carbon nanomaterials at one-twentieth the cost of imported CQDs

- It emits a bluish color with high-stability, good-conductivity, low-toxicity, environmental friendliness, and good optical properties.

- The source material used is abundant, low-quality Indian coal not directly suitable for thermal electricity production, much cheaper than the imports.

- The CSIR-NEIST technology can produce approximately 1 litre of CQDs per day at a low cost to become an import substitute.

- Environment-friendly reagents are used in the process of development.

Uses of Carbon based nanomaterials:

- Carbon-based nanomaterials are used as diagnostic tools for bio-imaging.

- Specifically, they are used in detecting cancer cells.

- They are also used in chemical sensing and in opto-electronics.

4. 5G

- It is the next generation cellular technology that will provide faster and more reliable communication with ultra-low latency.

- Latency is the amount of time data takes to travel between its source and destination.

5G is a giant leap forward from the earlier generations. It is expected to offer a peak data speed of 1 Gbps, which is 900% faster than 4G's maximum data speed. 5G also offers an ultra low latency of 1 millisecond which, in 4G is 10 milliseconds

Year	Generation	Maximum data speed	Data transfer per second	Time to download a 5GB movie
1991	2G	14.4 kbps	1.8 K	Over a month
2001	3G	384 kbps	48 K	Over a day
2010	4G	100 Mbps	12.5 MB	7 minutes
2020	5G	1 Gbps	125 MB	40 seconds

Benefit

- With 5G technology, consumers will be able to download data heavy content such as 8K movies and games with better graphics in just a few seconds.

- 5G is expected to form the backbone of emerging technologies such as the Internet of Things (IoT) and machine to machine communications, thereby supporting a much larger range of applications and services, including driverless vehicles, tele-surgery and real time data analytics.

- One of the primary applications of 5G will be implementation of sensor-embedded network that will allow real time relay of information across fields such as manufacturing, consumer durables and agriculture.

- 5G can also help make transport infrastructure more efficient by making it smart.

  * 5G will enable vehicle-to-vehicle and vehicle-to-infrastructure communication, making driverless cars, among other things, a reality.

Issue Area

- It is widely accepted that 5G's value for India may be even higher than in advanced countries because of the lower levels of investments in physical infrastructure.

What will be the economic impact?

- 5G is expected to create a cumulative economic impact of $1 trillion in India by 2035, according to a report by a government-appointed panel.

- According to a separate report by telecom gear maker Ericsson, 5G-enabled digitalisation revenue potential in India will be above $27 billion by 2026.

- Additionally, global telecom industry GSMA has forecast that India will have about 70 million 5G connections by 2025.

5. IIT Madras develops material with properties suitable for quantum optoelectronics

- Materials such as tungsten diselenide (WSe2) and molybdenum diselenide are being studied keenly for their opto-electronic properties – which is a combination of optics and electronics.
- A key property of these materials is photoluminescence, in which the material absorbs light and re-emits it as a spectrum.
- As a matter of fact, researchers from IIT Madras have found a way of enhancing this property about 30 times in tungsten diselenide, by drop-casting gold nanoparticles on to a two-dimensional film.
- The work is published in Applied Physics Letters.

Two-dimensional material:

- Consisting of practically one layer of atoms, these materials are two-dimensional in structure.
- Photoluminescence properties can be used in various devices such as quantum LEDs which can be used in communication and computation.
- Experts have opined that the most challenging aspect of this study was the controlled photoluminescence measurement of these materials from room temperature to 100 K.
- As is well known, electrons in semiconductors occupy bands of energy known as valence bands.
- As long as they live in these bands, they do not move and contribute to conduction.
- If excited by a small energy input, they get kicked into what is called the conduction band where they can actually be delocalised and contribute to the conduction by moving around.

Excitons:

- When an electron jumps from the valence to the conduction band, it leaves behind a shadow called a "hole."
- The electron in the conduction band and the hole in the valence band can bind together and form a composite object (or pseudoparticle) known as an exciton.
- Photoluminescence in tungsten selenide is a result of such excitons.
- There can be two ways in which an exciton can form – when the spins of the component electron and hole are opposite to each other and when they are aligned in teh same direction.
- The former is called a bright exciton and the latter, a dark exciton.
- Because their spins are opposite, the electron and hole forming the bright exciton can recombine, giving out a quantum of light in the process.

- Such a simple way of recombining does not exist for the dark excitons.
- Since there, the spin of the electron and the hole are parallel, their recombination is discouraged by the rule of conservation of angular momentum.
- Hence the dark excitons are longer lived than the bright excitons. The dark excitons need an external influence to help them recombine.
- In their work, the IIT Madras researchers find exactly such an external influence.

The power of gold:

- When they drop-cast gold nanoparticles on the surface of the monolayer tungsten diselenide, they find that the dark excitons couple to the surface fields generated and recombine to give off light quanta.
- Thus, the dark excitons are "brightened" with the help of the gold nanoparticles.
- That plasmonic effect arises due to gold nanoparticles is a well known concept. However, its application to 2D systems is in nascent stage.
- The scientists thought that if they drop-cast gold nanoparticles onto monolayer WSe2, then it will generate out-of-plane electric field due to plasmonic effect, which can help for spin-flip of conduction band electrons, thereby making dark excitons bright.

6. India will have its own space station, says ISRO chief Sivan

Context

- India plans to have its own space station, and modalities for it will be worked out after the first manned mission, Gaganyaan, scheduled for August 2022, said Chairman of ISRO

Details

- The project will be an extension of the Gaganyaan mission, which aims to send an Indian crew to space in 2022.
- The proposed space station is envisaged to weigh 20 tonnes and serve as a facility where astronauts can stay for 15-20 days, and it would be placed in an orbit 400 km above earth.
- The time frame for launch is 5-7 years after Gaganyaan
- The space station to be a much smaller one than the ISS
  * It will be used to carry small micro-gravity experiments.

Key Facts

- Currently, there is only one fully functional space station in the Earth's lower orbit, the International Space Station (ISS), and astronauts conduct different experiments in it.

- The first component of the ISS was launched into orbit in 1998, and first long-term residents arrived in November 2000.

- The ISS is a partnership between European countries represented by European Space Agency, the United States (NASA), Japan (JAXA), Canada (CSA) and Russia (Roscosmos).

- It is the world's largest international cooperative programme in science and technology. It conducts science based experiments (laboratory in space) that can be done only in space.

- China also plans to build a space station of its own.

Why planets are placed at 400km?

- First is about safety of Astronauts. The radiation level is very high at about 700 Km. This can be dangerous to health and conduction of experiments.

- Two at about 300 Km there will be atmospheric drag. Air in the atmosphere will be dragging the ISS down. ISS is already dropping to earth at around 2 km per year. Therefore reboosts are performed every year to bring it up.

- So it can be placed between 300 to 700 Km.

- But it was placed at 400 because of cost. Higher the elevation more the cost. So due to technical constraints and economic sustainability it was placed at this range.

7. NASA to send a drone to Saturn's largest moon

Context:

- NASA the US space agency will fly a drone helicopter mission named Dragonfly on Saturn's largest moon, Titan, in the 2030s.

Titan:

- Saturn has many moons ranging from tiny moonlets less than 1 kilometer across to the enormous Titan.

- Titan is Saturn's largest moon. It is the second largest natural satellite in the solar system.

- It is larger than planet Mercury.

- It is the only moon known to have a dense atmosphere.

- Titan has a substantial atmosphere and is viewed by scientists as an equivalent of very early-era earth.

- It is the only celestial body besides our planet known to have liquid rivers, lakes and seas on its surface, though these contain hydrocarbons like methane and ethane, not water.

Details:

- The Dragonfly mission would be launched in 2026 and land in 2034, will send a rotorcraft to fly to dozens of locations across the icy moon.

- It was said that the vehicle would have eight rotors and fly like a large drone.

- During its 2.7-year baseline mission, Dragonfly will explore diverse environments from organic dunes to the floor of an impact crater where liquid water and complex organic materials key to life once existed together for possibly tens of thousands of years

- Its instruments will study how far prebiotic chemistry may have progressed.

- They also will investigate the moon's atmospheric and surface properties and its subsurface ocean and liquid reservoirs.

- The instruments will search for chemical evidence of past or extant life.

- The craft will land first at the equatorial "Shangri-La" dune, exploring the region in short trips before building up to longer "leapfrog" flights of 8 km.

8. National Atmospheric Research Laboratory (NARL)

- NARL is an autonomous Research Institute funded by the Department of Space of the Government of India.

- NARL is engaged in fundamental and applied research in the field of Atmospheric Sciences.

- The research institute was started in 1992 as National Mesosphere-Stratosphere-Troposphere (MST) Radar Facility (NMRF).

Context

- The Vice President of India, Shri M. Venkaiah Naidu has called upon scientists and researchers to address pressing issues such as climate change, global warming and extreme weather events so that the world was better prepared to tackle adverse situations.

- Stressing the need to promote scientific temper from a young age, Shri Naidu asked NARL to produce literature on atmospheric science

9. New Company for Commercial Exploitation of Research and Development

Context

- New Space India Limited (NSIL), has been incorporated, as a wholly owned Government of India, under the administrative control of Department of Space (DOS) to commercially exploit the research and development work ISRO Centres and constituent units of DOS.

NSIL functions

- Small Satellite technology transfer to industry, wherein NSIL will obtain license from DOS/ISRO and sub-license it to industries

- Manufacture of Small Satellite Launch Vehicle (SSLV) in collaboration with Private Sector

- Productionisation of Polar Satellite Launch Vehicle (PSLV) through Indian Industry

- Productionisation and marketing of Space based products and services, including launch and application

- Transfer of technology developed by ISRO Centres and constituent units of DOS

- Marketing spin-off technologies and products/ services, both in India and abroad; and

- any other subject which Government of India deems fit.

Significance

- The above-mentioned mandate for NSIL would enable Indian Industries to scale up high-technology manufacturing

- Also production base for meeting the growing needs of Indian space programme and would further spur the growth of Indian Industries in the space sector.

10. PUNCH mission

- PUNCH which stands for "Polarimeter to Unify the Corona and Heliosphere"

- It is a mission that will image regions beyond the Sun's outer corona.

- It is focused on understanding the transition of particles from the Sun's outer corona to the solar wind that fills interplanetary space.

Objective

- The mission will study about Coronal Mass Ejections which are massive eruptions of electrically charged particles from the sun

  * They are powerful enough to impact satellite operations, and disrupt communication and GPS navigation signals.

  * They can also enter the earth occasionally and damage systems on ground like power plants.

  * It will study about it so that investigators and scientists can take precautions for space and ground based electronics.

- PUNCH will track and image the solar wind as it emerges from the solar corona, transitions to interplanetary space and streams through the solar system, bathing the planets and other solar system bodies.

  * These measurements will reveal how and why the material coming from the star becomes gusty and turbulent en route to Earth.

- PUNCH will consist of a 'constellation' of four suitcase-sized microsats that will orbit the Earth in formation and study how the corona, which is the atmosphere of the Sun, connects with the interplanetary medium. The mission is expected to be launched in 2022.

Other probes

- Other missions such as NASA's Parker Solar Probe and the ESA-NASA joint project, Solar Orbiter, which is due to be launched in 2020, can study the structures of the Sun's atmosphere.

- The PUNCH mission enhances these by tracking these structures in real time. Since the Sun's corona is much fainter than its surface layers, it cannot be viewed by the instruments directly.

- So PUNCH will block out the light from the Sun to view its corona and the structures in it.

11. Superconductivity

- It was discovered by Dutch physicist Heike Kamerlingh Onnes in 1911

- A superconductor is a material that can conduct electricity or transport electrons from one atom to another with no resistance.

- This means no heat, sound or any other form of energy would be released from the material

- Mostly metals, semimetals, or semiconductors conduct superconductivity

- Critical temperature (Tc): The temperature at which a conductor becomes a superconductor is known as critical temperature.

- Meissner Effect: The expulsion of magnetic lines of force from a superconducting specimen when it is cooled below the critical temperature is called Meissner effect.
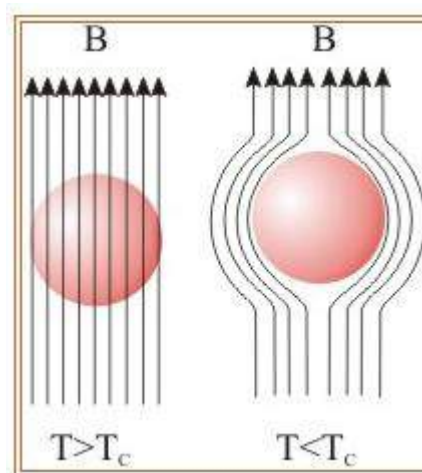
Type 1 and 2 Superconductors

- Type – I Superconductors: Low Temperature Superconductors.

  * Low critical temperature (typically in the range of 0K to 10K)

  * Example of Type I superconductors: Mercury, Aluminum, Zinc

- Type – II Superconductors: High Temperature Superconductors.

  * High critical temperature (typically greater than 10K)

  * Niobium-Tin

Context

- So far, all the superconductors in use work only at temperatures less than Zero.

- This makes regular superconductors not just expensive, but also impractical and essentially useless for use on a larger scale.

- IISC scientists have came out with the new research studied nanostructured materials as potential superconductors

- The researchers used nanomaterial in the form of pellets and films made from silver particles that are embedded into matrix of gold atoms.

- This material, as it turns out, is a "superconducter" of electricity at ambient or room temperature.

Benefits

- Superconductors will help build very high efficient devices leading to huge energy savings.

Applications

- Transportation: Magnetically levitated trains

- Physics: Particle Accelerators

- Medical: Magnet Resonance Imaging (MRI)

- Electronics: Sensors

SECURITY AND DEFENSE

1. Body scanners made mandatory at 84 airports

Context

- The Government of India has made it mandatory for 84 airports in the country to install full-body scanners to screen air travelers within a year and issued a standard operating procedure for their use.

- The 84 airports include 26 hyper-sensitive airports and 58 sensitive airports.

- Other airports have two years' time to introduce these scanners.

Global standard:

- This equipment will replace walk-through metal detectors and passengers will have to remove shoes, belts, jackets, thick clothing and be "divested" of all metallic items.

- As a matter of fact, this is a practice at most prominent airports across the world.

- However, 10% of passengers will also be subjected to full pat-down searches at random.

Advantages of body scanners:

- It is important to note that walk-through metal detectors and hand-held metal detectors cannot detect non-metallic weapons and explosives.

- On the other hand, body scanners detect both metallic and non-metallic items concealed on the body.

A Safeguard towards ensuring Privacy:

- Following concerns over these machines generating naked images of passengers, the Bureau of Civil Aviation Security (BCAS) has mandated privacy filters.

- As a result, these scanners will produce only an outline or a mannequin-like image, which is the same for all genders. A yellow box appears on the body image to highlight areas that may need further screening.

- The scanner shall provide image-free solution using a generic mannequin. Threats shall be graphically presented.

Technology which these scanners will use:

- These scanners use millimeter wave technology, which means passengers will not be subjected to harmful X-ray radiation, and the machine is safe for use by all, including pregnant women.

- These scanners will help airports improve passenger throughput as they are required to screen a passenger in eight seconds and 300 passengers per hour, according to the technical specifications spelt out by the BCAS.

2. Cyber Coordination Centre

Context

- Cyber Coordination Centre (CyCord) portal was launched as a one-stop platform for sharing all cyber related matters amongst Law Enforcement Agencies (LEAs), government organizations and other stakeholders.

Cyber Coordination Centre

- Primary objective of the Cyber Coordination Centre is to provide a platform to the Law Enforcement Agencies and other stakeholders to collaborate and coordinate their efforts to resolve cyber-crime, and for other cyber related issues like sharing case studies/ research findings, experience sharing, etc.

- Cyber Coordination Centre is an effective platform to deal with cyber issues.

- Ministry of Home Affairs issues advisories on cyber related issues to States/UTs from time to time.

- Further, safety advisories/messages are also issued by Ministry of Home Affairs through social media, FM radio and SMSes.

3. Dark Web

- The internet is a huge and sometimes disorganized place, almost like a huge flea market or bazaar. With billions of sites and addresses, it is amazing that we can search – and find – anything.

- There are basic level within this complex thing we call the World Wide Web – open and dark.

Open or Surface Web

- The open or surface web is what you access daily through Bing or Google.

- Just think of this as the general reading room in your local library. The books are there, they are precisely organized by theme and title, and you are free and able to look everywhere.

  * If you have questions you can go look through the card file or talk to a librarian.

- By accessing the normal internet, your device is accessing central servers which will then display the website.

  * Browsers such as Google, Bing, GoDuckGo are acting as librarians, sorting and cataloging the materials so they can be easily searched and also following your own moves with their trackers.

Deep Web

- he term "Deep Web" doesn't mean anything nefarious, it simply refers to the Unindexed Web Databases and other content that search engines can't crawl through and catalog – things like registration-required web forums or even your Gmail account.

- Just think of the deep web as an archive, containing an unsorted pile of websites and resources which are largely inaccessible.

- Deep sites include company intranets and governmental websites (i.e. the website of the European Union) where you can search for special topics or forms.

- On such pages, you can use their own internal search function not a search engine like Bing or Yahoo or another external search engines.

- The dark Web is comprised of websites that are visible to the public, but their IP address details are intentionally hidden. These websites can be visited by anyone on Internet, but it is not easy to find the server details on which the corresponding site is running, and it is difficult to track the one hosting the site.

Context

- Actor Amitabh Bachchan's Twitter account was hacked. Hours later, singer Adnan Sami's account on the social media platform was also hacked. A group identifying itself as Ayyildiz Tim cyber army claimed credit for both the breaches.

- Ayyildiz Tim, which translates to 'Star and Crescent', is a pro-Pakistan Turkish hacking group that was established in 2002.

What is the modus operandi of such groups? What do they gain from this?

- Normally such groups will hack into networks that will get widespread media publicity following which they can put out a message. For example in the case of actor Amitabh Bachchan, they put out a message on his account claiming that Turkish footballers were being treated unfairly by Iceland.

- In some cases, they also hack accounts to get back at someone who they believe has been involved in wrongdoing. They targeted Adnan Sami as they believed that he betrayed their 'brother country' Pakistan. Sami, who was a Pakistani citizen, gave up its citizenship to become an Indian national.

Is there any clarity on how they hacked into the accounts?

- Police are now probing to check if Bachchan or Sami also clicked on such a phishing link that led to their account being hacked.

- A phishing link has a virus that is activated and compromises sensitive details like passwords.

- Bachchan's password was circulated on the dark web within minutes of his account being hacked.

4. Disability pension will now be taxed

Context:

- As per the notification issued by the Finance Ministry, disability pension for military personnel who retired normally from service and not invalidated will now be taxed.

Details:

- The Central Board of Direct Taxes (CBDT) said that "such tax exemption will be available only to armed forces personnel who have been invalidated from service on account of bodily disability attributable to or aggravated by such service and not to personnel who have been retired on superannuation or otherwise."

- The notification, is silent on the date from which the notification will be effective.

- It is not mentioned if it would be prospective or retrospective.

Disability pension:

- Disability pension for armed forces is available based on a 1922 notification.

- Disability pension are of two types, war and normal.

- War disability is 60% of the last salary drawn in case of 100% disability and normal disability is 30% of the last salary drawn in case of 100% disability.

- It goes down proportionally for lower percentage of disability.

- Till now both were not being taxed if the disability is decided by a team of doctors.

Criticisms:

- Disability pension has long been an issue of contention over the rates and different slabs for officers and jawans, among others.

- The military fraternity has criticized the move calling it a measure lowering their status and equivalence compared to their civilian counterparts.

- There are also large number litigations filed by veterans against the Defence Ministry over non-recognition of disability.

5. Foreigners Tribunals

Context

- With Assam's National Register of Citizens as the backdrop, the Ministry of Home Affairs (MHA) has laid out specific guidelines to detect, detain and deport foreign nationals staying illegally across the country.

Details

- The MHA has amended the Foreigners (Tribunals) Order, 1964, and has empowered district magistrates in all States and Union Territories to set up tribunals to decide whether a person staying illegally in India is a foreigner or not.

- The 1964 order on Constitution of Tribunals said: "The Central Government may by order, refer the question as to whether a person is not a foreigner within meaning of the Foreigners Act, 1946 (31 of 1946) to a Tribunal to be constituted for the purpose, for its opinion." The amended order says – "for words Central Government may,' the words 'the Central Government or the State Government or the Union Territory administration or the District Collector or the District Magistrate may' shall be substituted."

- Earlier, the powers to constitute tribunals were vested only with the Centre.

  * Central Government is vested with powers to deport a foreign national under section 3(2)(c) of the Foreigners Act, 1946.

- The tribunals are quasi-judicial bodies, unique to Assam, to determine if a person staying illegally is a "foreigner" or not.

- In other parts, once a 'foreigner' has been apprehended by the police for staying illegally, he or she is produced before a local court under the Passport Act, 1920, or the Foreigners Act, 1946, with the punishment ranging three months to eight years in jail.

- Once the accused have served the sentence, the court orders their deportation, and they are moved to detention centres till the country of origin accepts them.

Changes in Assam

- The amended Foreigners (Tribunal) Order, 2019 also empowers individuals to approach the Tribunals.

- Earlier only the State administration could move the Tribunal against a suspect, but with the final NRC about to be published and to give adequate opportunity to those not included, this has been done.

- If a person doesn't find his or her name in the final list, they could move the Tribunal

Background

- Foreigners Tribunals, unique to Assam, are in the news as the final list of the National Register of Citizens (NRC) is to be published by July 31

- The NRC segregate Indian citizens living in Assam from those who had illegally entered the State from Bangladesh after March 25, 1971.

- To give a proper hearing to those excluded from the final list and to handle the influx of applications, the Ministry of Home Affairs sanctioned 1,000 additional tribunals.

Who runs the tribunals?

Each tribunal is like a quasi-judicial set-up.

- It's headed by a member appointed under the Foreigners Tribunal Act, 1941 and Foreigners (Tribunal) Order, 1984 as in the guidelines issued by the government from time to time.

- A member can be a retired judicial officer of the Assam Judicial Service,

- A retired civil servant not below the rank of Secretary and Additional Secretary with judicial experience, or

- A practising advocate not below the age of 35 years and with at least seven years of practice.

- The member is also required to have a fair knowledge of the official languages of Assam (Assamese, Bengali, Bodo and English) and the State's historical background giving rise to the foreigners' issue.

Why was 2005 a watershed year?

- Cases of suspected foreigners used to be handled by the Illegal Migrants (Determination) Tribunals (IMDT) under the IMDT Act that the Indira Gandhi government passed in 1983 during the peak of the Assam agitation seeking ejection of people staying illegally in the State.

- The system changed after the Supreme Court struck down the IMDT Act in July 2005

- The IMDT Act — applicable only in Assam while the detection of foreigners was done under the Foreigners Act, 1946 elsewhere in India — was said to provide special protection against undue harassment to the 'minorities' affected by the Assam Agitation.

- The burden of proving citizenship or otherwise under the IMDT Act rested on the accuser living within a 3 km radius of the accused and the police, and not on the accused as required by the Foreigners Act.

- The Supreme Court, while scrapping the IMDT Act in 2005, echoed the indigenous organisations and the Assam government's observation that the Act "has created the biggest hurdle and is the mainimpediment or barrier in the identification and deportation of illegal migrants".

How many tribunals are there?

Assam at present has 100 Foreigners Tribunals across the State. According to the State's Home Department, there were initially 11 Illegal Migrants (Determination) Tribunals (IMDT).

- These were converted to tribunals after the Supreme Court scrapped the Illegal Migrants (Determination by Tribunals) Act, 1983 in 2005.

- The State government established another 21 tribunals that year.

- Four more were added in 2009 and the remaining 64 were established in 2014 for disposal of cases that were piling up in the tribunals.

How do the tribunals work?

- The Assam Police Border Organisation, a wing of the State police tasked with detecting foreigners, readies the cases for the tribunals to decide who is a foreigner and who is not.

- The government allegedly gives the border police a monthly target to detect people of suspect citizenship and these cases are referred to the tribunals.

Foreigners Tribunal had declared Mohammad Sanaullah a war veteran for India an illegal immigrant

Introduction

- According to the Assam Accord, individuals who entered Assam after March 24, 1971 are illegal immigrants.

- There are two parallel processes to establish citizenship: the Foreigners Tribunals operating under the Foreigners Act, and the National Register of Citizens (NRC), which is under preparation.

- For something as elemental and important as citizenship, one would expect these systems to be implemented as carefully as possible, and with procedural safeguards.

- This is especially true when we think of the consequences of being declared a non-citizen: disenfranchisement, exclusion from public services, incarceration in detention camps, statelessness, and deportation.

- Before treating an individual — a human being — to such drastic consequences, the very least a humane and civilised society can do is to ensure that the rule of law has been followed to its last degree.

Concerns

- Investigative journalists have revealed over the last few years that 'administrative errors' like naming a person as laborer, investigating officers fabricating signatures as evidence, are the rule rather than the exception.

  * Additionally, reports show that Foreigners Tribunals habitually declare individuals to be "foreigners" on the basis of clerical errors in documents, such as a spelling mistake, an inconsistency in age, and so on.

- The Tribunals themselves are only constrained by a very limited number of procedural safeguards. This has led to situations where Tribunals have issued notices to entire families, instead of just the suspected "foreigner".

- Needless to say, the hardest hit by this form of "justice" are the vulnerable and the marginalised, who have limited documentation at the best of time, and who are rarely in a position to correct errors across documents.

  * There are individuals in the detention camps without the benefit of media scrutiny, there may be no bail — only an endless detention.

- On occasion, orders determining citizenship have been passed by tribunals without even assigning reasons, a basic sine qua non of the rule of law.

- In addition, a substantial number of individuals are sent to detention camps without being heard — on the basis of ex parte orders — and the detention centres themselves are little better than concentration camps, where families are separated, and people not allowed to move beyond narrow confined spaces for years on end.

- The Home Ministry's order also empowers the foreigners' tribunals, which will be established anywhere in the country, to regulate their own procedures in hearing the cases placed before them. It further empowers them to hear an appeal only if they "find merit" in it.

  * This means that a person whose name does not figure in the NRC cannot hope for a hearing from the foreigners' tribunal if the agency feels there is no "merit" in her appeal.

- The experience of these tribunals in Assam has been that they frequently function with open bias or without due process. The latest order of the Home Ministry further empowers these tribunals to function in prejudiced or arbitrary ways.

The role of the judiciary

- In a process riddled with such flaws, and where the consequences are so drastic, one would expect the judiciary, the guardian of fundamental rights and the guarantor of the rule of law, to intervene. Instead, the Supreme Court, led by the present Chief Justice of India, has played the roles of cheerleader

- Not only has it driven the NRC process, as outlined above but it has repeatedly attempted to speed up proceedings, pulled up the State government when it has asked to be allowed to release people detained for a long time, and instead of questioning procedural violations and infringement of rights, has instead asked why more people are not in detention centres, and why more people are not being deported.

- However, what the Supreme Court has failed to understand is that in questions of life and death, where the cost of error is so high, it is not "speed" that matters, but the protection of rights.

But through its conduct, the Supreme Court has transformed itself from the protector of the rule of law into an enthusiastic abettor of its daily violation. This is the very antithesis of how constitutional courts should behave.

Conclusion

- Sanaullah's case can do some good as well: it can prompt some urgent national introspection about a situation where, in the State of Assam, thousands of people languish in detention camps for years, victims of a process that, to use an old adage, would not be sufficient to "hang a dog on".

- If anything can trigger an urgent and imperative call for change, surely this will — and must.

6. goAML

- The goAML application is available to Financial Intelligence Units of Member States to support their work in countering money laundering and terrorist financing.

- goAML is an IT based information, collection, management, and analysis software package.

- The system is designed to manage processes and analyze reports on suspicious transactions, financial transactions of any type, and list or alert based reports. It is designed to fully automate data collection and dissemination.

7. Indian Navy Environment Conservation Roadmap (INECR)

- It is eco-friendly programme that comprises specific action plans covering the gamut of operations, maintenance, administration, infrastructure and community living.

Details

- As a progressive step, Indian Navy has pledged 1.5% of its 'Works' budget towards renewable energy generation

- Solar photovoltaic (PV) projects has been one of the focus areas of the Navy since the inception of the INECR and 24 MW of Solar Photo Voltaic (PV) projects consisting of both rooftop and land-based solar panels are under execution at various shore establishments of the Navy under the Jawaharlal Nehru National Solar Mission (JNNSM).

- Pilot projects utilizing wind or a mix of both solar and wind (hybrid) are also being taken up progressively which would not only reduce the carbon footprint but also help achieve self-sustenance in energy security

- Indian Navy has taken up initiatives for sustained usage of biodiesel for all MT vehicles.

- Afforestation drives at Naval stations, under which more than 18,000 plants have been planted

- Emphasis is also being accorded to ensure that pollution is kept minimal in harbours and seas. Effluent treatment plants for neutralizing toxic waste prior discharge

- Other measures being propagated include promoting renewable energy usage on all bases and ships, segregated waste collection and improved waste management techniques.

These Green Initiatives Programme would aid in boosting the national interests of environment sustainability and self-reliance in energy.

8. Mission Based Deployments (MBD)

Context

- In an expansion of its Mission Based Deployments (MBD) in the Indian Ocean Region (IOR), the Navy deployed its P-8I long-range maritime surveillance aircraft for anti-piracy sorties from Salalah in Oman to patrol the Gulf of Aden.

Mission Based Deployments

- With an increasing Chinese naval presence in the region, the Indian Navy has approved a plan for deploying mission-ready ships and aircraft along critical sea lanes of communications and choke points in the Indian Ocean Region

- A total of 14-15 ships will be deployed year-round in the region.

- Under the MBD concept, the Navy now maintains a ship at every choke point in the IOR at any point of time.

- These will be deployed always ready to meet any eventuality across the spectrum of operations ranging from

  * acts of maritime terrorism to

  * piracy to

  * Humanitarian Aid and Disaster Relief (HADR) missions.

- These deployments are aimed at maintaining 24/7 and round the year (vigil) with ships being sustained and turned around on station.

- Search and rescue and capability-enhancement activities have also emerged as major areas.

- The areas where these ships and corvettes and surveillance aircraft are being deployed include the Malacca Strait, Andaman Sea, North Andaman Sea, including Bangladesh and Myanmar, Lakshadweep islands and the Maldives, besides Madagascar and the Persian Gulf.
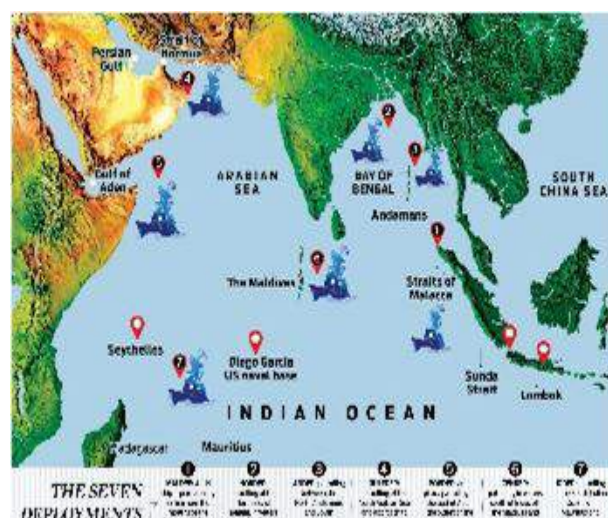
Details

- Long-range maritime reconnaissance Anti-Submarine Warfare aircraft P-8I undertakes anti-piracy patrol sorties from Salalah in the Gulf of Aden and other piracy prone areas in keeping with MBD philosophy

Mutual Cooperation

- As part of expanding engagement maritime engagement, India has stepped up cooperation with Indian Ocean littoral states and maritime neighbours.

- Under the 'Neighbourhood First' policy, the Navy undertakes Joint Exclusive Economic Zone (EEZ) surveillance with Maldives, Seychelles and Mauritius and Coordinated Patrols (CORPAT) with Bangladesh, Myanmar, Thailand and Indonesia.

9. **National Action Plan for Drug Demand Reduction**

- The plan aims to employ a multi-pronged strategy — involving preventive education, awareness generation, counselling, treatment and rehabilitation of drug-dependent people

    * It would emphasise on not stigmatizing addicts, but rather trying to educate people, particularly school and college students.

- It provides training and capacity-building of service providers through collaborative efforts of the Centre, state and NGOs

Context

- The Social Justice and Empowerment Ministry is working out action plan to address the problem of drug and substance abuse in the country

Stats

- According to the Magnitude of Substance Use in India report submitted by the National Drug Dependence Treatment Centre of the All-India Institute of Medical Sciences to the Ministry, 1.3% of children between 10 and 17 years reported current use of alcohol, 0.9% reported use of cannabis, 1.8% reported use of opioid and 1.17% reported use of inhalants.

Factors responsible

The drug trafficking scenario in India is largely attributed to various external and internal factors.

- One of the prime external factors happens to be India's close proximity to the major opium producing regions of South West and South East Asia known as the 'Golden Crescent' and the 'Golden Triangle', respectively.

    * The geographical location of India as such, makes it vulnerable to transit, trafficking and consumption of Opium derivatives in various forms along the known trafficking routes.

- The major internal factors responsible are illicit cultivation of Poppy and the diversion from the licit Opium sources into illicit production in interior areas.
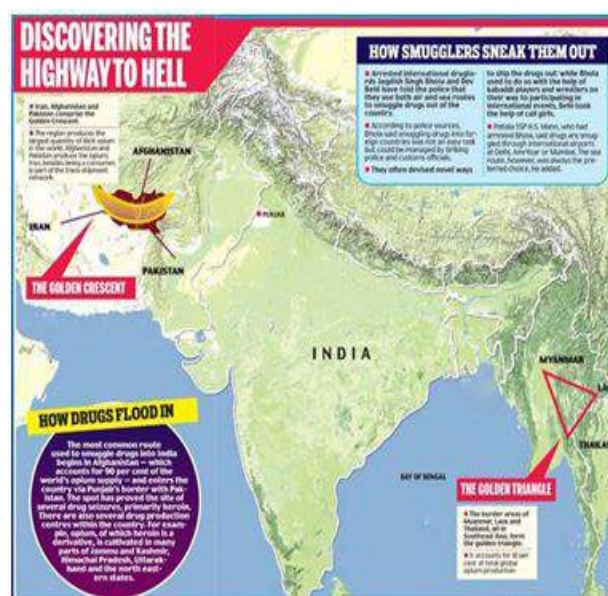
Types

Narcotic Crops

- Opium poppy

- Cannabis (marijuana)

Pharmaceutical Drugs

- The abuse of pharmaceutical drugs in India has assumed serious proportions in recent times. The problem seems to be more serious in the North-east and North-west region of the country.

- The pharmaceutical products that are abused include buprenorphine, codeine-based cough syrups, alprazolam, diazepam and other sedatives.

- The 'party drugs' are made from chemicals used to make cold and allergy medicines.

Precursor Chemicals

- Precursor chemicals are 'dual-use' chemicals that have both legitimate & illegitimate uses.

- These are chemicals that can be used in the manufacture of illicit narcotic drugs and psychotropic substances.

- The UN Convention against Illicit Trafficking in Narcotic Drugs and Psychotropic Substances, 1988, has identified 23 precursors as the chemicals that need to be controlled.

- Subsequently, India has notified 5 precursor chemicals as 'Controlled Substances'.

    * They are: 1. Acetic Anhydride 2. Ephedrine 3. Pseudoephedrine 4. Anthranilic acid 5. N- acetyl anthranilic acid

Measures to be taken

Targeted drug-demand reduction programme will soon be rolled out in high-risk areas of 127 districts in the country

- Peer-Led interventions for teenagers

  * It would involve students reaching out to their fellow students

- Setting up outreach and drop-in centres for those affected

  * The objective of this would be to assess drug use in the community, provide early prevention and give referrals to counselling, treatment and rehabilitation services.

- Workshops focusing on prevention of drug use would be conducted for about 8 lakh students around the country with the help of State education boards and NGOs

- The ministry has planned several measures — including coordination with implementing agencies for controlling sale of sedatives, painkillers and muscle relaxant drugs, and checking online sale of drugs by stringent monitoring by cyber cell — under the national action plan.

- Plans are also afoot for awareness generation through social, print, digital and online media, and engagement of celebrities, besides strengthening the national tollfree helpline for drug prevention

- As a part of the plan, module for re-treatment, ongoing treatment and post-treatment of addicts of different categories and age groups will be developed and database on substance use will be maintained

World Drug Report

- It is a United Nations Office on Drugs and Crime annual publication that analyzes market trends, compiling detailed statistics on drug markets

- International Narcotics Control Strategy Reports (INCSR) prepared by the US Department of State

10. National Defence Fund (NDF)

- NDF is an Indian Government Institution, set up in the year 1962 to receive voluntary donations for the promotion and welfare of the members of the Indian Armed Forces (including paramilitary forces) and their dependents.

- Donations to the National Defence Fund are 100% tax exempt

- The fund is entirely dependent on voluntary contributions from the public and does not get any budgetary support.

- Accounts of the Fund are kept with the Reserve Bank of India.

- The Fund is administered by an Executive Committee, with PM as Chairperson, and Defence, Finance and Home Ministers as Members. Finance Minister is the Treasurer of the Fund

Context

- Prime Minister Narendra Modi has approved changes to the Prime Minister's Scholarship Scheme for wards of deceased defence personnel under the National Defence Fund

Details

- This was "in line with the Prime Minister's vision for India's safety, security and the well-being of those who protect the nation...,"

- Mr. Modi approved the increase from ₹2,000 to ₹2,500 a month for boys and from ₹2,250 to ₹3,000 a month for girls.

- The ambit of the scheme was widened to cover the wards of State police officials martyred in terror or Naxal attacks.

- The scheme is meant to encourage technical and postgraduate education for widows and wards of deceased personnel of the armed forces, the paramilitary forces and the Railway Protection Force

- Under the scheme, new scholarships are given to 5,500 wards of armed forces personnel, 2,000 wards of paramilitary forces personnel and 150 wards of forces under the Railways Ministry every year.

11. Regional Cooperation Agreement on Combating Piracy and Armed Robbery against Ships in Asia (ReCAAP)

Context

- The Indian Coast Guard (ICG) will be co-hosting an international workshop that aims to deepen knowledge on issues related with piracy and armed robbery

Details

- The ReCAAP is the first regional Government-to-Government agreement to deal with piracy and armed robbery at sea in Asia.

- Presently, 20 countries are members of the ReCAAP.

- India played an active role in setting up and functioning of the ReCAAP ISC along with Japan and Singapore.

- The Centre has designated the ICG as the focal point within India for the ReCAAP

- India has previously hosted this workshop in November 2011 in Goa and December 2017 in Delhi.

12. Saudi Arabia becomes 1st Arab country to get FATF membership

- Saudi Arabia has become the first Arab country to be granted full membership of the Financial Action Task Force (FATF)

- The kingdom's accession came as the global money laundering watchdog celebrated the 30th anniversary of its first meeting held in Paris in 1989

- Two regional organisations the Gulf Cooperation Council and the European Commission are also part of FATF.

13. UdChalo

- 'UdChalo' is a travel portal that caters for the personal travel of the military and paramilitary forces personnel by aggregating defence fares and getting exclusive discounts.
- Its aim is to empower the disabled military veterans.

ENVIRONMENT AND ECOLOGY

1. Arogyapacha

- Arogyapacha is a highly potent medicinal plant endemic to the Agasthya hills.
- Also termed the 'miracle plant' is known for its traditional use by the Kani tribal community to combat fatigue.
- It is known to have numerous pharmacological properties.
- The plant is anti-oxidant, aphrodisiac, anti-microbial, anti-inflammatory, immunomodulatory, anti-tumour, anti-ulcer, anti-hyperlipidemic, hepatoprotective and anti-diabetic.

Context

- The genetic make-up of Arogyapacha (Trichopus zeylanicus) has been decoded by the Scientists from the University of Kerala.

2. ASEAN vows to tackle ocean waste- "Bangkok Declaration"

Introduction

- Just five Asian countries — China, Indonesia, the Philippines, Vietnam and Thailand — dump more than half of the eight million tonnes of plastic waste that end up in oceans every year, according to a 2017 Ocean Conservancy report.
- The region has come under fire for not doing enough to tackle its mounting trash troubles, with single-use plastic and sub-par waste management adding to the problem.

Details

- The group has expressed concern that rapid marine debris pollution, particularly plastic litter, may negatively impact marine ecosystems, fisheries, economics, public health, and society, among others, without immediate action.
- To strengthen actions at the national level as well as through collaborative actions among the ASEAN Member States and partners to prevent and significantly reduce marine debris, particularly from land-based activities, including environmentally sound management
- The group also committed to enhancing multi-stakeholder coordination and cooperation to combat marine debris, including implementing joint actions and partnerships for addressing such a challenge.
- They will also promote innovative solutions to enhance plastics value chains and improve resource efficiency by prioritizing approaches such as the circular economy and 3R (reduce, reuse, recycle).

- Research capacity and application of scientific knowledge would also be strengthened to combat marine debris, in particular, to support science-based policy and decision making.
- The group also committed to accelerating advocacy and actions to increase public awareness and participation, and enhance education on reducing marine debris.

3. Asiatic golden cat

Context

- Scientists have found that the Asiatic golden cats' coat comes in six types: cinnamon, golden, gray, melanistic, ocelot and tightly rosette.

Asiatic golden cat:

- The Asian golden cat (Catopuma temminckii) is a wild cat native to the northeastern Indian subcontinent and Southeast Asia.
- It is found across eastern Nepal through north-eastern India to Indonesia.
- Conservation status as per IUCN Red List of threatened species: near threatened.
- Asian golden cats in Sumatra are reddish brown in colour.
- Black ones were recorded in the eastern Himalayas.
- Golden, reddish brown and grey cats were recorded in north-eastern India and Bhutan
- A spotted Asian golden cat with large rosettes on shoulders, flanks and hips was described for the first time from China in 1872. This morph was recorded in China, Bhutan and in West Bengal's Buxa Tiger Reserve.

Details:

- The recent discovery in Arunachal Pradesh may be the world's greatest number of different-colored wild cat species ever reported in one area.
- Colour morphs are basically occurrence of two or more discrete colour forms of the animal within a population, due to a genetic mutation. For example- Black panther is a color morph of the common leopard.
- They are thought to arise from random genetic mutations and take hold in the population through natural selection.

- These color morphs are not classified as different sub-species as they may live in the same area and even inter-breed.

- If they do not interbreed then this could represent the beginning of the evolutionary process into separate subspecies.

- The wide variation displayed in the cat's coats enables them to occupy different habitats at different elevations from wet tropical lowland forests to alpine scrubs and provides camouflage while hunting different prey such as tropical pheasants or a rabbit-like mammal called Himalayan pika.

- It is also suspected by scientists that the phenomenon is driven by competition with other big cats such as tigers and clouded leopards.

- Being dark colored in the mountains helps the cats conceal themselves from their prey making them better predators.

Significance of the discovery:

- According to evolutionary theory, if a colour morph is not beneficial for a species survival over time, it should die out in the population.

- The fact that there are so many different colour morphs persisting in Dibang Valley shows there are some ecological advantages to the variety of colours.

- Understanding how this phenomenon takes hold in a population could help scientists to understand how quickly species can adapt and evolve to changing environments.

- This would help scientists to gain better insight into the resilience capacity of the species to climate change or habitat degradation and destruction, which is also the reason for decreasing population of these species.

4. Bonn Challenge

- It is a global effort to bring 150 million hectares of the world's deforested and degraded land into restoration by 2020, and 350 million hectares by 2030.

- It was launched in 2011 by the Government of Germany and IUCN, and later endorsed and extended by the New York Declaration on Forests at the 2014 UN Climate Summit.

- Underlying the Bonn Challenge is the forest landscape restoration (FLR) approach, which aims to restore ecological integrity at the same time as improving human well-being through multifunctional landscapes.

5. Chennai Water Crisis

Context

- Chennai is practically the first Indian city to have gone dry with the Central Water Commission reporting a rainfall deficit of 41 per cent in Tamil Nadu

- Most of Chennai's population today is dependent on water tankers and curtailed municipal supply for daily requirement of drinking water.

But how did Chennai lose its water?

- Three rivers - the Cooum, the Adyar, and the Kosasthalaiyar - flow through Chennai into the Bay of Bengal. The Buckingham canal connects all the three rivers.

- North Chennai gets its water from reservoirs in Thamaraipakkam and Minjur desalination plant.

- South Chennai gets its water from Veeranam Lake and Nemmeli seawater desalination plant.

- Chennai used to be water-surplus metropolitan cities of the country till a couple of decades ago. Following the age-old water conservation tradition of Tamil Nadu, Chennai had nearly two dozen water bodies including three rivers and a British period Buckingham canal. Today, it is reduced to half a dozen.

- A study by the Anna University has found that Chennai has lost 33 per cent of its wetlands in the last one decade. During the same period, Chennai lost 24 per cent agricultural land, crucial for improving groundwater table.

- The Centre for Climate Change that conducted the study blamed road construction - highways and flyovers, airports and high-rises for depleting water resources in Chennai. These development projects were undertaken on reclaimed water bodies

- All three rivers and the Buckingham Canal are dry except for a few patches here and there. Same is the case with wetlands. Reports say that wetlands such as Pallikaranai Marsh, Pulicat Lake, Kattupalli Island, Madhavaram and Manali Jheels and the Adyar Estuary Creek have been encroached upon to expand urban settlements.

- The four main water reservoirs that supply drinking water to Chennai are currently at less than one per cent of storage level.

Concerns

- Water, or rather its scarcity, has started impacting the law and order situation too as the city has started seeing a spurt in cases of 'water rage'.

- Local gangs taking control of public water taps and dominating supply from street-corner tanks is too common.

- More than 20,000 employees working in technology firms have been asked to either work from home or move to offices in neighboring states

What should the Govt do?

- A time-bound plan is needed to augment the resources in the Greater Chennai region encompassing the neighbouring districts of Thiruvallur and Kancheepuram.

* This plan should be tasked to a Special Officer, to be framed by officials in consultation with credentialed experts in research and academia, and public comments invited before it is finalised.

- Given the large base of tanks and reservoirs in Greater Chennai — over 4,000 waterbodies of significance — prudent rainfall management can help it through withering summers and weak monsoons.

    * A white paper with a full assessment of these wetlands and their storage potential should be a priority for the State's Sustainable Water Security Mission. Deepening storage in the four major reservoirs must get priority.

- Tamil Nadu made rainwater harvesting mandatory quite early, but failed to follow it up with an institutional mechanism to help citizens implement it.

    * The government should give monetary incentives to NGOs, as NITI Aayog proposed in its Water Index report, to encourage them to install systems and show quantifiable recharge outcomes.

- On the consumer side, devices and practices to reduce wastage should be promoted, especially on commercial premises.

6. Coringa Wildlife Sanctuary

- It is a wildlife sanctuary and estuary situated in Andhra Pradesh

- It is the second largest stretch of mangrove forests in India

- It is home to the critically endangered white-backed vulture and the long billed vulture

Threats

- Coringa has become one of the fastest growing tourist destinations in the State prompting the government to allocate funds for developing amenities for the domestic and international tourists.

- From construction of the Polavaram irrigation project to the rapid industrialisation along the Kakinada coasts, the flora and fauna have been facing many challenges.

    * Water flowing in the creeks of the mangrove is a perfect mix of the outcomes of the Godavari and the Bay of Bengal.

    * Any change in this balance may alter the water quality, which in turn is going to have a cascading affect on the flora and fauna.

- Merger of industrial and irrigation effluents into the creek is the major challenge

    * Since the agriculture and aqua farmers from the vicinity are using more and more fertilizer and pesticide to get good yield, water flowing from these fields into the creek is carrying the residues

- The pesticide content has an adverse impact on honey production

    * As the honeybees are known for their relentless travel, they happen to get affected by the pesticides being used by the farmers.

Context

- The government has begun the process to get UNESCO's World Heritage Site status for Godavari Mangroves at Coringa Wildlife Sanctuary, near Kakinada

- The State government eyes heritage site tag for the mangroves so that it would get UNESCO funding to protect and preserve the wildlife sanctuary and attract international tourists.

7. Forests in news

Koundinya Wildlife Sanctuary

- It is a wildlife sanctuary and an elephant reserve situated in Andhra Pradesh

Nandankanan Zoological Park

- It is a zoo and botanical garden in Bhubaneswar, Odisha.

- Established in 1960, it became the first zoo in India to join World Association of Zoos and Aquariums (WAZA) in 2009.

- It also contains a botanical garden and part of it has been declared a sanctuary. Nandankanan environs of the Chandaka forest, and includes the 134-acre (54 ha) Kanjia lake.

Nagzira Wildlife Sanctuary

- It is located between Bhandara-Gondia district of Maharashtra

Navegaon National Park

- It is a National park located in the Arjuni Morgaon subdivision of Gondia district in Maharashtra

8. Golden langur to get fruits of MGNREGA

- IUCN: Endangered

- Habitat: Assam, Bhutan

- It is found in the Kakoijana reserved forest which is near Abhayapuri in Bongaigaon district of Assam

Chakrashila Wildlife Sanctuary

- It is a wildlife sanctuary falling under Dhubri and Kokrajhar districts of Assam

- It is India's first wildlife sanctuary with golden langur as the primary species.

Context

- For the first time since it became law in 2005, the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) will have non-human beneficiaries — the rare golden langur (Trachypithecus geei)

Details

- Several golden langurs have died due to electrocution and in road accidents while looking for food beyond the reserve forests.
- Therefore district authorities launched a ₹27.24-lakh project under the MGNREGA to plant guava, mango, blackberry and other fruit trees to ensure that the resident golden langurs of the 17 sq.km. Kakoijana Reserve Forest do not have to risk their lives to find food.

9. Impressed Tortoise/ Manouria Impressa

- Found in Myanmar, as well as pockets of Thailand, Laos, Vietnam, Cambodia, China and Malaysia, the Impressed Tortoise is an elusive, medium-sized species that inhabits moist, primary forests of hilly tracts
- IUCN: Vulnerable
- Chelonian is an order of reptile that includes turtles, terrapins and tortoises.
- There are only two species of tortoises under the Manouria
- India was known to be the home of only the Asian Forest Tortoise (Manouria emys) until the discovery of the Impressed Tortoise.
- The Asian Forest Tortoise, the largest in mainland Asia, is found only in the northeast, as are 20 of the other 28 species of chelonians.

Context

- A tortoise Impressed Tortoise (Manouria impressa) has been discovered in Arunachal Pradesh.
- This is the first record of the tortoise in India, taking the count to five and the non-marine chelonian count to 29.

10. Jal Shakti Abhiyan

Context

- The Centre is set to initiate the Jal Shakti Abhiyan to ramp up rainwater harvesting and conservation efforts in 255 water-stressed districts, in line with the government's promise to focus on water.

Details

- The Jal Shakti Abhiyan would aim to accelerate water harvesting, conservation and borewell recharge activities already being carried out under the Mahatma Gandhi National Rural Employment Guarantee scheme and the Integrated Watershed Management Programme of the Rural Development Ministry, along with existing water body restoration and afforestation schemes being undertaken by the Jal Shakti and Environment Ministries.

- Progress would be monitored in real time through mobile applications and an online dashboard at indiawater.gov.in.
- A major communications campaign on TV, radio, print, local and social media would be carried out, with celebrities mobilised to generate awareness for the campaign.

Implementation

- Though water is a State issue, the campaign would be coordinated by 255 central IAS officers of Joint or Additional Secretary-rank, drawn from ministries as varied as Space, Petroleum and Defence
- The campaign seems to follow the model of Gram Swaraj Abhiyan, where central officials monitored the implementation of seven flagship development schemes in 117 aspirational districts across the country.
- The campaign would run from July 1 to September 15 in States receiving rainfall during the south-west monsoon, while States receiving rainfall in the retreating or north-east monsoon would be covered from October 1 to November 30.
- All officers would also participate in a preparatory workshop led by the Cabinet Secretary at Vigyan Bhavan in the capital. Scientists and IITs would provide technical support, while national NGOs would aid in community mobilisation. State- and district-level officials would also join these teams on the ground.
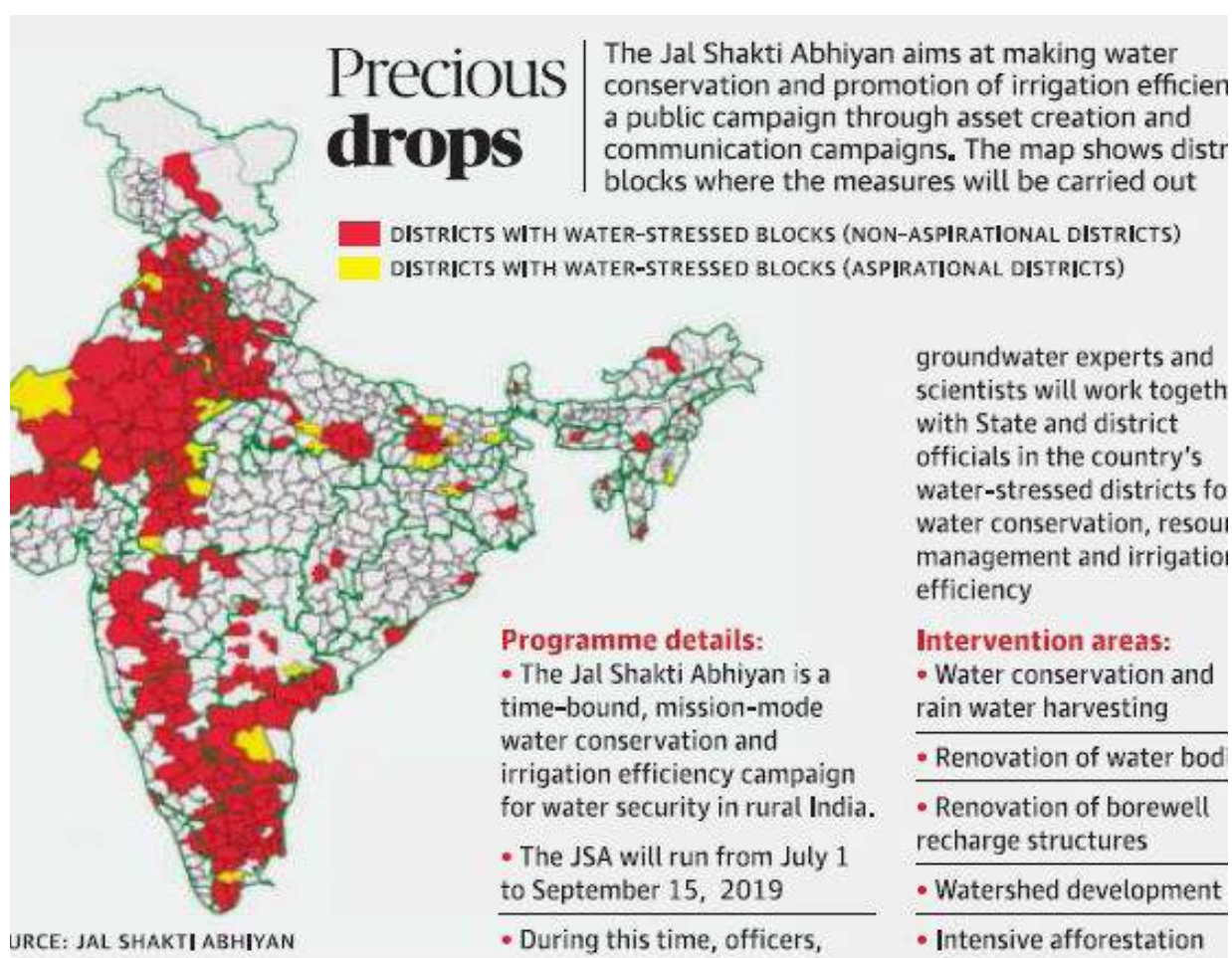
11. 'Jal Shakti' ministry

Context

- The government has launched a new unified 'Jal Shakti' ministry that is aimed at providing clean drinking water as well as fight India's water woes.

Details

- The new ministry has been formed by merging the Ministry of Water Resources, River Development and Ganga Rejuvenation and Ministry of Drinking Water and Sanitation

- It will encompass issues ranging from providing clean drinking water, international and inter-states water disputes, to the Namami Gange project aimed at cleaning Gang and its tributaries, and sub tributaries.

- The ministry will roll out government's ambitious plans to provide piped water connections to every household in India by 2024.

12. Kudakrumia Rangnekari

Context

- A new species of wasp from the genus Kudakrumia has been recently identified by scientists in Goa.

Details

- A wasp is any insect of the order Hymenoptera and suborder Apocrita that is neither a bee nor an ant

- The wasp, Kudakrumia rangnekari, was named after Goa-based researcher Parag Rangnekar.

- The holotype is from Kotigao Wildlife Sanctuary of Goa of northern Western Ghats and the paratype is from Ranipuram hill of Kerala of southern Western Ghats.

- The Kudakrumia is a genus of primitive wasps that is described and previously known only from Sri Lanka.

13. Normalized Difference Vegetation Index (NDVI)

- It estimates density of vegetation by deriving data from remote-sensing satellite

How it works?

- Live green plants absorb solar radiation which they use as a source of energy in the process of photosynthesis.

- Leaf cells also re-emit solar radiation in the Near-Infrared Spectral Region

- NDVI is a measure of the plant health based on how the plant reflects light at certain frequencies

- Chlorophyll (a health indicator) strongly absorbs visible light, and the cellular structure of the leaves strongly reflect near-infrared light.

- When the plant becomes dehydrated, sick, afflicted with disease, etc., the spongy layer deteriorates, and the plant absorbs more of the near-infrared light, rather than reflecting it

* Since healthy vegetation strongly absorbs red and reflects near infrared light, this difference can indicate the presence of healthy vegetation and map it into a colour code.

- Range of NDVI is –1 to +1.
    * Higher value of NDVI refers to healthy and dense vegetation.
    * Lower NDVI values show sparse vegetation

- This has been used to estimate the amount of food abundance available to herbivorous animals

Context

- A field study by researchers from Bengaluru shows that a popularly used index that remotely estimates density of vegetation does not yield a reliable estimate of food abundance for elephants in tropical forests.

- The NDVI is used, for instance, in attempts to track the presence of elephants using the vegetation they consume. However, this work clearly establishes that this can be misleading, and field-based studies are the ones which can yield definitive results.

14. Olive Ridleys

Context

- A proposal has been made to establish a permanent research centre near the Rushikulya rookery on the Odisha coast to study the mass nesting of Olive Ridleys and the environmental factors related to it.

Details:

- The research centre is expected to be established at a cost of more than Rs. 9 crore.

- The Forest Department is planning to have it in the Khallikote forest range, which is near the Rushikulya rookery.

- The centre would be involved in a detailed study of the habits and the habitat of the turtles and the coastal flora and fauna.

Busting myths:

- The centre would also allay myths and unscientific theories related to the mass nesting, said the DFO.

- Recently, it became viral on social media that the turtles had sensed Cyclone Fani and gave the rookery the skip.

- But past data proved the assumption wrong. Mass nesting occurred at the rookery in 1999 and 2013, when major cyclones hit the Odisha coast.

- In both cases, the Rushikulya rookery was affected.

- Mass nesting had not occurred in 1998, 2002, 2007 and 2016 though no major cyclone hit the coast.

Olive Ridley Turtles:

- Odisha is home to 50 percent of the total world's population of Olive Ridleys and about 90 percent of Indian population of sea turtles.

- The unmanned island, located close to the Wheeler's Island defence test range centre, a prohibited territory, is one of the largest rookeries in the world.

- These turtles get their name from the olive colored carapace, which is heart-shaped and rounded.

- Olive Ridley sea turtles come in large numbers for nesting to Odisha coasts. The mass nesting draws worldwide attention on the conservation of Olive Ridley in Odisha.

- The synchronised nesting in mass numbers is called Arribadas.

- They are mostly carnivorous and feed on jellyfish, snails, crabs, and shrimp. They occasionally consume algae and seaweed.

- The major breeding ground for these turtles is Rushikulya (Odisha), Dharma (Odisha), Devi estuary (Odisha), Astaranga Coast (Odisha), Gahirmatha beach (Odisha) and Hope Island of Coringa Wild life Sanctuary (Andhra Pradesh).

- They are classified as Vulnerable — IUCN Red List.

15. Reversing the scale of priorities

Chennai-Salem Expressway

- An eight-lane Chennai- Salem expressway is a proposed project in Tamil Nadu as part of the "Bharatmala Pariyojana"
    * It is a centrally sponsored highways programme acting as a corridor for more efficient freight movement.
    * The intended highway will cover more than 250 km

- The highway would pass through Kanchipuram, Tiruvannamalai, Krishnagiri, Dharmapuri and Salem districts, an agrarian region comprising reserved forest areas and several industrial zones.

- A feasibility study for the project pegged the total cost at Rs 9,106 crores and a tentative cost for rehabilitation and resettlement had been worked out to Rs 415 crores.

- There are three existing routes between Salem and Chennai.
    * stretches are facing abnormal delay due to increasing traffic volume carrying over one lakh passenger car units a day
    * Direct Salem – Chennai highway may be the only solution to ease traffic and reduce the travel time.

Madras High Court Judgment

- The project, it was feared, would destroy thousands of acres of fertile land, water bodies, residential areas, wells, forest land and hills, besides the flora and fauna and the livelihoods of hundreds of farmers.

- The critics claimed that there were alternative highways in the State between these two cities and the new one would not ease the congestion.

- The Madras High Court quashed notifications issued for acquisition of land for the project under Section 3A(1) of the National Highways Act 1956.

- The court cited the failure of the state government in conducting a mandatory public hearing and not receiving prior environmental clearance from the Centre.

- It also based its judgment on major flaws in the project report submitted by a private consultant.

The ultimate controversy in the case came down to this: was an environmental impact assessment (EIA) required before efforts were made to acquire land for the highway project? If not, at what stage of the project was such an assessment required?

What did Govt say?

- It argued that its power to acquire land under the National Highways Act, 1956, was unconditional.

- There was, it said, no law mandating an EIA before efforts are made to acquire private land.

- In its belief, a notification under the Environment (Protection) Rules, 1986, which required an EIA for the construction of a new highway, did not decree such an assessment for the purposes of securing the land.

Sustainable development

- Recognising this, in 1987, a United Nations-backed committee led by the former Norwegian Prime Minister Gro Brundtland proposed a long-term strategy which called for sustainable development, among other things.

  * This programme, radical at the time, titled "Our Common Future", defined the principle as an endeavor to ensure that any development "meets the needs of the present without compromising the ability of the future generations to meet their own needs."

- Since then, sustainable development has been viewed as something of a mantra in environmental jurisprudence. So much so that in India, even before the principle crystallised into a binding international norm, the Supreme Court in Vellore Citizens' Welfare Forum (1996) read the idea as intrinsic to India's constitutional structure.

  * "The traditional concept that development and ecology are opposed to each other is no longer acceptable," wrote Justice Kuldip Singh. "'Sustainable Development' is the answer."

Development prioritized over Environment

- But grand as this statement sounds, in practice it's proved scarcely useful. For the courts have invariably seen sustainable development as demanding a balancing exercise, as requiring a calculation of trade-offs between the environment and the economy.

- The courts of neoliberal India wound up fashioning a sliding scale of priorities in which the environment, particularly the urban ecosystem, always trumped people, but where eventually development trumped it all.

- Supreme Court judgment in a case concerning industrialisation at the Kudremukh National Park said where the commercial venture or enterprise would bring in results which are far more useful for the people, difficulty of a small number of people has to be bypassed.

  * "The comparative hardships have to be balanced and the convenience and benefit to a larger section of the people has to get primacy over comparatively lesser hardship"

Primacy to the environment

- Sustainable development can, therefore, work only if the environment is seen as valuable for its own sake. The Madras High Court does this in its judgment in Krishnamoorthy.

- The judgment, therefore, not only holds the state accountable for the violation of basic notions of due process, in exercising the power of eminent domain, but also sees the possession of farmlands by farmers as an article of faith.

- But most importantly, the ruling deepens a commitment to the protection of forests and waterbodies. It places the environment in a position of primacy over unthinking measures of ostensible development.

Conclusion

- By so holding, the Madras High Court has effectively reversed the prevailing scale of priorities.

- This is especially remarkable since it comes at a time when the government is seeking to further weaken the existing norms for environmental clearance.

- That such efforts at diluting environmental protections are underway when it has become increasingly apparent that climate change represents an existential threat ought to alarm us into action

- One way to act is to compel the state to look beyond exercises of balancing, as the High Court does, and to see nature as intrinsically valuable.

16. <u>Sambar (Rusa unicolor)</u>

- It is a large deer native to the Indian subcontinent, southern China, and Southeast Asia

- IUCN Red List: Vulnerable

- Sambar are nocturnal or crepuscular.

17. Sathyamangalam Wildlife Sanctuary

- It is a protected area and tiger reserve along the Western Ghats in the Erode District of Tamil Nadu

- It is the largest wildlife sanctuary in Tamil Nadu.

- Sathyamangalam forest range is a significant wildlife corridor in the Nilgiri Biosphere Reserve between the Western Ghats and the rest of the Eastern Ghats and a genetic link between the four other protected areas which it adjoins, including the Billigiriranga Swamy Temple Wildlife Sanctuary, Sigur Plateau, Mudumalai National Park and Bandipur National Park.

18. Serious concerns over Bt brinjal

- Bt brinjal genetically modified (GM) to resist the brinjal fruit and shoot borer (an insect), was found growing illegally in Haryana.

- This was a different Bt brinjal from the one developed by the Indian company, Mahyco, in which Monsanto has a 26% stake.

- It is important to note that Mahyco's Bt brinjal has been under a moratorium since 2010.

- Even as the government clamped down on the illegal GM crop, some farmer groups have demanded the release of Mahyco's Bt brinjal and other GM crops in the regulatory pipeline.

- It is true that the moratorium was imposed by the then Environment Minister Jairam Ramesh, despite being cleared by the Genetic Engineering Appraisal Committee (GEAC), the apex regulatory body for GM crops.

- However, an important question arises: Is Bt brinjal actually ready for release?

A Look at the impacts:

- Before imposing the moratorium, Mr. Ramesh had sought comments from a range of experts and concerned groups on environmental impacts and implications for consumers and farmers. Despite demands from activists and social scientists, the Ministry of Agriculture has not offered evidence that Bt brinjal will benefit farmers.

- Ironically, the National Institute of Agricultural Economics and Policy Research anticipates that if Bt brinjal performs as Mahyco proposes, brinjal output will increase and retail prices will fall, benefiting consumers far more than farmers.

Divided opinions on issues of biosafety:

- On biosafety issues, scientific opinion is divided down the middle.

- While some scientists from Delhi University were in favour of releasing Bt brinjal, others such entomologist David Andow of the U.S., and the then Vice-Chancellors of the Acharya N.G. Ranga Agricultural University and the Dr. Y.S.R. Horticultural University highlighted crucial deficiencies in the characterisation of Bt brinjal, and in the environmental impacts assessment.

- The ecologist, Madhav Gadgil, warned of contamination of India's diverse brinjal varieties. It is important to note that biodiversity is critical for nutrition and sustainability, and the government's own task force on biotechnology (2004) had recommended that no GM crop be allowed in biodiversity-rich areas.

- Further, a majority of the technical expert committee appointed by the Supreme Court (in the public interest litigations over GM crops), recommended a ban on genetically modifying those crops for which India is a centre of origin or diversity.

- Brinjal happens to be such a crop

A Perspective on Nutrition issues:

- In terms of nutrition, there seem to be some significant differences between Bt and ordinary brinjal.

- Many health researchers and professionals, and scientists such as immunologist David Schubert of the Salk Institute, U.S. and Suman Sahai of Gene Campaign have argued that Bt brinjal poses risks to human health.

- Furthermore, M.S. Swaminathan and V.M. Katoch, then the Director General of the Indian Council of Medical Research, asked for long-term (chronic) toxicity studies, before taking any decision on Bt brinjal.

- As a matter of fact, they asked that these be conducted independently, instead of relying exclusively on Mahyco for data.

Finding no support from State governments:

- Bt brinjal found no support from State governments.

- Kerala and Uttarakhand asked for a ban on GM crops.

- States with substantial brinjal cultivation, i.e. West Bengal, Odisha, Bihar opposed the release pending rigorous, extensive testing.

- As did Chhattisgarh, Tamil Nadu, Karnataka, Madhya Pradesh, and undivided Andhra Pradesh. These States were ruled by parties across the political spectrum.

Findings of key committees:

- Furthermore, in 2012 and 2017, respectively, the Parliamentary Standing Committee on Agriculture and the Committee on Science & Technology, Environment and Forests assessed the GM controversy. Both committees expressed grave concerns about lapses in the regulatory system.

- In fact, the Committee on Agriculture was so alarmed by the irregularities in the assessment of Bt brinjal, that it recommended "a thorough probe by a team of eminent independent scientists and environmentalists".

- Unfortunately, this thorough probe never happened.

- Further, both committees endorsed labelling GM foods to protect a consumer's right to know.

- However, since retailing is largely unorganised, enforcing truthful labelling is a logistical nightmare, and the Ministry of Agriculture believes it is impractical.

- The Food Safety and Standards Authority of India has only recently begun putting labelling rules into place.

An absence of a scientific consensus:

- In sum, there is a moratorium on Bt brinjal because there is no scientific consensus on its safety and efficacy, and because the States and Parliament have profound misgivings about the regulatory system.

- Further, in recent years, pests have developed resistance to Bt cotton, forcing farmers to spray lethal pesticides.

- This led to over 50 deaths by pesticide-poisoning in Vidarbha in 2017.

- It is important to note that a GM-based strategy of pest control is unsustainable, all the more so since farmers, already pressed for land, ignore the government's recommendation to plant refuge crops.

Concluding Remarks:

- Experts opine that we as a society cannot wish all these concerns away simply because some farmers want to try Bt brinjal, or farmers in Bangladesh have been cultivating Bt brinjal since 2013.

- Farmers do not and cannot assess long-term impacts on ecology and health, which needs more rigorous and sensitive studies than those conducted so far.

- Yet, in the nine years since the moratorium, there has hardly been any progress toward addressing these issues.

- If anything, the problem of sustainable, remunerative farming has become more acute, and alternative strategies such as organic and zero budget natural farming, which do not allow GM seeds, are gaining ground.

- Experts point out that at the very least, the government must detail the steps it has taken since 2010 to address the scientific lacunae, clarify precisely how Bt brinjal will benefit farmers, put the infrastructure to ensure labelling into place, and demonstrate how Bt brinjal fits in with sustainable farming and biodiversity conservation.

- In conclusion, as things stand, Bt brinjal runs counter to the framework for agricultural development and farmers' well-being devised by parliamentary panels and the government's own task forces and expert committees.

19. Vespersaurus Paranaensis

- It is a desert-based carnivorous dinosaur

- It used claws to capture small prey 90 million years ago

- The Vespersaurus was a theropod, a group of two-footed, meat-eating dinosaurs that included the better known Tyrannosaurus and Velociraptor.

Context

- The dinosaur has been unearthed in southern Brazil in Cruzeiro do Oeste municipality of Parana state

- The northeastern region of Parana was once a desert and the dinosaur's remains suggest that the Vespersaurus was well adapted to that type of climate.

20. White Carp Fish

- White carp fish, also known as the Mrigal carp is Native to streams and rivers in India.

- The only surviving wild population is in the Cauvery River

- However, it is widely aquafarmed and introduced populations exist outside its native range.

- Due to its hardy nature and rapid growth, it is popular as a food fish.

- It is the most widely farmed species among the Indian major carps and an important component of carp polyculture throughout South Asia.

- It fails to breed naturally in ponds, thus induced breeding is done.

- It is classified as vulnerable in The IUCN Red List of Threatened Species

21. World Wide Fund for Nature (WWF)

- It is an international non-governmental organization founded in 1961

- It works in the field of the wilderness preservation, and the reduction of human impact on the environment.

- WWF aims to "stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature

- WWF is the world's largest conservation organization with over five million supporters worldwide, working in more than 100 countries

- Headquarters- Gland, Switzerland

HEALTH ISSUES

1. **Acute Encephalitis Syndrome (AES)**

   Context

   - AES in Bihar's Muzaffarpur, Vaishali, Sheohar and East Champaran districts has so far claimed the lives of over 100 children.

   - More than 400 children with AES have been admitted to various hospitals. Most of the deaths have been attributed to low blood sugar level (hypoglycaemia).

   What is it?

   - AES in short, it is a basket term used for referring to children with clinical neurological manifestations which include mental confusion, disorientation, convulsion, delirium or coma.

   - Meningitis caused by virus or bacteria, encephalitis (mostly Japanese encephalitis) caused by virus, encephalopathy, cerebral malaria, and scrub typhus caused by bacteria are collectively called acute encephalitis syndrome.

   - While microbes cause all the other conditions, encephalopathy is biochemical in origin, and hence very different from the rest. There are different types of encephalopathy. In the present case, the encephalopathy is associated with hypoglycaemia and hence called hypoglycaemic encephalopathy.

   Is encephalitis different from hypoglycaemic encephalopathy?

   - The blood sugar level is usually normal in children with encephalitis

     * But is low in children with hypoglycaemic encephalopathy.

   - In the case of encephalitis, fever (due to virus infection) for a day or two is followed by the onset of symptoms caused by the brain getting affected.

     * However, in hypoglycaemic encephalopathy, children go to bed without any illness but manifest symptoms such as vomiting, convulsion and semi-consciousness early next morning (between 4 a.m. to 7 a.m.).

   - The most important difference between the two is the presence of White Blood Cells in the cerebrospinal fluid. In encephalitis, there are more white blood cells per unit volume of cerebrospinal fluid, which is a reflection of inflammation in the brain.

     * In contrast, no increase in white blood cells is seen in hypoglycaemic encephalopathy as there is no inflammation in the brain.

   What killed so many children in Bihar?

   - In a majority of cases, children died due to hypoglycaemic encephalopathy.

   Why has it affected only young children?

   - It is an observed fact that malnourished children between two to 10 years fall ill and die due to hypoglycaemic encephalopathy.

   - It is not known why older children or adults do not suffer the same way.

   - This clear discrimination by age is also a reason why the underlying cause of the illness cannot be a virus. A virus does not discriminate by age, and children younger than two years too are affected by Japanese encephalitis.

   - It has also been documented that most of the children falling ill are from families camping in orchards to harvest the fruits. These children tend to collect and eat the fruits that have fallen on the ground.

   - Hypoglycaemic encephalopathy outbreaks are restricted to April-July, with a peak seen in June. This is because litchi is harvested during this period.
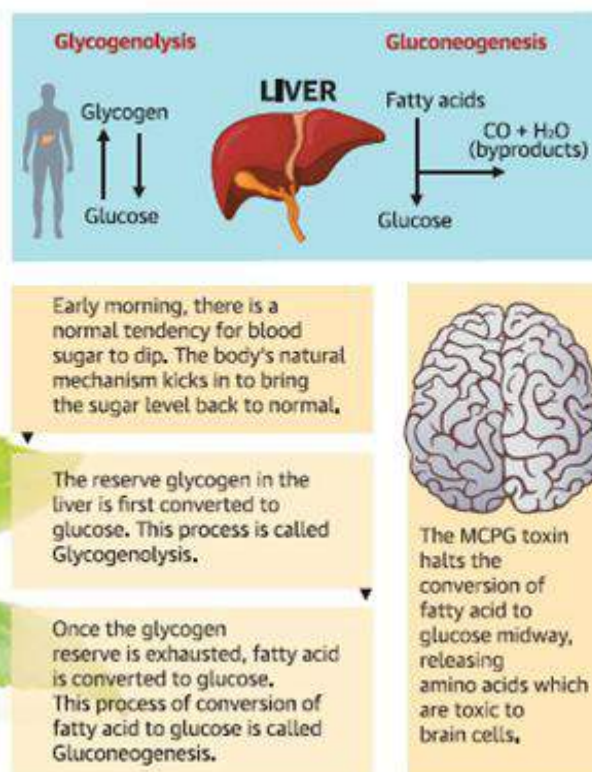
   Is litchi fruit responsible for causing hypoglycaemic encephalopathy?

   - In 2012-2013, a two-member team headed by virologist Dr. T. Jacob John suspected, and confirmed the next year, a toxin found in litchi fruit that was responsible for causing hypoglycaemic encephalopathy.

   - In 2017, an India-U.S. team confirmed the role of the toxin called Methylene Cyclopropyl Glycine (MCPG).

Fatal roadblock

Why is the litchi toxin dangerous to undernourished children? How does it lead to hypoglycaemic encephalopathy?

Litchis contain a naturally occurring toxin called Methylene Cyclopropyl Glycine (MCPG). Undernourished children, who have litchis during the day time and go to bed on an empty stomach are at high risk

Glycogenolysis   LIVER   Gluconeogenesis

Glycogen ↕ Glucose   Fatty acids → $CO + H_2O$ (byproducts) → Glucose

Early morning, there is a normal tendency for blood sugar to dip. The body's natural mechanism kicks in to bring the sugar level back to normal.

The reserve glycogen in the liver is first converted to glucose. This process is called Glycogenolysis.

Once the glycogen reserve is exhausted, fatty acid is converted to glucose. This process of conversion of fatty acid to glucose is called Gluconeogenesis.

The MCPG toxin halts the conversion of fatty acid to glucose midway, releasing amino acids which are toxic to brain cells.

Litchi does not cause any harm in well-nourished children, but only in undernourished children who had eaten litchi fruit the previous day and gone to bed on an empty stomach.

Why is the toxin more dangerous for undernourished children?

- In well-nourished children, reserve glucose is stored as glycogen (glucose polysaccharide) in the liver. Whenever the glucose level goes down, glycogen is broken down into glucose and circulated in the blood for use.

- But undernourished children lack sufficient glycogen reserve that can be converted into glucose. Therefore, the natural mechanism in undernourished children is unable to correct the glucose level in blood, leading to hypoglycaemia.

- Normally, when glycogen reserve in the liver is exhausted or is not sufficient, the body converts the fatty acid (non-carbohydrate energy source) into glucose. But in the presence of the litchi toxin, the conversion of fatty acid into glucose is stopped midway. As a result, no glucose is generated and the low blood glucose level is not corrected by the body.

How does the toxin cause coma and even death in children?

- The toxin acts in two ways to harm the brain and even cause death. Because of the toxin, the body's natural mechanism to correct low blood glucose level is prevented thus leading to a drop in fuel supply to the brain. This leads to drowsiness, disorientation and even unconsciousness.

- When the toxin stops the fatty acid conversion into glucose midway, amino acids are released which are toxic to brain cells.

- The amino acids cause brain cells to swell resulting in brain oedema. As a result, children may suffer from convulsions, deepening coma and even death.

Can hypoglycaemic encephalopathy be prevented in undernourished children?

- Calif • Yes, by making sure that undernourished children do not eat plenty of litchi fruit, ensuring that they eat some food and not go to bed on an empty stomach.

Can hypoglycaemic encephalopathy be treated?

- Yes, hypoglycaemic encephalopathy can be easily treated. A full and complete recovery can be achieved if children with hypoglycaemic encephalopathy are infused with 10% dextrose within four hours after the onset of symptoms.

- Infusing 10% dextrose not only restores blood sugar to a safe level but also stops the production of amino acid that is toxic to brain cells by shutting down the body's attempt to convert fatty acid into glucose.

- Together with dextrose infusion, infusing 3% saline solution helps in reducing oedema of the brain cells. The concentration of ions in the fluid outside the brain cells becomes more than what is inside the cell; this causes the fluid from the cells to come out thus reducing oedema and damage to brain cells.

- If dextrose infusion is not started within four hours after the onset of symptoms, the brain cells may not recover but will die. As a result, even if they survive, children suffer from various aspects of brain damage — speech getting affected, mental retardation, muscle stiffness/weakness and so forth.

Lychee (Litchi chinensis Sonn)

- It an important sub-tropical evergreen fruit crop belonging to family Sapindaceae, is believed to have originated in China, where it has been grown in Southern Guangdong State for thousands of years.
- It is highly specific to climatic requirements and probably due to this reason its cultivation is restricted to few countries in the world.
- In India, lychee was introduced in the 18th century through Burma, and from there, it spread to many countries.
- India and China account for 91 percent of the world lychee production but it is mainly marketed locally.
- Lychee being exacting in climatic requirement is confined to a few states with 74 percent of production recorded in Bihar. In this state, lychee is the livelihood for millions of people as it provides both on-farm and off-farm employment. Small and marginal farmers get additional income from lychee plants in their homesteads. Thus, lychee cultivation is the livelihood security for a large population, especially in the state of Bihar.
- The second largest lychee producing state is West Bengal followed by Tripura and Assam

Basic Needs, Basic Rights

Introduction

- First, like the constitutional principle of a basic structure, it is time to articulate an equally robust doctrine of basic rights.
- Second, these basic rights must be viewed primarily as positive, rights not against interference from the state (negative rights) but to the provision of something by it.
- Third, just as individuals are punished for legal violations, the government of the day must also be punished for the violation of these basic rights. This punishment need not await the next round of elections but must be meted out immediately, by the law itself.
- In short, defaulting governments must be held legally accountable. The systematic violation of basic rights must be treated on a par with the breakdown of constitutional machinery.

But what are basic rights? How are they different from other fundamental rights?

- Basic rights flow from basic needs such as physical security or subsistence. Needs are different from wants. You may want a chocolate every morning but don't need it.

- But basic needs are different: their non-fulfilment can cause great harm, even kill. The failure to get an antibiotic if you have a bacterial infection can hurt you very badly.
- It is true, of course, that though terribly important, basic needs are not what we live for. They don't make our life worth living. But anything really worth pursuing depends on the satisfaction of basic needs.
- Imagine the plight of those who queue up for long hours to get a bucket of water or a place to bathe, dress or defecate. People suffer if basic needs are met inadequately or with delay. They are then denied a minimally decent life.
- When basic needs are not fully met, we feel vulnerable and helpless. We grieve, cry for help, seek assistance. We complain and demand elementary justice from our community, especially from the state. Elementary justice requires that before anything else, the state does everything at its disposal to satisfy all basic needs of its citizens, particularly of those who cannot fend for themselves.

But what does the language of rights add to the idea of basic needs?

- First, a right is something that is owed to us; it is not a favour. So, rights help the recognition of anything that satisfies basic needs as an entitlement.
  * Basic rights are claims on the state to provide us with goods and services that satisfy our basic needs.
- Second, when something is identified as a basic right, it puts the state under a duty to enable its exercise. The state becomes its guarantor.
  * For example, the right to physical security, the first basic right, is socially guaranteed when the state provides its people a well-trained, professional police force.
  * As the philosopher Henry Shue, puts it, it is 'an attempt to give to the powerless a veto over some economic, social and political forces that harm them'.
  * These rights are basic also because many intrinsically valuable rights can be enjoyed only once these rights are secured.
- The third is the right to minimum economic security and subsistence that includes clean air, uncontaminated water, nutritious food, clothing and shelter. By showing the devastation caused by its absence, the Muzaffarpur tragedy amply proves that the right to primary health care is also an integral part of the right to subsistence.

What should the Govt do?

- Credible threats to these rights can be reduced by the government by establishing institutions and practices that assist the vulnerable; for example, by setting up hospitals with adequate number of doctors, nurses, beds, medical equipment, intensive care units, essential drugs and emergency treatments.

- For this, proper budgetary allocation is required that depends in turn on getting one's political priority and commitment right.

- When a government fails to provide primary health care to those who can't afford it, it violates their basic rights.

  * Therefore, the first signs of an outbreak must prompt strong prevention measures.

  * These include, apart from a robust health education drive and replenishing primary health centres (PHCs) with essential supplies, extensive deployment of peripheral health workers (ASHA workers) and ambulance services to facilitate rapid identification and management of suspected cases.

  * Vacant doctor positions in PHCs must be urgently filled through deputation.

- Furthermore, short-term scaling-up of the Poshan Abhiyaan and the supplementary nutrition programme — which makes available hot, cooked meals for pre-school children at Anganwadis along with take home ration for mothers and distribution of glucose/ORS packets in risk households — are imperative.

- Governments must make arrangements for people to demand that their basic rights be satisfied, to complain when these demands are not met, to report lapses and omissions on the part of governments, point fingers at apathetic government officials, criticise the government for its failures and to do so without fear.

Conclusion

- There are no limits to the longing for a better life. But the point of having a threshold of minimal decency is that our life must not fall below a certain level of existence. Anything short of a minimally decent life is simply not acceptable.

- This is why we must ask why governments are not immediately and severely penalised when they undermine the exercise of these basic rights.

- The solution lies in building more functional PHCs and sub-health centers; scaling-up the cadres of ASHA workers; strict monitoring of nutrition programmes; and addressing the maldistribution of doctors and medical colleges. The resultant robust primary care system can then be geared towards being more responsive to future outbreaks. We should also bolster our technical capacity to better investigate the causes of such outbreaks and operationalise a concrete long-term strategy.

2. **AWaRe- WHO Tool**

Context

- The World Health Organization (WHO) has launched a global campaign that urges countries to adopt its new online tool aimed at guiding policy-makers and health workers to use antibiotics safely and more effectively.

- Its objective is to limit drugs that are at risk of resistance.

Details

- The AWaRe tool was developed by the WHO Essential Medicines List to contain rising resistance and make antibiotic use safer and more effective.

- It classifies antibiotics into three groups – Access, Watch and Reserve – and specifies which antibiotics to use for the most common and serious infections, which ones should be available at all times in the healthcare system, and those that must be used sparingly or preserved and used only as a last resort.

The tool, known as 'AWaRe', classifies antibiotics into three groups:

- Access — antibiotics used to treat the most common and serious infections

- Watch — antibiotics available at all times in the healthcare system

- Reserve — antibiotics to be used sparingly or preserved and used only as a last resort

The new campaign aims to increase the proportion of global consumption of antibiotics in the Access group to at least 60%, and to reduce use of the antibiotics most at risk of resistance from the Watch and Reserve groups.

3. **Cyberchondria**

- The term "cyberchondria" is derived from the terms cyber- and hypochondria.

  * "Hypochondrium" derives from Greek and literally means the region below the "cartilage" or "breast bone."

- This refers to severe anxiety that is fuelled by medical information found on the Internet.

- People who try to self-diagnose their health condition by searching their symptoms on search engines usually suffer from cyberchondria as they often misdiagnose their condition.

- They may, for instance, experience the unfounded fear that they suffer from serious diseases like cancer even though the symptoms they experience may be better explained by a medical condition that is far less serious.

- While cyberchondriacs may be searching the Internet to feel better, the information they find on the Internet might, in fact, increase their anxiety.

4. Encephalitis and Meningitis

- Encephalitis, caused by a virus infection, is the inflammation of the brain, and

  * Symptoms of encephalitis include fever, headache, neck pain, drowsiness and nausea.

- Meningitis, caused by bacterial infection, is the inflammation of the meninges or tissues that surround the brain or spinal cord.

  * Those with meningitis will have headache, fever, stiff neck, and nausea.

- Nipah-infected patients generally will show encephalitis symptoms along with disorientation, respiratory issues and a confused state of mind.

5. Food safety is everyone's business: WHO

Context

- World Health Organisation (WHO) which has released figures that estimate 600 million cases of food-borne diseases occur annually worldwide. This translates into one in 10 people falling ill after eating contaminated food.

Details:

- "Food safety is an increasing threat to human health. Children under 5 years of age carry 40% of the food-borne disease burden with 1,25,000 deaths every year," said WHO.

- A note issued by the organisation said the first-ever World Food Safety Day was adopted by the U.N. General Assembly in December 2018 and this year it would be celebrated on June 7 with the Food and Agriculture Organization (FAO) facilitating member-States' effort to celebrate it.

Way forward:

- Access to sufficient amounts of safe and nutritious food is key to sustaining life and promoting good health. Food-borne diseases impede socio-economic development by straining health care systems and harming national economies, tourism and trade.

- The way in which food is produced, stored, handled and consumed affects the safety of our food. Complying with global food standards, establishing effective regulatory food control systems is essentials.

- Some ways in which governments, international organisations, scientists, the private sector and civil society can work to ensure food safety are as follows:

  * Including emergency preparedness and response

  * Providing access to clean water

  * Applying good agriculture practices (terrestrial, aquatic, livestock, horticulture),

  * Strengthening the use of food safety management systems by food business operators,

  * Building capacities of consumers to make healthy food choices

6. Gestational Diabetes Mellitus (GDM)
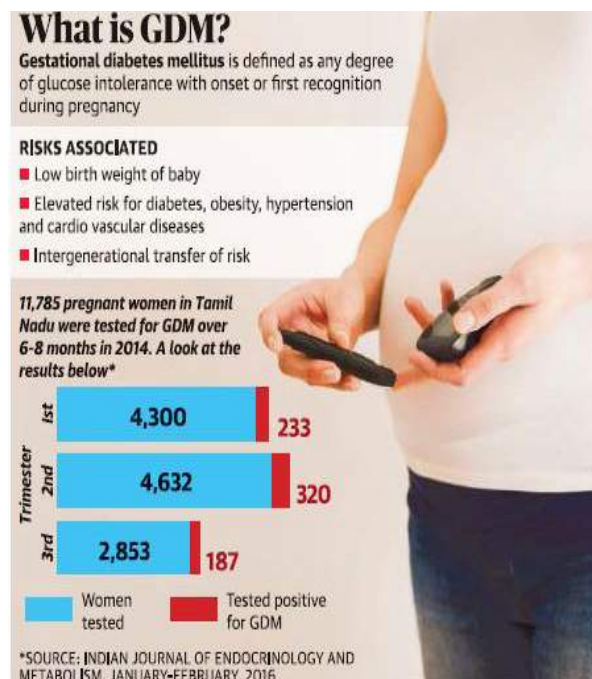
- Gestational diabetes usually starts between weeks 24 and 28 of pregnancy and usually doesn't have many symptoms.

- During this period pregnant women can experience unusual thirst, frequent urination in large amounts (distinguished from the frequent but usually light urination of early pregnancy), fatigue (which may be difficult to differentiate from normal pregnancy fatigue) and sugar in the urine.

National Guidelines

- The Ministry of Health has developed national guidelines for testing, diagnosis and management of hyperglycaemia in pregnancy, and they recommend early testing at the time of contact (during the first trimester) and if the test is negative, yet another test should be done between 24-28 weeks.

7. Homoeopathy Central Council (Amendment) Bill, 2019

Context

- The Lok Sabha has passed the Homoeopathy Central Council (Amendment) Bill, 2019.

Background:

- The Homoeopathy Central Council Act, 1973 was enacted for the constitution of the Central Council of Homeopathy, along with the maintenance of the Central Register of Homeopathy and matters related to it.

- The Act was amended in 2002 to make provisions and seek permission from the central government for the setting up of new colleges or starting new courses or increase the admissions in the existing colleges.

- However, many homoeopathic colleges are struggling to meet the required standards necessary for quality education.

Details:

- The amendment enables the government to extend the tenure of the Board of Governors for a further period of one year with effect from May 17, 2019.

- It will replace an ordinance issued by the previous government.

- The affairs of the Central Homoeopathy Council have been entrusted to a Board of Governors comprising eminent and qualified homoeopathy doctors and eminent administrators till such a time the council is reconstituted.

- The tenure has been extended since the council could not be reconstituted within one year due to non-updation of State registers of homoeopathy during general elections.

Issue:

- There have been several instances of serious malpractices in the Council, even after the Centre taking steps to bring transparency in the Council's affairs.

- There have been reports that many members of the Council are still continuing even after their terms have long ended.

- There have been charges of misconduct against the president of the Council, for allegedly accepting a bribe of Rs 20 lakh to set up a new Homeopathy college.

- The President of India, Ram Nath Kovind, in May 2018, promulgated the Homoeopathy Central Council (Amendment) Ordinance.

- The bill is opposed by the opposition parties, which demanded that the government should further examine the proposed legislation, saying there should be supervision mechanism for homoeopathy and ayurvedic medical institutions.

- The government was also criticised for frequent use of ordinance, stating that it is against the spirit of democracy.

8. Lifestyle Diseases

Context

- The Vice President of India has called for popularizing Yoga and making it part of the school curriculum to promote healthy lifestyles and combat growing incidence of non-communicable diseases in the country.

- He was talking at International Yoga Day celebrations at the Red Fort, Delhi.

Key Points:

- Lifestyle diseases and physical fitness have become a matter of concern for a section of our population.

- Improper food habits were harming health and the Vice President cautioned young people against consuming junk food.

- He also said that "Instant food means constant disease" and that the native food practices handed down from generations were suited for each region and had to be adopted by people.

- He also said that tremendous pressure in daily life had to be countered with the science of Yoga. Yoga would help not just to achieve physical well-being, but also to lead a better life by making enlightened choices.

- He emphasised on balance in all spheres. And, said that a true yogi develops harmonious relationships with the self, others and the environment that form the foundation of healthy societies and a healthy planet.

- Introducing Yoga in schools would make people adopt it from a young age. Yoga can help achieve physical and mental well-being.

- Many schools in other countries had made Yoga a mandatory part of the curriculum.

Lifestyle Diseases

- Lifestyle diseases are defined as diseases linked with the way people live their life. This is commonly caused by alcohol, drug and smoking abuse as well as lack of physical activity and unhealthy eating.

- Diseases that impact on our lifestyle are heart disease, stroke, obesity and type II diabetes.

- Lifestyle diseases are preventable for children if parents set them on the correct path, as early life decisions and influences can impact people later on in life.

9. Medical services hit as doctors' agitation spreads

Background

- Several junior doctors were thrashed by about 200-odd mob in NRS Medical College and Hospital, when an 85-year-old patient died, apparently to what the mob believes is due to medical negligence

- Immediately Nationwide protests were taken up by doctors across India to condemn violence against their peers in West Bengal

- The agitation, which spread to Delhi, Mumbai, Hyderabad, Bengaluru and other cities, has made one thing clear — laws currently in place to protect physicians from attack by patients or their families are simply not working.

Laws

Under Seventh Schedule in State List comes the subject of Public health and sanitation; hospitals and dispensaries.

- At least 19 states — including West Bengal, the epicentre of the protests — have passed what is called the Protection Of Medicare Service Persons And Medicare Service Institutions (Prevention Of Violence And Damage To Property) Act, also known as the Medical Protection Act (MPA).

Who does it cover?

- The Act, covering doctors affiliated to institutions as well as independent practitioners,

- Registered nurses; Medical students; Nursing students;

Penalty

- It outlaws attacks against physicians and damage to their property

- Offenders can get a jail term of up to three years and a fine of Rs 50,000.

Issue with Laws

- As stringent as it sounds, the Act, however, fails to really protect doctors because it features neither in the Indian Penal Code (IPC) nor in the Code of Criminal Procedure (CrPC).

- This makes it difficult for victims to approach the police for help or the latter to file a complaint against suspects.

Reasons for violence

Perceived injustice was one of the key reasons of violence

- Delay in patient care

  * The most common scenario is that of a patient being brought to the casualty ward of a public hospital in a critical condition by family members or neighbours. If the patient does not survive, there is the reality or perception that treatment was not administered to him or her in time.

  * The tipping point is when the staff in hospitals display insensitivity when they are questioned about delays.

- Overcrowding

  * In India, when people go to the police with a complaint of an assault, they are advised to go to a government hospital even if they have very minor injuries, to record them to strengthen their legal case.

  * All these patients come to the casualty ward adding to the crowd and the burden of the hospital staff.

  * If the staff have to treat only 10% of the load of critical patients, they would do a much better job and perhaps even save lives.

- Long wait for appointment and investigations

- Shortage of security guards

- Lack of soft skills among healthcare workers

  * Attacks are impulsive responses in an emotional moment. What may work instead is softening the blow on families by breaking the message to them in a planned and organised manner

What needs to be done?

- Carry out triage in casualty

- Allow only one attendant with a patient

- Increase no. of security guards

- Install CCTVs at high-risk places like casualty

- Conduct Stress management classes and meditation sessions for staff

Conclusion

- Treating the issue as a law and order problem is just one way. The real solution may lie in improving health infrastructure, counselling patients about possible adverse treatment outcomes, and providing basic security in medical institutions.

10. Monkeypox scare

- Monkeypox is a rare viral zoonotic disease (a virus transmitted to humans from animals) that occurs primarily in remote parts of central and west Africa, near tropical rainforests

- The monkeypox virus is similar to human smallpox and belongs to the virus family Poxviridae

- It is transmitted primarily through infected animals (rodents and primates).

Outbreaks

- Human monkeypox was first identified in humans in 1970 in the Democratic Republic of Congo

Transmission

- Infection of index cases results from direct contact with the blood, bodily fluids, or cutaneous or mucosal lesions of infected animals.

  * In Africa human infections have been documented through the handling of infected monkeys, Gambian giant rats and squirrels, with rodents being the most likely reservoir of the virus.

- Eating inadequately cooked meat of infected animals is a possible risk factor.

- Human-to-human transmission of monkeypox is possible but limited.

* Secondary, or human-to-human, transmission can result from close contact with infected respiratory tract secretions, skin lesions of an infected person or objects recently contaminated by patient fluids or lesion materials.

Treatment and vaccine

- There are no specific treatments or vaccines available for monkeypox infection, but outbreaks can be controlled.

- Vaccination against smallpox has been proven to be 85% effective

- Data from Africa suggest that smallpox vaccine offers at least 85% protection against monkeypox if the vaccine is administered before exposure to the virus.
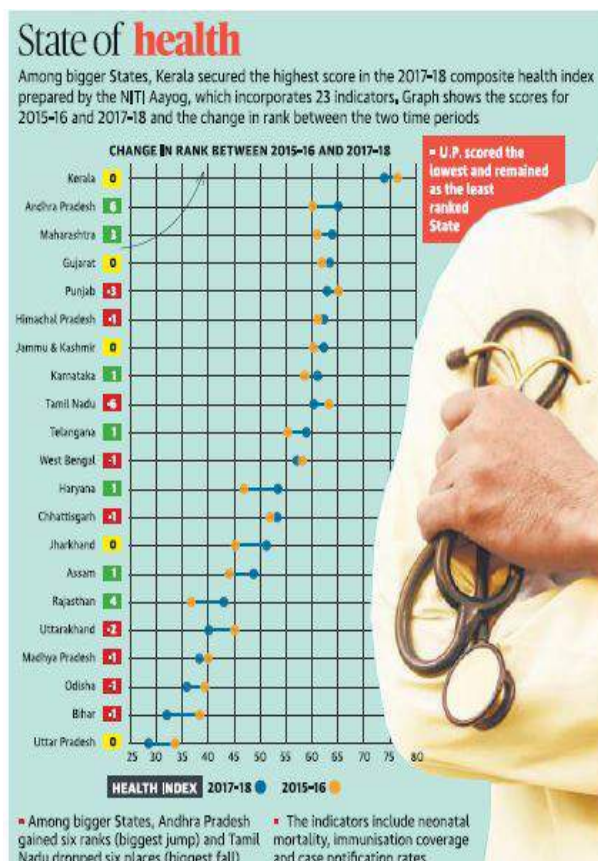
11. Niti Aayog Health Index

Context

- Kerala has emerged as the top ranking state in terms of overall health performance, while Uttar Pradesh is the worst, according to the second health index launched by Niti Aayog.

Details

- The report 'Healthy States, Progressive India: Report on Rank of States and UTs' has ranking in three categories — larger States, smaller States and Union Territories "to ensure comparison among similar entities."

- The Index ranks the States and Union Territories based on 23 health-related indicators, including neonatal mortality rate, under-five mortality rate, proportion of low birth weight among new-borns, proportion of districts with functional Cardiac Care Units, full immunisation coverage and proportion of specialist positions vacant at district hospitals.

- States are also assessed on improvements to administrative capability and public health infrastructure.

- The report has been prepared in collaboration with the Ministry of Health and Family Welfare with technical assistance from the World Bank.

Ranking

- Kerala, which got an overall score of 74.01, was followed by Andhra Pradesh (65.13), Maharashtra (63.99), Gujarat (63.52) and Punjab (63.01), Himachal Pradesh (62.41), Jammu and Kashmir 62.37, Karnataka (61.14) and Tamil Nadu (60.41).

- Other States at the bottom of the list were Bihar (32.11), Odisha (35.97) and Madhya Pradesh (38.39).

- The report added that among the eight Empowered Action Group States, only three States — Rajasthan, Jharkhand and Chhattisgarh — showed improvement in the overall performance.

State of health

Among bigger States, Kerala secured the highest score in the 2017-18 composite health index prepared by the NITI Aayog, which incorporates 23 indicators. Graph shows the scores for 2015-16 and 2017-18 and the change in rank between the two time periods

CHANGE IN RANK BETWEEN 2015-16 AND 2017-18

U.P. scored the lowest and remained as the least ranked State

HEALTH INDEX 2017-18   2015-16

- Among bigger States, Andhra Pradesh gained six ranks (biggest jump) and Tamil Nadu dropped six places (biggest fall)
- The indicators include neonatal mortality, immunisation coverage and case notification rates

Concerns

For the Health Index concept to spur States into action, public health must become part of mainstream politics.

- While the Centre has devoted greater attention to tertiary care and reduction of out-of-pocket expenses through financial risk protection initiatives such as Ayushman Bharat, several States remain laggards when it comes to creating a Primary Health Care (PHC) system with well-equipped PHCs as the unit.

- This was first recommended in 1946 by the Bhore Committee. The neglect of such a reliable primary care approach even after so many decades affects States such as Bihar, where much work needs to be done to reduce infant and neonatal mortality and low birth weight, and create specialist departments at district hospitals.

- The Health Index does not capture other related dimensions, such as non-communicable diseases, infectious diseases and mental health.

- It also does not get uniformly reliable data, especially from the growing private sector.

Way forward

- What is clear is that State governments now have greater resources at their command under the new scheme of financial devolution, and, in partnership with the Centre, they must use the funds to transform primary health care.

Primary, Secondary and Tertiary HealthCare

Primary Healthcare

- Primary healthcare denotes the first level of contact between individuals and families with the health system.
- According to Alma Atta Declaration of 1978, Primary Health care was to serve the community it served; it included care for mother and child which included family planning, immunization, prevention of locally endemic diseases, treatment of common diseases or injuries, provision of essential facilities, health education, provision of food and nutrition and adequate supply of safe drinking water.
- In India, Primary Healthcare is provided through a network of Sub centres and Primary Health Centres in rural areas, whereas in urban areas, it is provided through Health posts and Family Welfare Centres.

Secondary Health Care

- Secondary Healthcare refers to a second tier of health system, in which patients from primary health care are referred to specialists in higher hospitals for treatment.
- In India, the health centres for secondary health care include District hospitals and Community Health Centre at block level.

Tertiary Health Care

- Tertiary Health care refers to a third level of health system, in which specialized consultative care is provided usually on referral from primary and secondary medical care. Specialised Intensive Care Units, advanced diagnostic support services and specialized medical personnel on the key features of tertiary health care.
- In India, under public health system, tertiary care service is provided by medical colleges and advanced medical research institutes.

12. What yoga can teach us

- The word yoga was first mentioned in the Rigveda. However, its philosophy, science and grammar were first provided by Patanjali in his magnum opus, Patanjali Yoga Sutra.

Yoga's journey to the West:

- Yoga was taken to the West by Indian gurus.
- They started centres where people practised yoga and realised its benefits. However, the popularity of yoga also created a massive business of approximately $40 billion.
- This is set to grow with the rising popularity of yoga.

The Philosophy of 'All is one':

- Yoga is something beyond physical health and material wealth.
- The human persona is not only a body; it is also a mind, an intellect, and a soul.
- Yoga attempts to harmonise all of them.

- In the process, one attains a healthy body, a sharp intellect, and a focused mind capable of realising the unity between 'I', generally defined as personal consciousness, and 'I', the universal or cosmic consciousness.

What is Yoga and its goal?

- Yoga means to join.
- Its ultimate goal is to experience the unity of individual and universal consciousness.
- Yoga teaches us to recognise the fundamental unity between human beings and humankind, humans and the environment, and ultimately recognise a total interconnectedness of everything.
- The essence of this realisation is to experience that all is one. There is no 'us' and 'they' — everything is us. This is an integral or holistic approach.

Looking at Science:

- There is today a new vision of reality emerging from new physics.
- As we know, old physics was mechanistic; we had then the great figure of Isaac Newton.
- Corresponding to that mechanistic philosophy, but in a larger mould, we had a dualistic philosophy that divided the world into two components: the world of matter and the world of mind.
- The great figure of this philosophy was Descartes.
- However, a hundred years ago, a brilliant Indian physicist, Jagadish Chandra Bose, demonstrated to the scientific world that there was no fundamental division between plants, animals and human beings.
- When Darwin discovered the process of evolution, a series of new philosophies came to be developed.
- But none of these philosophies has the thoroughness of the evolutionary philosophy of Indian sages that bridges the gulfs between matter and life, and life and mind, and of Sri Aurobindo's philosophy of evolution from mind to supermind. In fact, he reverses the entire process of evolution and points out that the real evolutionary force is not material but supramental in character, and that matter itself is nothing but a mode of the supermind. He thus bridges, like the Vedic rishis, the three great oceans of existence — the inconscient, conscient, and superconscient.
- This is extremely refreshing, and one feels a kind of rejuvenation of thought and life.
- One can see clearly the interconnection between Sri Aurobindo's vision of a world union of free nations, the vision of a spiritualised society, and the vision of integral humanism based on a holistic vision of the universe.

A new way of thought:

- Globalisation based on the mechanistic world view also attempts to integrate nations through the concept of the world as one market.

- The recent experience of attempts to integrate the economies and technologies of nations instead of creating any global consciousness leading to oneness has turned out to be divisive, exclusivist, fragmentary and has not helped in resolving any of the conflicts.
- The market forces, instead of harmonising conflicts, have further deepened the fault lines.
- As a matter of fact, this has resulted in a world that is out of balance.
- Currently, restoration of the balance in this planet is a big challenge. Enlightened global minds need to think about an alternative paradigm.

Yoga and its holistic tenets in the realm of international relations:

- Former United Nations Secretary-General Ban Ki-moon said, "We should do this [yoga] before every negotiation so that we can work with a calm mind".
- It can be argued that if international negotiations could be held on the basis of holistic tenets, along with a calm mind, perhaps the UN would be able to use its time for good purposes.
- If such and other practices of holistic behaviour are pursued, possibly a new culture of conducting world affairs and international relations might evolve in the future.
- It is important to note that there is increasing awareness that the present imbalance is the outcome of the inability of existing socio-economic institutions and political structures to deal with the current impasse, which is derived from the inadequacy of concepts and values of an outdated model of the universe and the belief that all problems can be solved by technology.
- In light of this, perhaps there is a need for a new paradigm.

Concluding Remarks:

- Some important questions arise: Can an alternative world view for transforming human society into a non-violent, eco-friendly, non-dogmatic, egalitarian, all-inclusive, secular world family be evolved through the harmonisation of yoga and science?
- Enlightened global minds should seriously ponder on such a probability.
- In fact, apart from emphasising the normal benefits of yoga, International Yoga Day should be utilised to think about how a peaceful transition can be achieved for peace, harmony and happiness.

13. World Food Safety Day

- In 2018, the United Nations General Assembly declared June 7th, as the World Food Safety Day
- The UN has designated two of its agencies i.e. the Food and Agriculture Organization (FAO) and the World Health Organization (WHO) to go with the promotion of food safety across the world

World Food Safety Day 2019: UN Guidelines

- Governments must ensure safe and nutritious food for all: The governments should ensure and guarantee safe and nutritious food for its citizens. Policymakers should promote more sustainable solutions in sectors like agriculture and food systems. Food safety authorities should manage the food safety of the entire food chain
- Agriculture and food producers need to adopt good practices: The governments should encourage farmers to shift to more sustainable farming practices and reduce the usage of chemicals within the farming system. With this, they should also take precautionary measures to avoid leaching of chemicals from industries into farmland. The chemicals can cause reproductive and developmental problems which can damage the immune system and can also lead to cancer

ART AND CULTURE

1. Bhawai

- Bhawai is a folk dance with swaying and twirling movements that is performed by women from certain tribes from the state of Rajasthan.
- The men from these communities offer the music to this dance, using string and percussion instruments.
- Bhavai dance is often misinterpreted from 'Bhavai' which is a folk theatre form of Gujarat.

2. Chang dance

- It is a folk dance from Rajasthan
- It is also referred to Dhamal, dhuff dance and as Holi dance
- It originates from the Shekhawati region of Rajasthan

3. Chari Dance

- It is a folk dance in Rajasthan
- Chari dance is a female group dance.
- It is prominent in Gujjar and Saini community of Kishangarh and Ajmer
- The Chari dance is performed at marriage celebrations, on the birth of a male child and at celebrations and festivals of goodness.
- During the Chari dance, colorfully dressed, bejeweled women hold earthenware or brass Chari pots on their heads.

4. Chaukhandi Stupa

Context:

- An ancient Buddhist site in Uttar Pradesh's Sarnath known as Chaukhandi Stupa has been declared to be "of national importance" by the Archaeological Survey of India
- The word Sarnath comes from a corruption of the name Saranganatha (lord of deer).

Details

- The Chaukhandi Stupa is thought originally to have been built as a terraced temple during the Gupta period
- According to an inscription at Chaukhandi stupa, Humayun sought refuge in Sarnath when he was escaping from the battle of Chausa.
  - * The Battle of Chausa was a notable military engagement between the Mughal emperor, Humayun, and the Afghan, Sher Shah Suri.

5. Ghoomar

- Ghoomar is a traditional folk dance of Rajasthan
- It was Bhil tribe who performed to worship Goddess Sarasvati which was later embraced by other Rajasthani communities
- The dance is chiefly performed by veiled women who wear flowing dresses called ghaghara.

6. Kalbelia

- Kalbelia or Kabeliya is a dance from Rajasthan, performed by the tribe of the same name
- The dance is an integral part of their culture and performed by men and women.
- Their traditional occupation is catching snakes and trading snake venom. Hence, the dance movements and the costumes of their community bear a resemblance to that of the serpents.
- They live a nomadic life and belong to the scheduled tribes.

7. Koodiyattam

- Koodiyattam is one of India's oldest living theatrical traditions.
- It is a traditional performing art form of state of Kerala.
- Koodiyattam means combined acting.
- It is a combination of ancient Sanskrit theatre with elements of Koothu, a Tamil/Malayalam performing art which is as old as Sangam era.
- In its theatrical language, neta abhinaya (eye expression) and hasta abhinaya (the language of gestures) are prominent.
- The art form is officially recognised by UNESCO as a Masterpiece of the Oral and Intangible Heritage of Humanity.

8. National Film Heritage Mission

- It has an objective of Preservation, Conservation, Digitization and Restoration of films
- National Film Archive of India (NFAI) is the nodal organization.
- NFAI seeks to bring in industry perspective and expertise, as the success of the mission depends on an effective synergy with the industry.

9. **Nilgiri tribals tense as trekkers trash priceless rock art**

Context:

- The rock paintings in Karikiyoor at Kil Kotagiri in the Nilgiri forests have withstood the forces of nature for some 5,000 years, but in just the last few years, close to 40% of the paintings have been destroyed by trekkers, tourists, and vandals.

Details

- The site in Nilgiri Forests remained undisturbed till recently, but a spurt in the number of tourists has led to many people organising illegal treks to the rock art site. They enter the site without permission.

- These paintings are damaged by illegal trekkers, who have painted over religious symbols using whitener pens and political messages with chalk, while couples have carved their names on the rocks, permanently disfiguring the priceless pre-historic site.

- Members of the Irula tribal community, have an ancestral link to the site

    * Irulas have a deep cultural connection to the site, believing that their ancestors were the ones who had painted the symbols.

Significance of paintings

- The rock paintings in Karikiyoor contain analogous-Indus script, meaning they resemble the script found in Indus civilization sites of northern India

- Sites such as Karikiyoor need to be preserved to better understand the people that lived in the region, while also possibly deducing how certain technology and written scripts could have possibly diffused to southern India from the Indus peoples or vice versa

- The rock paintings serve both, as a "historical record," detailing the hunting habits and ways of life of the local communities, and also a ritualistic purpose\

Way forward

- The State Archeological Department, the Archeological Survey of India and also the Forest Department have a huge say in ensuring the site is protected. They need to act quickly to ensure that what remains of the rock paintings are preserved

Irula

- They are a Dravidian ethnic group inhabiting the area of the Nilgiri mountains, in the states of Tamil Nadu and Kerala

- They speak Irula, which belongs to the Dravidian family

- Irular means "dark people" in Tamil and Malayalam, from the root word irul, meaning "darkness", in reference to their dark skin complexion

    * The name 'Irulas' originates from the word 'Irul', meaning 'night' in Tamil. The Irula men were originally part of the Kings' Guard. They were the ones who kept watch at night

- The main occupation of the Irulas has been snake, rat catching and honey collection

10. **Sahitya Academy Award**

- It is a literary honor in India, which the Sahitya Akademi, India's National Academy of Letters, annually confers on writers of the most outstanding books of literary merit published in any of the major Indian languages (24 languages including the 22 listed in the Eighth Schedule of the Indian Constitution, along with English and Rajasthani) recognised by the Sahitya Akademi

- Established in 1954, the award comprises a plaque and a cash prize of ₹ 1,00,000

- The award's purpose is to recognize and promote excellence in Indian writing and also acknowledge new trends.

- The plaque awarded by the Sahitya Akademi was designed by the Indian film-maker Satyajit Ray

11. **Tukaram**

- Sant Tukaram, Bhakta Tukaram, Tukaram Maharaj, Tukoba and Tukobaraya

- He was a 17th-century Hindu poet and sant of the Bhakti movement in Maharashtra

- He was part of the egalitarian, personalized Varkari devotionalism tradition

- Varkaris worship Vitthal (also known as Vithoba), the presiding deity of Pandharpur, regarded as a form of Krishna.

- Tukaram is best known for his devotional poetry called Abhanga and community-oriented worship with spiritual songs known as kirtans

GOVERNANCE

1. Compulsory Retirement

Context:

- Govt orders compulsory retirement of 12 senior IT officers for corruption, misconduct

Details

- This has been performed under Fundamental Rule 56(j) of Central Civil Services (Pension) Rules, 1972.

- Under the section, the performance of an officer who has turned 50 or 55 or has completed 30 years of service (whichever is earlier,) is being reviewed to ascertain if he/she is liable for compulsory retirement.

2. Prasar Bharati Act

- It is a statutory autonomous body set up by an Act of Parliament and comprises the Doordarshan Television Network and All India Radio

- The Parliament of India passed the Prasar Bharati Act to grant this autonomy in 1990

    * On the context of what true autonomy means for a broadcasting corporation, the Supreme Court has referred to a ruling by the German Constitutional Court, which said that "freedom from State control requires the legislature to frame some basic rules to ensure that government is unable to exercise any influence over the selection, content or scheduling of programmes".

- The President of India appoints the Chairman and the other Members, except the ex officio members, nominated member and the elected members

- The Prasar Bharati Corporation's main objective is to provide autonomy to Doordarshan and Akashvani in order to "educate and entertain the public."

The twin aims of the Prasar Bharati (Broadcast Corporation of India) Act of 1990 are crystallised in Section 12 of the law.

- Section 12 (3) (a) mandates that Prasar Bharati ensure that "broadcasting is conducted as a public service."

- Section 12 (3) (b) reinforces that the purpose of establishing the corporation is to gather news, not propaganda.

Background

- The Act came into existence after decades of post-independence struggle to free broadcasting from the stranglehold of the government.

- The legislative intent of the Act finds an echo in the Supreme Court's 1995 judgment in The Secretary, Ministry of Information and Broadcasting versus the Cricket Association of Bengal, which said the "first facet of the broadcasting freedom is freedom from state or governmental control, in particular from the censorship by the government... Public broadcasting is not to be equated with state broadcasting. Both are distinct."

Committees in the past

- The efforts for an autonomous broadcasting corporation can be traced to the post-Emergency B.G. Verghese Committee, which recommended the formation of Akash Bharati or the National Broadcast Trust for All India Radio and Doordarshan.

    * The panel, in its February 1978 report, highlighted the need for a fiercely unbiased and independent corporation as "the executive, abetted by a captive Parliament, shamelessly misused the Broadcasting during Emergency."

- Once the Janata Party imploded and Indira Gandhi came back in power, the Congress government appointed the P.C. Joshi Committee in 1982, with a narrow mandate of evaluating the programming of Doordarshan.

- The committee emphasised the lack of functional freedom in Doordarshan and said the "Ministry of Information and Broadcasting should be reorganised and a separate board, on the lines of the Railway Board, should be created, in which only people with professional experience should get entry."

3. Prison Statistics India 2016

Background

- In independent India, the Committee on Jail Reforms led by Justice AN Mulla recommended uniform, nationwide collection of prison statistics in 1983.

- The National Crimes Records Bureau undertook this task and, in 1996, published the first Prison Statistics India, for 1995. Thereafter, the statistics were published without interruption until 2015.

- The statistics for 2016, however, were only released in April 2019, with neither an explanation for the long delay nor any indication as to when data for later years will be published.

Stats

- Of the 4,33,033 prisoners in 2016, around 70.35% were either illiterate or had not finished Class 10, pointing to a correlation between the lack of access to education and crime.

- Nearly 34.5% of all staff positions across India's prisons were vacant in 2016. Shortage of staff means that no matter how committed individual officials are to reforming prisoners, they are overwhelmed by their sheer numbers.

- Among the total prisoners, 6,370 are foreigners, accounting for 1.5 per cent of all.

- Uttar Pradesh accounts for the highest number of undertrials and convicts in jails.

2016 Data on Undertrials

- The report tells us that at the end of 2016, there were 4,33,033 people in prison; of them 68% were undertrials, or people who have yet to be found guilty of the crimes they are accused of.

- India's under-trial population remains among the highest in the world and more than half of all undertrials were detained for less than six months in 2016.

- This suggests that the high proportion of undertrials in the overall prison population may be the result of unnecessary arrests and ineffective legal aid during remand hearings.

No demographic details

- The most significant shortcoming of the report lies in the NCRB's failure to include demographic details of religion and the Scheduled Caste and Scheduled Tribe status of prisoners, which are crucial to understanding India's prison population.

- This information was consistently published for the last 20 years and instrumental in revealing the problematic overrepresentation of Muslims, Dalits and Adivasis among under-trials in prisons.

- The report of 2015, for instance, said that Muslims, Dalits and Adivasis accounted for 55% of the under-trial population even though they made up only 50% of the convict population and 38% of the total Indian population.

- Another disturbing point is the rise in the number of people held under administrative (or 'prevention') detention laws in Jammu and Kashmir (a 300% increase), with 431 detainees in 2016, compared to 90 in 2015.

  * Administrative, or 'preventive', detention is used by authorities in J&K and other States to unfairly detain persons without charge or trial and circumvent regular criminal justice procedures.

Data on prisoner release

- But a new and important addition to the report is the number of prisoners eligible to be released and actually released, under Section 436A of the Code of Criminal Procedure, which allows undertrials to be released on a personal bond if they have undergone half of the maximum term of imprisonment they would have faced if convicted.

- In 2016, out of 1,557 undertrials found eligible for release under Section 436A, only 929 were released. Research by Amnesty India has found that prison officials are frequently unaware of this section and unwilling to apply it.

- In 2017, the Law Commission of India had recommended that undertrials who have completed a third of their maximum sentence for offences attracting up to seven years of imprisonment be released on bail.

Data on prison Visits

- The 2016 prison statistics do not mention the number of prison visits by official and non-official visitors which typically include district magistrates and judges, social workers and researchers.

- This number, while not as disaggregated as it should be, must nevertheless be used to provide some information on independent monitoring of prisons.

- This is essential to uncover torture and other forms of ill-treatment, increase transparency and balance the power asymmetry in prisons.

- The relevance of prison visits is underlined by the number of "unnatural" deaths in prisons, which doubled between 2015 and 2016, from 115 to 231.

- The rate of suicide among prisoners also increased by 28%, from 77 suicides in 2015 to 102 in 2016.

  * For context, the National Human Rights Commission in 2014 had stated that on average, a person is one-and-a-half times more likely to commit suicide in prison than outside, which is an indicator perhaps of the magnitude of mental health concerns within prisons.

- The NCRB has said that about 6,013 individuals with mental illness were in jail in 2016.

  * It does not provide information on whether these prisoners were diagnosed with mental illness before entering prison, making it difficult to determine whether prison conditions worsened their plight.

Dearth in Medical practitioner for assistance

- The report states that there was only one mental health professional for every 21,650 prisoners in 2016, with only six States and one Union Territory having psychologists/psychiatrists.

BYJU'S IAS
The Learning App

- Odisha, Uttar Pradesh and Madhya Pradesh, the three States with the most prisoners with mental illness, did not have a single psychologist or psychiatrist.

Conclusion

- The NCRB's apparent reluctance to be prompt and open about its prison statistics does not bode well for the democratic discourse in India.

- If the government is serious about addressing the horrific state of India's prisons as revealed by the 2016 statistics, it must publish more prison data regularly instead of curtailing the release of this information fearing bad press.

4. SMART Police

Con (S-Sensitive and Strict; M-Modern with mobility; A- Alert and Accountable; R- Reliable and Responsive; T- Trained and Techno-savvy)

- The Prime Minister of India had introduced the concept of SMART Police during the 49th Directors General/ Inspectors General Annual Conference at Guwahati in 2014.

- A SMART Police Station should be citizen friendly and clean.

Some suggested features of a SMART Police Station are:

- Basic amenities for visitors, waiting area, toilets, drinking water, Receptionist whom the visitors can meet.

- Rest room for constables, including separate room for women constables.

- Natural lighting and ventilation, solar lighting, energy saving features.

- CCTV, Safe & secure Armoury, Record Room, Communication Room for wireless, computers etc.

- Automated kiosks for filing of complaints by public (with a back-end system for tracking follow up action).

SMART survey

Context:

- Rahimatpur police station in Satara district in western Maharashtra has emerged as the State topper in a survey based on the 'SMART' policing concept

Details

- The Quality Council of India (QCI), which executed the survey, assessed 87 shortlisted police stations across the country on a number of parameters like performance in controlling crime, infrastructure of the police building, mess and optimal use of technology, and citizen feedback.

- The other vital parameters included approachability and discipline of the police personnel, storage of manual records in the police station as well as the station head officer's (SHO's) declaration of the budgetary process.

GEOGRAPHY

1. Amundsen Sea

- The Amundsen Sea, an arm of the Southern Ocean off Marie Byrd Land in western Antarctica

Context

- The melting of Antarctic ice and ensuing rise in sea level will accelerate with climate change.
- A study published in Science argues that this will be delayed by a crustal uplift in the Amundsen sea sector, which helps reduce grounding line retreat.
- While this won't reverse ice sheet loss, this can delay the progress of dynamic mass loss of Thwaites glacier by about 20 years.

2. Cyclone Vayu

- It was a strong tropical cyclone
- Vayu originated from a low-pressure area that was first noted by the India Meteorological Department near the northern Maldives.
- The name Vayu was provided by India, and is derived from a Sanskrit and Hindi word meaning 'wind'

Cyclone did not make a landfall

- Cyclone Vayu has dissipated earlier than anticipated and will not make landfall over Gujarat
- A 'well marked low' refers to a state when a tropical storm has lost is strength and no longer possesses an 'eye' or a centre, which is the hallmark of a cyclone.

Cyclones on the western Coast

- Gujarat is the state with longest coastline in India but major cyclones rarely hit it. This is largely because it falls on the west coast hugging the Arabian Sea.
- India experiences cyclones from two sources: the Arabian Sea basin and the Bay of Bengal basin. Of these, most cyclones are generated over the Bay of Bengal because its conditions are more suitable for cyclones.
- The primary reason is that the surface temperature of Bay of Bengal is more than that of the Arabian Sea.
- Tropical cyclones generally need a temperature of around 28 degrees Celsius, a condition easily met by the Bay of Bengal, unlike the Arabian Sea.

Key stats from IMD

- India Meteorological Department reports show that 48.5 per cent of all cyclones generated over the Arabian Sea dissipate over the sea itself and do not reach land.
- On the west coast, Gujarat is the most prone for the cyclones developing over the Arabian Sea. It is estimated that nearly 23 per cent of the cyclones developing over Arabian Sea cross Gujarat coast and 11 per cent each cross Pakistan and Oman coasts.

3. Danube

- It is Europe's second longest river, after the Volga
- Originating in Germany, passing through Austria, Slovakia, Hungary, Croatia, Serbia, Bulgaria, Romania, Moldova, and Ukraine.
- It drains into Black Sea

4. Eastern Rajasthan Canal Project (ERCP)

- It is a major initiative for interlinking of rivers linking Parvati, Kalisindh and Chambal Rivers

- The project proposes to transfer excess waters from the Chambal river basin to 13 districts facing water scarcity issue in eastern and south-eastern districts of the State, at least till 2051.

- Besides supplying drinking water in 13 districts, the mega project will also provide water for irrigation to an additional 2 lakh hectares.

- Provision of has been kept for industries including Delhi Mumbai Industrial Corridor (DMIC) requirement.

  * Availability of sustainable water sources will create environment for Investment in the state.

  * With the installation of Industries GDP of the state will increase and it will also improve employment opportunities to youth of the area
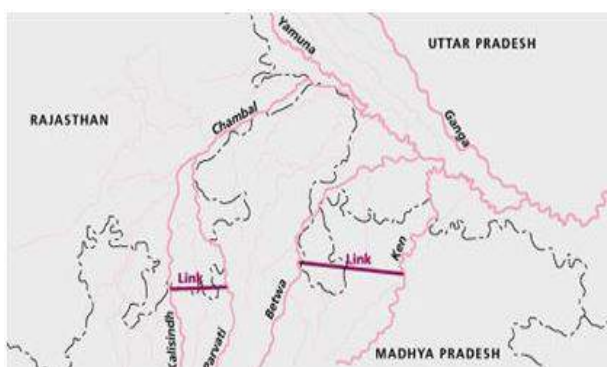
Chambal River

- It rises in the old Vindhya Range and flows in northeastern direction.

- The Chambal River flows through three Indian states: Madhya Pradesh, Rajasthan and Uttar Pradesh.

- It is a tributary of the Yamuna River

- The main tributaries of Chambal include the Banas and Mej rivers on the left and the Parbati, Kali Sindh and Shipra rivers on the right.

5. Mauna Kea

- Mauna Kea ("White Mountain") is a dormant volcano on the island of Hawaii, the largest and southernmost of the Hawaiian Islands.

- In its current post-shield state, its lava is more viscous, resulting in a steeper profile

Context

- After years of protests and legal battles, officials have announced that a massive telescope which will allow scientists to peer into the most distant reaches of our early universe will be built on a Hawaiian volcano

Why Mauna Kea?

It is unique as an astronomical observing site.

- The atmosphere above the mountain is

        *   extremely dry - which is important in measuring infrared and submillimeter radiation from celestial sources - and

        *   Cloud-free, so that the proportion of clear nights is among the highest in the world.

- The new telescope will allow astronomers to reach back 13 billion years, to the time just after the big bang, and scientists say it will help answer fundamental questions about the advent of the universe.

Issues

- Telescope will desecrate sacred land atop Mauna Kea and a place of religious importance to Native Hawaiians.

- Rights to religious freedom are being violated.

6. Puerto Williams

- It is on the remote southern tip of the South American continent that has been upgraded to the category of "city" by Chilean authorities, making it the world's southernmost city.

- Puerto Williams has nudged out Ushuaia, in Argentina's Tierra del Fuego, for the title.

EDUCATION

1. **Central Sector Interest Subsidy Scheme**

Context

- The Ministry of Human Resource Development is implementing the Central Sector Interest Subsidy Scheme for welfare of the students from rural areas with poor economic backgrounds.

Details

- The scheme aims to ensure that no one from the Economically Weaker Sections, including minorities, SCs/STs, women and disabled, is denied access to professional education only for the reason that he or she is poor.

- Under the Scheme, full interest subsidy is provided during the moratorium period (course period plus one year), on the educational loan up to Rs. 7.5 lakh, taken by the students having annual parental income up to Rs.4.5 lakh.

- The Government is regularly monitoring the creation of seats for EWS categories in the CEIs.

- In order to prevent commercialization of education and protect the interests of the poor students the UGC (Institution of Eminence Deemed to be Universities) Regulations, 2017 have been notified.

2. **For more inclusive private schools under RTE**

Introduction

- In India, the right to education was made a fundamental right by inserting Article 21A by the Constitution (Eighty-sixth Amendment) Act, 2002.

- It was enabled with the subsequent enactment of the Right to Education (RTE) Act, 2009.

- The RTE Act bears many similarities to the U.S.'s No Child Left Behind Act, including school accountability, assessment standards and teacher training.

- Like the U.S., in India too States have been given major leeway in deciding the course of implementation.

Private Schools

- Section 12 (1) (c) of the Act mandates all private schools (except for minority schools) to allocate 25% of their seats to economically weaker sections, i.e.

  * Those families with an income of less than ₹2 lakh a year

  * Other disadvantaged groups like Scheduled Castes, Scheduled Tribes and the physically challenged.

- The State government will then reimburse these schools for students admitted under this provision, at an amount per month that is determined by the State rules.

Tamilnadu Example

It has always been at the forefront of educational progress in India, has made certain strides in the implementation of Section 12 (1) (c).

- It has widened the ambit of "disadvantaged sections" to include HIV positive children and transgenders.

- A centralised database has been created by the State where people can access all the matriculation (State board) schools in the State which lie within 1 km of their residence.

- Another notification has been issued by the Tamil Nadu government to bring all schools affiliated to boards other than State boards under the control of its Director of School Education for RTE implementation.

Issues

- One of the main concerns is the absence of several CBSE schools on the school database set up by the State.

  * Despite the use of GIS tagging, several parents complain that the system is faulty in identifying nearby schools.

- Financial problems continue to mar the system — many schools collect money for textbooks and uniform though this is part of the State-stipulated fees.

- The Centre is supposed to release up to 70% of the funds for this programme which is often delayed.

  * This leads to a financial crunch for the State and, by extension, the schools.

- There have also been several grievances regarding the '1 km radius' criterion, especially for rural residents who may not have any private schools in their vicinity. This criterion will eventually widen the rural-urban divide in educational outcomes.

Better implementation

- The window for the admission process for RTE Act vacancies in private schools is very narrow.

  * This causes many parents to miss the deadline, despite thousands of vacancies.

  * The procedure for admission should be made through a single-point window online for all school boards, with computer kiosks to assist parents who may not be able to fill the form online.

- A mobile application should be built with live information on the number of seats available in each school under the 25% quota.

- An RTE compliance audit should be conducted for all schools every year by the State Education Department.

- Any aid given to private schools must be tied to the levels of compliance achieved by the school.

  * Several schools do not adhere to the 25% quota. These schools should be penalised and derecognised if continuous violations occur.

  * Every school should declare prominently that it is RTE compliant — and the admission procedure, including deadlines, should be conspicuously displayed at the school premises.

- On the government side of things, funds need to be released in a timely manner, so that it inspires confidence in schools to fill all the vacancies.

This socialization will benefit all classes of society as we rise above our social biases to make our children not just better learners but better human beings.

3. National Testing Agency (NTA)

- It has been established as a premier, specialist, autonomous and self-sustained testing organization to conduct entrance examinations for admission/fellowship in higher educational institutions.

Mission

Right candidates should be joining best institutions and best talent has to be drawn for India to make its demographic dividend productive and worthwhile.

- To improve equity and quality in education by administering research based valid, reliable, efficient, transparent, fair and international level assessments.

- The best subject matter experts, psychometricians and IT delivery and security professionals will ensure that the current gaps in existing assessment systems are properly identified and bridged.

Standardised Aptitude Test (SAT)

- The system seems to have some similarities to the Standardised Aptitude Test widely used for admissions to colleges and universities in the United States.

- The SAT, however, is used as a criterion alongside school grades.

Details

- Admission to undergraduate courses in all government-funded universities and colleges will soon be through all-India entrance tests, if the draft National Education Policy is approved.

  * Private institutes will also be strongly encouraged to make use of the common admission tests, which will be available from 2020.

- Both aptitude and subject knowledge-based tests will be offered.

- NTA assessment will replace Class 12 marks as the criteria for admission to these government funded institutions.

- This will help to eliminate the intensity, stressfulness, and wasted time of the Grade 12 examination season faced by students every year as well as by so many higher educational institutions and employers

- It can be taken on multiple occasions during the year in order to reduce the intense and unnecessary pressures of the university entrance examinations system

- The draft projects that the NTA will establish test centres across the country, offering tests in multiple languages. The preferred mode of testing will be computer-based

DISASTER MANAGEMENT

1. First Resilient Kerala Program

Context:

- The Government of India, the Government of Kerala and the World Bank signed here today a Loan Agreement of USD 250 million for the First Resilient Kerala Program to enhance the State's resilience against the impacts of natural disasters and climate change.

Key features:

- The Kerala floods in 2018 affected the state adversely and there was a loss of lives, property and infrastructure.
- About 5.4 million people were affected while 1.4 million were displaced from their homes, especially the poor and vulnerable segments of the population.
- The Resilient Kerala Program will focus on strengthening the State's institutional and financial capacity to protect the assets and livelihoods of poor and vulnerable groups through an inclusive and participatory approach.
- The programme is part of the Government of India's support to Kerala's 'Rebuild Kerala Development Programme' aimed at building a green and resilient Kerala.
- The World Bank has been working closely with the Government of India and Kerala since the floods struck in August 2018 in assessing the impact of the floods and assisting in recovery and reconstruction.
- The Bank support also helped identify policies, institutions and systems for resilience to disaster risks and climate change.
- This programme is the first instance of 'State Partnership' of the World Bank in India.
- It is also the first of two programmes to mainstream disaster and climate resilience into critical infrastructure and services.
- Aims of the programme:
    * improved river basin planning and water infrastructure operations management, water supply and sanitation services
    * resilient and sustainable agriculture, enhanced agriculture risk insurance
    * improved resilience of the core road network
    * unified and more up-to-date land records in high risk areas
    * risk-based urban planning and strengthened expenditure planning by urban local bodies
    * strengthened fiscal and public financial management capacity of the state

2. Flood Hazard Atlas

Background

- Vast areas of Odisha are inundated when there is flooding every year in major rivers, namely, the Mahanadi, Brahmani, Baitarani, Subarnarekha and Rushikulya.
    * Some of the rivers like, the Vamsadhara and Budhabalanga, also cause flash floods due to instant run-off from their hilly catchments.
- Damages due to floods are caused mainly by the Mahanadi, the Brahmani and the Baitarani, which have a common delta where floodwaters intermingle, and, when in spate simultaneously, wreak considerable havoc.
- The entire coastal belt is prone to storm surges, which is usually accompanied by heavy rainfall, thus making the estuary region vulnerable to both storm surges and river flooding.

Context

- Odisha has come out with a unique flood hazard atlas on the basis of historic flood inundation captured through satellite imagery over the period from 2001 to 2018, which is expected to help the State manage floods more efficiently.
- The National Remote Sensing Centre (NRSC) of ISRO, Hyderabad had taken the study on flood hazard zonation for Odisha.
- Satellite images depict the extent of flooding and flood inundated areas can be identified using digital image analysis techniques.
- The atlas provides information on frequently flooded villages and also provides the flood hazard severity in different districts based on flood hazard category, flood hazard area and intra-annual flood variations.

Key Fact

- Assam is the first State in the country to release satellite based flood hazard atlas in 2011 and also the first State to update the atlas in 2016.

NRSC analysis

- It says about 8.96% (13.96 lakh hectares) of land in Odisha was affected by floods during 2001-2018.
- Out of total flood-affected area (13.96 lakh hectares), about 2.81 lakh hectares of land falls under high (inundated seven-nine times) to very high (inundated 10-14 times) flood hazard categories.

Example
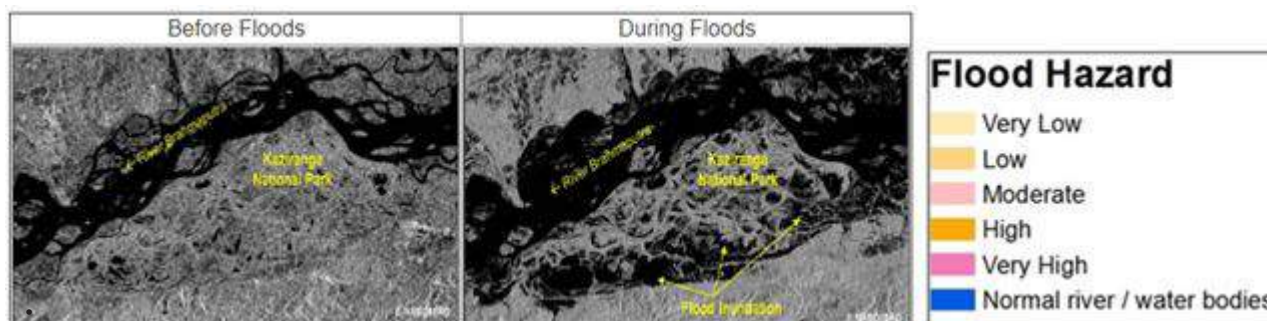
Significance
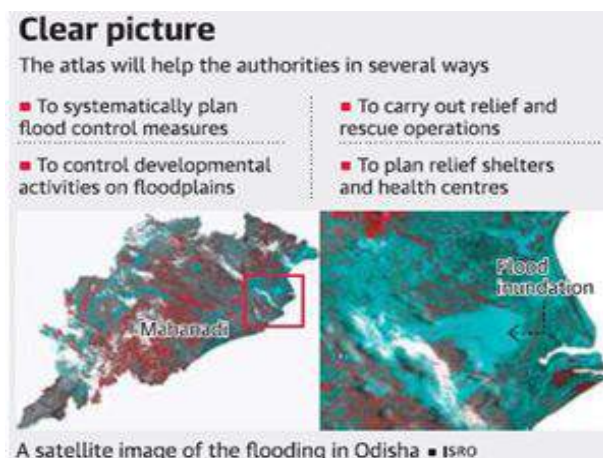
- A total of 18,450 cases of fire accidents were reported in the country during 2015
- Between 2010 and 2014, a total of 1.21 lakh fire accidents of various types took place in the country claiming more than 1.13 lakh lives.
  - * In each of the five years from 2010 to 2014, the percentage of women victims was more than 60%.

Examples

- Fire at Karol Bagh's Arpit Palace hotel claimed 17 lives- Feb 2019
- Mumbai rooftop pub fire kills 14- December 2017
- Uphaar Fire Tragedy — Delhi, 1997 59 dead due to suffocation & resulting stampede.
  - * Lack of a functional PA system, emergency / foot light and exit signs, most exits locked.

Institutional Causes

- Construction and fire safety laws exist in India but, only on paper. The laws made by the state govt and some framework given by central govt is a farce. It is a piece of futility because implementation has been a sham
- A fire tragedy consumes people and politicians announce compensation for them; back in 1997 (the year the Uphaar incident occurred) it was ₹50,000 now it is ₹4 lakh. Why don't they use this money to equip their fire departments better instead? Lack of Political Will
- The nexus between the builder mafia, the owners and occupiers of buildings and government officials continues on the one hand and justice continues to remain a luxury available only to the rich, the

3. Surat fire Tragedy

Context

- The fire in the Takshashila Arcade building in Surat claimed 22 lives.

Laws

- Fire service is a state subject and has been included as municipal function in the XII schedule of the Constitution.
- The municipal corporations and local bodies are responsible for providing fire services in many states.
- Ministry of Home Affairs, Govt. of India, renders technical advice to the States and UTs and Central Ministries on Fire Protection, Fire Prevention and Fire Legislation

Stats

- According to National Crime Records Bureau (NCRB) statistics, around 62 people die in fire incidents each day

powerful and the corrupt; that is why such tragedies keep happening time and again.

* People pay some bribes and build more floors than one is allowed to

- Due to lack of resources, fire services are ill equipped in providing adequate fire safety cover to the population.

People's Apathy

- People lack culture of fire safety — people do not even bother with commonsensical things such as creating multiple exits and buying reasonably priced fire extinguishers and alarms for buildings — in addition to lack of public sensitivity to fire tragedies in the country.

- Instead of taking pictures and making videos bystanders could have helped the ill-equipped local fire department rescue and save the lives which have been snuffed out.

- There is no outrage when it comes to fire tragedies like there was after cases such as Nirbhaya or the 26/11 attacks. Lives are lives no matter how they are lost.

- In commercial establishments, major fires start in storage area and warehouses than production areas.

  * Poorly stored goods, even though they are not flammable, may help to spread fire and hinder fire fighters gain access to the seat of the fire or reduce the effectiveness of sprinkler systems.

Human and Economic Loss

- The loss of assets due to fire is estimated to be almost more than 10, 000 crores

- Accidental Fires are number 3 reason that causes most unnatural deaths in India after road accidents and drowning

Fire Safety Audit (FSA)

In 2013, the Supreme Court asked the fire department to conduct annual fire safety audits of the city's structures.

- It is an effective tool to assess fire safety standards of an organisation or an occupancy.

- In other words, it is aimed to assess the building for compliance with the National Building Code of India, relevant Indian standards and the legislations enacted by state governments and local bodies, on fire prevention, fire protection and life safety measures.

- In India, although there are many rules and regulations, codes and standards related to fire safety, these are seldom followed. There is a need to revisit fire safety audit regulations and state fire services as well.

  * Therefore, FSA should be made mandatory all over India and the work should be entrusted to independent agencies.

* It is reasonable to have a fire safety audit every year.

Way forward

- Lack of maintenance makes the equipments dysfunctional. This should be checked periodically.

- The National Building Code of India, the basic model code in India on matters relating to building construction and fire safety should be enforced.

  * Minimum number and size of staircase, exit corridors and Refuge areas

  * Using Fire resistant construction materials

  * Installing Fire lifts

  * Fire escape (Exit) route with clearly defined map

- The government should continue to provide financial support and assistance in augmenting and modernising the fire departments.

- Building awareness among citizens about fire prevention and protection measures is also of paramount importance.

- Organizing firefighting workshop once in six months in localities/mohallas/schools with the involvement of local councellor/elected representatives is one way to achieve the aforementioned.

  * There are many offices/high rise buildings/mandir and religious places having firefighting equipments installed but hardly any person has the knowledge of using them.

- The use of smoke detectors, fire alarms, automatic sprinklers, water mist systems, clean agent suppression system, should be encouraged, especially in high rise buildings.

MISCELLANEOUS

1. Equator Prize

- It is organized by the Equator Initiative within the United Nations Development Programme

- It is awarded biennially to recognize community efforts to reduce poverty through the conservation and sustainable use of biodiversity

Context

- The women sangams (groups) of the Deccan Development Society have bagged the United Nation's Equator Prize for 2019.

Details

- They have been selected for standing as 'an outstanding example of a local, nature-based solution to climate change and sustainable development.'

- The women farmers, majority of them are Dalits, have been building their own seed banks and growing millets in the predominantly rain-fed villages

2. Liberals need to think again

Free will

- Free will, in humans, the power or capacity to choose among alternatives or to act in certain situations independently of natural, social, or divine restraints.

- It is based on the subjective experience of freedom, on sentiments of guilt, on revealed religion, and on the universal supposition of responsibility for personal actions that underlies the concepts of law, reward, punishment, and incentive.

Context

- The face veil ban in Sri Lanka — which, like a similar ban in France, is aimed at all religious groups, not just orthodox Muslims.

- But few liberals try to oppose the veil ban in the name of free will.

Excuse for the orthodox

- For instance, a Hindu can take up the old institution of Sati, or widow immolation. Sati was sanctioned by some Hindu religious traditions and it was argued that widows who committed Sati did so of 'their own free will'.

  * Hindus, even religious ones, would not want to reintroduce Sati.

- Christianity in 19th century Europe, when divorce was mostly impossible for women (and poor men) to obtain.

  * it was argued that 'good wives' always choose to stay within a 'heaven-made' marriage — no matter how uneven or abusive

  * Today, almost no European would subscribe to this view.

- If a woman is made to believe that a certain behavior or dress is vital for her well-being in this world and the next, then the choice of that deportment or dress can never be a free one.

Muslims, Christians or Hindus, for that matter — insist on a certain treatment of women because they consider it God-ordained, religion-based and definitely not a matter of personal choice or 'free will'.

So what is free will according to author?

- The hard fact remains that if a group of people are under pressure to behave in certain ways, then they cannot be said to choose that particular option. Even if the option is 'freely' chosen, it is not a free choice.

- For a choice to be free, other options need to have equivalent prestige and acceptability, both within the community and around it.

There are two good reasons not to 'ban' personal matters, whether it is the consumption of food or drink, or the wearing (or not wearing) of a particular kind of dress.

- First of all, such bans often create a bigger backlash, at least in the future.

- Second, and more importantly, any such ban introduces the public into the private: there are very good (liberal) reasons to keep governments out of drawing rooms, toilets and kitchens.

Conclusion

- It is time for liberals to stop fooling themselves and talking of 'free will' in order to justify tradition, custom and other forms of direct or indirect social coercion.

- It might make them feel good to be so generous and accepting, but it is neither the truth nor politically useful. In the longer run, it is even detrimental.\

3. Solanum Plastisexum

It is Australia's New Sex-Changing Tomato

- While it's not unusual for flowers to be hermaphrodite, i.e. to bear both male and female reproductive parts, this unusual plant did not seem to fall in with the binary sexual norms of the plant kingdom.

- But Solanum Plastisexum is really an unusual one. Its sexual expressions are unpredictable.

- Also known as the Dungowan bush tomato, Solanum plastisexum is a distant relative of the cultivated eggplant.

4. World Giving Index

- It is an annual report published by the U.K.-based Charities Aid Foundation, using data gathered by Gallup, and ranks over 140 countries in the world according to how charitable they are.

- The aim of the World Giving Index is to provide insight into the scope and nature of giving around the world.

- The first edition was released in September 2010

2018

India

- India has the highest number of people volunteering time to support any cause

- India also has the highest number of people donating money to charity, while it occupies the second spot in the highest number of people helping a stranger.

- India scores significantly lower than some of its neighbours like Pakistan (91), Sri Lanka (27), Nepal (52) and Bangladesh (74).

- However, it is placed well above China, which ranks 142 in the Giving Index.

Global

- Indonesia is the most generous country in the world

PRACTICE QUESTIONS

1. **The provision for a 'Uniform Civil Code' is contained in which Article of the Indian Constitution?**

   A. Article 44

   B. Article 38

   C. Article 46

   D. Article 39

2. **Consider the following statements:**

   1. The National Green Tribunal is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.

   2. The Tribunal is not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.

   3. The Tribunal's dedicated jurisdiction in environmental matters is aimed at providing speedy environmental justice and help reduce the burden of litigation in the higher courts.

   Which among the above statements is/are incorrect?

   A. 1 and 2 only

   B. All 1, 2 and 3 only

   C. 2 and 3 only

   D. Neither 1 nor 2 nor 3

3. **Consider the following statements:**

   1. PM KISAN is a Central Sector scheme with 100% funding from Government of India.

   2. Under the scheme an income support of Rs.6000/- per year in three equal instalments will be provided to small and marginal farmer families having combined land holding/ownership of upto 2 hectares.

   Which among the above statements is/are correct?

   A. 1 only

   B. Both 1 and 2

   C. 2 only

   D. Neither 1 nor 2

4. **Consider the following statements:**

   1. The Bab-el-Mandeb is a strait located between Yemen on the Arabian Peninsula, and Djibouti and Eritrea in the Horn of Africa. It connects the Red Sea to the Gulf of Aden.

   2. The Strait of Hormuz is a strait between the Persian Gulf and the Gulf of Oman. The Strait of Hormuz is one of the most critical sea lanes in the world today.

   Which among the above statements is/are correct?

   A. 1 only

   B. Both 1 and 2

   C. 2 only

   D. Neither 1 nor 2

5. **Consider the following statements:**

   1. The Bureau of Civil Aviation Security (BCAS) is the regulatory authority for civil aviation security in India.

   2. The main responsibility of the BCAS are to lay down standards and measures in respect of security of civil flights at International and domestic airports in India.

   Which among the above statements is/are correct?

   A. 1 only

   B. 2 only

   C. Both 1 and 2

   D. Neither 1 nor 2

6. **Consider the following statements:**

   1. Photoluminescence is a process in which the material absorbs light and re-emits it as a spectrum.

   2. Photoluminescence properties can be used in various devices such as quantum LEDs which can be used in communication and computation.

   3. Electrons in semiconductors occupy bands of energy known as valence bands.

   Which among the above statements is/are incorrect?

   A. 1 and 2 Only

   B. 2 and 3 Only

   C. All 1, 2 and 3

   D. Neither 1 nor 2 nor 3

7. **Consider the following statements:**

   1. The Council of Scientific & Industrial Research (CSIR), India, a premier national R&D organisation, is among the world's largest publicly funded R&D organisation.

   2. CSIR's 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology', instituted in 1957 is the most coveted and revered prize in science and technology in the country.

   Which among the above statements is/are correct?

   A. 1 only

   B. 2 only

   C. Both 1 and 2

   D. Neither 1 nor 2

8. **Consider the following statements:**

   1. Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's DNA.

   2. These technologies allow genetic material to be added, removed, or altered at particular locations in the genome.

Which among the above statements is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

9. **Consider the following statements**

1. Nanda Devi is the second highest mountain in India.

2. The mountain is located entirely within India.

3. Nanda Devi National Park, surrounding the mountain is a UNESCO World Heritage site.

Which of the following statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

10. **Consider the following statements with respect to Generalised System of Preferences (GSP):**

1. It is a trade program designed to promote economic growth in the developing world.

2. It provides duty free entry of selected goods from GSP beneficiary countries.

3. The preferential treatment is reciprocal.

Which of the following statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

11. **Arrange the following events in chronological order with the earliest being first:**

1. Second Round Table Conference

2. Salt Satyagraha

3. Quit India Movement

4. Gandhi Irwin pact

Choose the correct option

A. 1-2-3-3

B. 1-4-2-3

C. 2-4-1-3

D. 2-1-4-3

12. **Which of the following is known as the metal age?**

A. Paleolithic age

B. Mesolithic age

C. Neolithic age

D. Chalcolithic age

13. **Consider the following statements:**

1. Sashastra Seema Bal is under the administrative control of Ministry of Defence.

2. It is one of India's Central Armed Police Forces.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D Neither 1 nor 2

14. **Consider the following statements:**

1. Core inflation represents the long run trend in the price level.

2. Core inflation does not consider the inflation in food and fuel.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

15. **Consider the following statements:**

1. Montreux Recordis maintained as part of the List of Ramsar wetlands of international importance.

2. Bhitarkanika Mangroves and Chilika lake are listed under Montreux Record.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

16. **Solar Radiation Management is a process through which:**

1. The reflectivity of the Earth's atmosphere is increased.

2. The efficiency of Solar Panels is increased.

Choose the correct option:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

17. **Consider the following statements:**

1. Bills that are introduced in the Rajya Sabha and are pending there lapse with the dissolution of the Lok Sabha.

2. Bills passed by the Lok Sabha and pending in the Rajya Sabha do not lapse with the dissolution of the Lok Sabha.

Which of the given statements are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

18. **Which of the following are the criteria followed for determination of Particularly Vulnerable Tribal Groups?**

1. A pre-agriculture level of technology

2. A declining sex ratio

3. A stagnant or declining population

4. Extremely low literacy

A. 1, 2 and 3

B. 1, 2 and 3

C. 1, 3 and 4

D. 1, 2, 3 and 4

19. **Consider the following statements:**

1. The IUCN Red List Categories define the extinction risk of species assessed

2. Red List categorises the species assessed into five categories

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

20. **Consider the following statements:**

1. Bird Life International is the official Red List authority for birds, for the IUCN

2. It is a worldwide alliance of nongovernmental organizations that promotes the conservation of birds and their habitats

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

21. **Consider the following statements:**

1. Encephalitis is caused by a virus or bacterial infection and is the inflammation of the brain.

2. Meningitis is caused by bacterial infection and is the inflammation of the meninges or tissues that surround the brain.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

22. **Consider the following statements:**

1. The Supreme Court can issue writs only for the enforcement of fundamental rights under article 32

2. High Court can issue writs for enforcement of fundamental rights along with legal rights.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

23. **Consider the following statements:**

1. Foreign portfolio investment (FPI) consists of securities and other financial assets held by investors in another country.

2. It provides the investor with direct ownership of a company's assets.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

24. **Consider the following statements:**

1. The Western Ghats is declared an ecological hotspot.

2. The Western Ghats is a UNESCO World Natural Heritage Site.

3. The Western Ghats are older than the Himalayas.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

25. **Consider the following statements:**

1. River Sabarmati originates in the Aravalli Range.

2. It is a major East flowing river.

Which of the given statement/s is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

26. **Which of the following is a judicial writ issued as a command to an inferior court or ordering a person to perform a public or statutory duty?**

A. Quo Warranto

B. Certiorari

C. Habeas Corpus

D. Mandamus

27. Consider the following statements:

1. The Demands for Grants are presented to the Rajya Sabha along with the Annual Financial Statement.

2. The Speaker shall decide whether or not a cut motion is admissible.

Which of the following statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

28. Mars Atmosphere and Volatile Evolution (MAVEN) mission was developed by

A. Indian Space Research Organisation (ISRO)

B. National Aeronautics and Space Administration (NASA)

C.   European Space Agency (ESA)

D. Roscosmos State Corporation for Space Activities (Roscosmos)

29. Who among the following is/are debarred from receiving Foreign Contribution under the Foreign Contribution Regulation Act (FCRA), 2010.

1. Candidate contesting an election

2. Political parties

3. Judges

Choose the correct option:

A. 1 only

B. 1 and 2 only

C. 2 and 3 only

D. 1, 2 and 3

30. Lakhari Valley Wildlife Sanctuary is located in

A. Madhya Pradesh

B. Odisha

C. West Bengal

D. Jammu and Kashmir

31. Consider the following statements with respect to Hague Abduction Convention

1. The Convention applies only to children under the age of 18.

2. India is a signatory to it.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

32. Consider the following statements

1. Himalayas is the youngest and highly unstable landmass of India.

2. Brahmaputra marks the eastern border of the Himalayas.

Which of the given statement/s is/are correct?

A. 1 only

B.   2 only

C. Both 1 and 2

D. Neither 1 nor 2

33. Orsang, the Barna and the Kolar are the tributaries of River

A. Yamuna

B.   Ganga

C.   Krishna

D. Narmada

34. Consider the following statements

1. Birsa Munda was a tribal freedom fighter

2. He converted to Christianity in order to receive an education from a missionary school.

3. Birsa declared his declaration against the British and the Dikus (outsiders) and began the Munda Rebellion

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 3 only

C. 2 only

D. 1, 2 and 3

35. Consider the following statements:

1. Ranthambore National Park is located in Madhya Pradesh.

2. The national park is bound by Chambal River to the North.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

36. Consider the following statements:

1. A biome is a large community unit, characterized by a major vegetation type and associated fauna, found in a specific climatic region.

2. An ecotone is a transitional area between two biomes or diverse ecosystems.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

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C. Both 1 and 2

D. Neither 1 nor 2

37. Enforcement Directorate comes under the

A. Ministry of Home Affairs

B. Ministry of Finance

C. Ministry of Corporate Affairs

D. Ministry of Personnel, Public Grievances and Pensions

38. Which of the following statements are incorrect with respect to Payment Banks?

1. They can offer Credit Cards

2. They can sell Mutual Funds and insurance

3. They can accept NRI deposits

Choose the correct option:

A. 1 only

B. 1 and 2 only

C. 2 only

D. 1 and 3 only

39. Consider the following statements:

1. The Asian Tea Alliance was launched in India

2. It is an alliance of five tea growing and consuming countries

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

40. The "Lithium Triangle" recently in news is made of which of the following countries?

1. Argentina

2. Chile

3. Bolivia

4. Uruguay

Choose the correct option

A. 1, 2 and 3

B. 1, 3 and 4

C. 1, 2 and 4

D. 2, 3 and 4

41. Consider the following statements:

1. P waves or Primary waves are longitudinal in nature

2. P waves cannot travel in all mediums

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

42. Consider the following statements:

1. Narrow money is a category of money supply that includes all physical money.

2. It only contains the most liquid financial assets.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

43. Which of the following countries border Sudan?

1. Eritrea

2. Ethiopia

3. Libya

4. Somalia

Choose the correct option.

A. 1, 2, 3, 4

B. 1, 2, 3

C. 1, 2, 4

D. 2, 3, 4

44. Consider the following statements with respect to Polar Vortex:

1. It is a large area of low pressure and cold air surrounding the Earth's North and South Pole.

2. There is one polar vortex in each hemisphere.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

45. Consider the following statements:

1. Duty of a Pro-tem Speaker is to administer the oath of office to new members of the house.

2. The pro-tem speaker also has same powers, privileges as that of the Speaker.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. 1 and 2 only

D. Neither 1 nor 2

46. Consider the following statements:

1. Cost Push Inflation occurs when the general prices of the commodities decrease.

2. Demand pull inflation occurs as a result of mismatch in demand.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. 1 and 2 only

D. Neither 1 nor 2

47. Consider the following statements:

1. A proclamation imposing President's Rule must be approved by both the Houses of Parliament within two months from the date of its issue.

2. It can be extended for a maximum period of five years with the approval of Parliament, every six months.

3. Every resolution approving the proclamation or continuance of the President's Rule can be passed by a simple majority.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

48. Consider the following statements:

1. The Asian golden cat is a wild cat native to the North-Eastern Indian subcontinent.

2. They are classified as vulnerable in the IUCN Red List of threatened species.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

49. Consider the following statements:

1. Insurance Regulatory and Development Authority of India (IRDAI) is a body involved in regulating and developing the insurance and reinsurance industry in India.

2. It was created on the recommendations of the Malhotra Committee Report.

3. It is headquartered at Delhi.

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

50. Who is known as the Father of Communal Electorate in India?

A. Lord Ripon

B. Lord Mountbatten

C. Lord Willingdon

D. Lord Minto

51. Consider the following statements with respect to Systematic Voters' Education and Electoral Participation program (SVEEP):

1. It is a flagship program of the Government of India.

2. The programme was launched for spreading voter awareness and promoting voter literacy in India.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

52. Paramparagat Krishi Vikas Yojanawas launched in order to

A. Boost organic farming

B. Promote the use of traditional farming methods

C. Prevent sub division of agricultural land

D. Promote shifting cultivation

53. Consider the following statements:

1. NASA's Voyager 2 is the first and only manmade object to exit the Heliosphere.

2. It is the only spacecraft to have visited all four gas giant planets — Jupiter, Saturn, Uranus, and Neptune.

Consider the following statements:

A. 1 only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

54. Consider the following statements:

1. Strait of Hormuz is a choke-point between the Gulf and the open ocean. With Iran on its northern coast and the UAE and an Omanian enclave on the south, the Strait, at its narrowest point, has a width of 34 km.

2. A third of crude oil exports transported via ships pass through the Strait, which makes it the world's most important oil artery.

Which of the given statement/s is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

55. Consider the following statements, regarding "Balsams":

1. Consisting of both annual and perennial herbs, balsams are succulent plants with high endemism.

2. Because of their bright beautiful flowers, these groups of plants are of prized horticultural significance.

Which among the above statements is/are incorrect?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

56. Consider the following statements:

1. A fuel cell is a device that converts chemical potential energy (energy stored in molecular bonds) into electrical energy.

2. Fuel cells which are used commercially in hydrogen fuel–based cars, require good catalysts that are efficient as well as cost-effective.

Which of the given statement/s is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

57. Which of the following countries has been referred to as the "Last Shangri-La"?

A. Bhutan

B. Nepal

C. China

D. Japan

58. Consider the following statements:

1. Monsoon refers to the climate associated with seasonal reversal in the direction of winds.

2. The movement of Inter Tropical Convergence Zone (ITCZ) plays an important role in the Indian Monsoon.

Which of the following statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

59. The wind blowing in the northern plains in summers is known as:

A. Loo

B. Trade Wind

C. Kal Baisakhi

D. None of the above

60. Consider the following statements:

1. North-Western part of India experiences the highest diurnal range of temperature.

2. Parts of Rajasthan, Gujarat are drought prone because they fall in the rain shadow area of the Aravalli.

Which of the following statement/s is/are incorrect?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

61. Consider the following statements:

1. The Election Commission of India is a permanent and independent statutory body.

2. The body is constituted to conduct free and fair elections to the national and state legislatures and of President and Vice-President.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

62. Chief Election Commissioner is appointed by

A. The President

B. The Chief Justice of India

C. The Prime Minister

D. The Lok Sabha Speaker

63. Consider the following statements with respect to Seva Bhoj Yojana?

1. It is a programme of the Ministry of Culture.

2. The scheme envisages lessening the burden of such Charitable Religious Institutions who provide food without any cost.

Which of the given statement/s is/are incorrect?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

64. Consider the following statements with respect to Pariwartan Scheme:

1. Under the scheme, there is a focus on warehousing stressed power projects to protect their value.

2. This scheme will be implemented by the Ministry of Ministry of Power.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

65. Consider the following statements:

1. During the Vajrayana phase of Buddhism, worship of the female form was seen.

2. The goal of spiritual practice within the Vajrayana traditions is to become a fully awakened Buddha.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

66. Consider the following statements:

1. India is a member of World Meteorological Organization (WMO).

2. WMO originated from the International Meteorological Organization.

3. Its secretariat is headquartered in Geneva.

Which of the statement/s is/are correct?

A. 1 and 2 only

B. 2 and 3 only

C. 2 only

D. 1, 2 and 3

67. The Gini coefficient is used to measure:

A. Inflation

B. Unemployment

C. Economic Growth

D. Income inequality

68. Consider the following statements:

1. The Economist Intelligence Unit publishes the Democracy Index.

2. India is classified as a 'flawed democracy' in Democracy index 2018.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

69. Consider the following statements:

1. Futures and Options are types of derivatives.

2. An optiongives the buyer the right, but not the obligation, to buy or sell an asset at a specific price at any time during the life of the contract.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

70. Consider the following statements:

1. The origin of sedition law in India is linked to the Wahabi Movement of 19th century.

2. The Sedition Act was first invoked against Jogendra Chandra Bose.

Which of the statement/s given above is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

71. Consider the following statements with respect to Securities and Exchange Board of India

1. SEBI is a quasi-legislative, quasi-judicial and quasi-executive body.

2. It was initially constituted as a statutory body.

Which of the statement/s given above is/are correct?

A. 1 only

B. 2 only

C. Both 1and 2

D. Neither 1 nor 2

72. Consider the following statements:

1. The Financial Action Task Force (FATF) is an inter-governmental body.

2. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.

Which among the above statements is/are correct?

A. 1 only

B. Both 1 and 2

C. 2 only

D. Neither 1 nor 2

73. Consider the following statements:

1. The Indian elephant is a Schedule-I animal under the Wildlife (Protection) Act, 1972.

2. Section 9 of the Wildlife (Protection) Act, 1972 prohibits their capture from the wild.

Which among the above statements is/are correct?

A. 1 only

B. Both 1 and 2

C. 2 only

D. Neither 1 nor 2

74. Consider the following statements:

1. The National Tiger Conservation Authority is a statutory body under the Ministry of Environment, Forests and Climate Change.

2. 'Project Tiger' is a Centrally Sponsored Scheme of the Environment, Forests and Climate Change, providing funding support to tiger range States, for in-situ conservation of tigers in designated tiger reserves.

Which among the above statements is/are correct?

A. 1 only

B. Both 1 and 2

C. 2 only

D. Neither 1 nor 2

75. **What is the theme of the G20 Summit scheduled to be held in Osaka, Japan?**

A. "Human centred future society"

B. "Inclusive Growth for All"

C. "Technology and Innovation for All"

D. "Sustainable and Holistic Development for mankind"

76. **Consider the following statements:**

1. The normalized difference vegetation index (NDVI) is a simple indicator which tells how much of the ground is covered with vegetation.

2. It basically calculates the difference between the red and near infrared components of light reflected by objects, from, say, a satellite.

3. Since healthy vegetation strongly absorbs red and reflects near infrared light, this difference can indicate the presence of healthy vegetation and map it into a colour code.

Which among the above statements is/are correct?

A. 1 and 2 Only

B. 2 and 3 Only

C. All, 1, 2 and 3

D. Neither 1 nor 2 nor 3

77. **Consider the following statements:**

1. National Remote Sensing Centre (NRSC) is one of the primary centres of Indian Space Research Organisation (ISRO), Department of Space (DOS).

2. NRSC has the mandate for establishment of ground stations for receiving satellite data, generation of data products, dissemination to the users, and development of techniques for remote sensing applications including disaster management support, geospatial services for good governance and capacity building for professionals, faculty and students.

Which among the above statements is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

78. **Consider the following statements:**

1. The blood sugar level is usually normal in children with encephalitis but is low in children with hypoglycaemic encephalopathy.

2. In encephalitis, there are more white blood cells per unit volume of cerebrospinal fluid, which is a reflection of inflammation in the brain. In contrast, no increase in white blood cells is seen in hypoglycaemic encephalopathy as there is no inflammation in the brain.

Which among the above statements is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

79. **With which of the following statements does "Operation Sankalp" that was recently in the news relate to?**

A. An Indian Naval Operation in the Persian Gulf and the Gulf of Oman to reassure Indian flagged vessels transiting through the area following the recent maritime incidents in the region.

B. An Indian Air Force Search Operation launched in the wake of the disappearance of the An-32 twin engine turboprop transport aircraft of the Indian Air Force.

C. A joint operation between the Indian Army and Border Roads Organisation along the India-China border.

D. A joint military exercise between India and France

80. **Consider the following statements with respect to Pichwai:**

1. It is a folk dance form.

2. It is widely practiced in the state of Rajasthan.

Which of the given statement/s is/are incorrect?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

81. **Consider the following statements with respect to MANAV: Human Atlas initiative:**

1. Project aims to create an atlas, exclusively of the tribes in India.

2. It was launched by the Ministry of Science and Technology.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

82. Consider the following statements:

1. Black Soil is rich in Nitrogen, Phosphorus.

2. It has high water retaining capacity.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

83. Consider the following statements:

1. Loktak lake is the largest fresh water lake in North Eastern India.

2. It has the only floating national park in the world.

Which of the following statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

84. Consider the following statements:

1. GST council is a constitutional body.

2. In the GST council each state has one vote, irrespective of its population.

3. Centre has 1/3rdvoting rights and states have 2/3rd voting rights in the GST council.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 and 3 only

C. 2 only

D. 1, 2 and 3

85. Consider the following statements:

1. Nitrification is the process by which ammonium is converted into nitrates by bacteria.

2. Nitrification is an aerobic process.

Which of the following statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

86. Consider the following statements:

1. The period just after the question hour is called the Zero Hour.

2. Zero Hour is an Indian innovation.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

87. Consider the following statements:

1. Silicic magma is hotter than the basaltic magma.

2. The magma solidified between sedimentary rocks in a vertical position is known as dyke.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

88. Consider the following statements:

1. Motion of thanks must be passed in both of the houses.

2. Motion of Thanks is deemed to be a no-confidence motion.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

89. Consider the following statements:

1. Salinity of the oceans decreases to pole wards.

2. The highest salinity is observed at the equator.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

90. Which of the following are correctly matched?

1. Kalaripayattu : Kerala

2. Silambam : Tamil Nadu

3. Huyen langlon : Assam

Choose the correct answer:

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

91. Consider the following statements:

1. Saint Tukaram is known for his devotional poetry called Abhanga

2. He is a poet of Bhakti Movement from Maharashtra

3. His poetry is dedicated to Vithoba

Which of the given statement/s is/are correct?

A. 1 only

B. 1 and 2 only

C. 1 and 3 only

D. 1, 2 and 3

92. Navegaon National Park is located in

A. Goa

B. Maharashtra

C. Gujarat

D. Odisha

93. Which of the following is/are not an exception/s for disqualification under the anti-defection law:

1. A complete political party merging with another political party.

2. 2/3rd of the legislators of a party merging into another party.

3. A split in the political party.

Choose the correct answer:

A. 1 only

B. 2 only

C. 3 only

D. 1 and 2 only

94. Which of the following elements formed the initial atmosphere on the earth?

1. Hydrogen

2. Oxygen

Choose the correct answer:

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

95. Consider the following statements with respect to UN Convention on Combating Desertification (UNCCD):

1. It addresses the land degradation in the drylands.

2. It is not legally binding on the parties.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

96. Broad money is

A. The unaccounted money that is concealed from the tax administrator

B. Currencies of other countries in the Indian economy

C. The total stock of money that is circulating in the economy.

D. None of the above

97. Consider the following statements:

1. Anti-dumping duty is the duty levied on such imports that are believed to have been price

below their domestic price.

2. Countervailing duty is the additional duty levied by the importing country on specific goods.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

98. Consider the following statements with respect to saint Dnyaneshwar:

1. He is one of the foundations of the Varkari Bhakti movement tradition of Hinduism in Maharashtra.

2. His ideas reflected the Advaita Vedanta Philosophy.

3. His work "Dnyaneshwari" is a commentary on the Bhagavad Gita.

4. Saints Eknath, Tukaram were his contemporaries.

Which of the following statement/s is/are correct?

A. 1 only

B. 2 and 4 only

C. 1, 2 and 3 only

D. 1, 2, 3 and 4

99. Indravati National Park is located in:

A. Chhattisgarh

B. Karnataka

C. Tamil Nadu

D. Odisha

100. Which of the following is/are correct about the Hojagiri dance form?

1. It is from the state of Tripura.

2. It is performed by the Reang tribe.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

101. Consider the following statements:

1. The Sun's corona, which is like the Sun's atmosphere, although hotter than its interior, is less dense and therefore emits fewer photons.

2. The Sun's magnetic field lines stretch out from the surface and permeate the corona.

Which among the above statements is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

102.   Consider the following statements:

1. Dendrochronology is the analysis of tree rings to infer things about the past.

2. A recent study suggests that slowly growing trees sequester more carbon than fast-growing ones.

Which of the given statement/s is/are correct?

A. 1 Only

B. 2 Only

C. Both 1 and 2

D. Neither 1 nor 2

103.   Consider the following statements:

1. The Regional Comprehensive Economic Partnership (RCEP), is a proposed Free Trade Agreement between ten ASEAN member states and their six Free Trade Agreement (FTA) partners namely India, Australia, China, Japan, New Zealand and Republic of Korea.

2. The RCEP is expected to provide market access for India's goods and services exports and encourage greater investments and technology into India.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

104.   Consider the following statements regarding NASA's PUNCH mission

1. PUNCH, stands for "Polarimeter to Unify the Corona and Heliosphere".

2. The mission is focused on understanding the transition of particles from the Sun's outer corona to the solar wind that fills interplanetary space.

Which of the given statement/s is/are correct?

A. 1 only

B. 2 only

C. Both 1 and 2

D. Neither 1 nor 2

ANSWER KEYS

1. Answer: A

Explanation:

The provision for a 'Uniform Civil Code' is contained in Article 44 of the Indian Constitution.

2. Answer: D

Explanation:

- The National Green Tribunal is established under the National Green Tribunal Act 2010 for effective and expeditious disposal of cases relating to environmental protection and conservation of forests and other natural resources including enforcement of any legal right relating to environment and giving relief and compensation for damages to persons and property and for matters connected therewith or incidental thereto.

- The National Green Tribunal is a specialized body equipped with the necessary expertise to handle environmental disputes involving multi-disciplinary issues.

- The Tribunal is not be bound by the procedure laid down under the Code of Civil Procedure, 1908, but shall be guided by principles of natural justice.

- The Tribunal's dedicated jurisdiction in environmental matters, is aimed at providing speedy environmental justice and help reduce the burden of litigation in the higher courts.

3. Answer: B

Explanation:

- PM KISAN is a Central Sector scheme with 100% funding from Government of India.

- It has become operational from 1.12.2018.

- Under the scheme an income support of Rs.6000/- per year in three equal instalments will be provided to small and marginal farmer families having combined land holding/ownership of upto 2 hectares

- Definition of family for the scheme is husband, wife and minor children.

- State Goverment and UT Administration will identify the farmer families which are eligible for support as per scheme guidelines.

- The fund will be directly transferred to the bank accounts of the beneficiaries.

4. Answer: B

Explanation:

The Bab-el-Mandeb is a strait located between Yemen on the Arabian Peninsula, and Djibouti and Eritrea in the Horn of Africa. It connects the Red Sea to the Gulf of Aden.

The Strait of Hormuz is a strait between the Persian Gulf and the Gulf of Oman. The Strait of Hormuz is one of the most critical sea lanes in the world today.

5. Answer: C

Explanation:

- BCAS is the regulatory authority for civil aviation security in India.

- The main responsibility of the BCAS are to lay down standards and measures in respect of security of civil flights at International and domestic airports in India

6. Answer: D

Explanation:

- Photoluminescence is a process in which the material absorbs light and re-emits it as a spectrum.
- Photoluminescence properties can be used in various devices such as quantum LEDs which can be used in communication and computation.
- Electrons in semiconductors occupy bands of energy known as valence bands.

7. Answer: C

Explanation:

- The Council of Scientific & Industrial Research (CSIR), India, a premier national R&D organisation, is among the world's largest publicly funded R&D organisation.
- CSIR's pioneering sustained contribution to S&T human resource development is acclaimed nationally.
- CSIR's 'Shanti Swarup Bhatnagar (SSB) Prize for Science and Technology', instituted in 1957 is the most coveted and revered prize in science and technology in the country.

8. Answer: C

Explanation:

- Genome editing (also called gene editing) is a group of technologies that give scientists the ability to change an organism's DNA.
- These technologies allow genetic material to be added, removed, or altered at particular locations in the genome. Several approaches to genome editing have been developed.
- A recent one is known as CRISPR-Cas9, which is short for clustered regularly interspaced short palindromic repeats and CRISPR-associated protein 9.
- The CRISPR-Cas9 system has generated a lot of excitement in the scientific community because it is faster, cheaper, more accurate, and more efficient than other existing genome editing methods.

9. Answer: D

Explanation:

Nanda Devi, the second highest mountain in India is located in Uttarakhand. It is the highest mountain located entirely within the country. The mountain is located between the Rishiganga valley on the west and the Goriganga valley on the east.

10. Answer: B

Explanation:

GSP is a unilateral, non-reciprocal and non-discriminatory benefit extended by the U.S. and other developed countries to developing countries.

11. Answer: C

Explanation:

- The Salt March, also known as the Dandi March from 12 March 1930 to 6 April 1930
- The 'Gandhi-Irwin Pact' was a political agreement signed by Mahatma Gandhi and Lord Irwin, the then Viceroy of India, on 5 March 1931 before the second Round Table Conference in London.
- The Quit India Movement, was launched at the Bombay session of the All-India Congress Committee by Gandhi on 8 August 1942, during World War II, demanding an end to British Rule of India.

12. Answer: D

Explanation:

The Chalcolithic Age denotes the first period in which metal was used. It is also called as the Copper-Stone Age, referring to the initial use of pure copper along with its predecessor tool making material – stone.

13. Answer: B

Explanation:

Sashastra Seema Bal is currently under the administrative control of the Ministry of Home Affairs (MHA).

14. Answer: C

Explanation:

Core inflation is the change in costs of goods and services, but does not include those from the food and energy sectors. This measure of inflation excludes these items because their prices are much more volatile.

15. Answer: A

Explanation:

The Montreux Record is a register of wetland sites on the List of Ramsar wetlands of international importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference. Loktak Lake and Keoladeo National Park are listed under Montreux Record.

16. Answer: A

Explanation:

Solar Radiation Management, also popularly known as Solar Geo-Engineering is a process through which the reflectivity (albedo) of the Earth's atmosphere or surface is increased, in an attempt to offset some of the effects of GHG-induced climate change. The technique mimics big volcanic eruptions that can cool the Earth by masking the sun with a veil of ash or similar other things.

17. Answer: D

Explanation:

A bill pending in the Rajya Sabha but not passed by the Lok Sabha does not lapse, whereas, the bill passed by the Lok Sabha and pending in the Rajya Sabha lapse with the dissolution of the Lok Sabha.

18. Answer: C

Explanation:

The criteria followed for determination of PVTGs are as under:

i. A pre-agriculture level of technology

ii. A stagnant or declining population

iii. Extremely low literacy

iv. A subsistence level of economy

19. Answer: A

Explanation:

The IUCN Red List Categories define the extinction risk of species assessed. Nine categories extend from NE (Not Evaluated) to EX (Extinct). Critically Endangered (CR), Endangered (EN) and Vulnerable (VU) species are considered to be threatened with extinction.

20. Answer: C

Explanation:

21. Answer: C

Explanation:

Encephalitis is the inflammation of the brain. The most common cause is a viral infection. Bacterial infections and non-infectious inflammatory conditions also can cause encephalitis. Meningitis, caused by bacterial infection, is the inflammation of the meninges or tissues that surround the brain or spinal cord. Symptoms of encephalitis include fever, headache, neck pain, drowsiness and nausea. Those with meningitis will have headache, fever, stiff neck, and nausea.

22. Answer: C

23. Answer: A

Explanation:

Unlike FDI, FPI consists of passive ownership. Investors have no control over ventures or direct ownership of property or a stake in the company.

24. Answer: D

Explanation:

The Western Ghats were declared an ecological hotspot in 1988.The Western Ghats was included as a 'World Natural Heritage Site' by UNESCO in 2012. The Western Ghats are older than the Himalayas.

25. Answer: A

Explanation:

The Sabarmati River is one of the major west-flowing rivers in India. It originates in the Aravalli Range of the Udaipur District of Rajasthan and meets the Gulf of Khambhat of Arabian Sea.

26. Answer: D

Explanation:

Mandamus means "we command". It is a judicial writ issued as a command to an inferior court or ordering a person to perform a public or statutory duty.   This writ is a command issued by court to a public official, public body, corporation, inferior court, tribunal or government asking them to perform.

27. Answer: B

Explanation:

Article 113 of the Constitution mandates that the estimates of expenditure from the Consolidated

Fund of India included in the Annual Financial Statement and required to be voted by the Lok Sabha are submitted in the form of Demands for Grants. The Demands for Grants are presented to the Lok Sabha along with the Annual Financial Statement. Parliament being the authority to check the expenditure of the government may not approve all demands. Cut motions are motions in the parliament moved to reduce the amount of demand.

Speaker to decide admissibility 211. The Speaker shall decide whether a cut motion is or is not admissible under these rules and may disallow any cut motion when in his/her opinion it is an abuse of the right of moving cut motions or is calculated to obstruct or prejudicially affect the procedure of the House or is in contravention of these rules

28. Answer: B

Explanation:

Mars Atmosphere and Volatile Evolution (MAVEN) mission was developed by NASA to study the Martian atmosphere while orbiting Mars.

29. Answer: D

Who are debarred from receiving Foreign Contribution under the Foreign Contribution Regulation Act (FCRA), 2010?

- Candidate contesting an election
- Cartoonist, editor, publishers of registered newspaper
- Judge
- Government servants or employee of any corporation
- Member of any legislature
- Political parties

30. Answer: B

Explanation:

The Lakhari Valley Wildlife Sanctuary is located in Ganjam District, Odisha.

31. Answer: D

Explanation:

The Hague Convention on the Civil Aspects of International Child Abduction or Hague Abduction Convention is a multilateral treaty between Australia and several other countries, developed by the Hague Conference on Private International Law (HCCH). It provides an expeditious method to return a child internationally abducted by a parent from one member country to another. As per the convention, if a child is removed from his or her place of habitual residence, then they must be returned. The Convention applies only to children under the age of 16. Such child must be a habitual resident of the contracting states. India is not signatory to it (as country has to have domestic law in place before it can become signatory).

32. Answer: C

Explanation:

33. Answer: D

Explanation:

Hiran, the Orsang, the Barna and the Kolar are the right bank tributaries of River Narmada. Other tributaries are the Burhner, the Banjar, the Sher, the Shakkar, the Dudhi, the Tawa, the Ganjal, the Goi etc.

34. Answer: D

Explanation:

Birsa Munda was born at Ulihatu in the Bengal Presidency (presently in Jharkhand). His childhood was spent in a typical Munda fashion amidst poverty. He converted to Christianity and became Birsa David/ Daud in order to receive an education from a missionary school. He spent a great part of his childhood in Chaibasa. He was influenced by the national movement there. His father withdrew him the missionary school. Birsa developed a strong anti-government and anti-missionary stamp on his mind from there. During the 1890s, he started speaking to his people about the exploitation done by the British. The British agrarian policies were stifling the tribal people and disrupting their way of life which was hitherto peaceful and in tune with nature. Another problem was that of cultural belittlement of the tribal people by the Christian missionaries. In 1894, Birsa declared his declaration against the British and the Dikus (outsiders) and thus began the Munda Ulgulan/ rebellion.

35. Answer: D

Explanation:

Ranthambore National Park is located in Rajasthan. National Park lies at the edge of a plateau and is bounded to the north by the Banas River and to the south by the Chambal River. It is named after the historic Ranthambore fortress, which lies within the park.

36. Answer: C

37. Answer: B

Explanation:

Enforcement Directorate is economic intelligence and law enforcement agency responsible for enforcing economic laws and fighting economic crime in India. It functions under aegis of Department of Revenue, Union Ministry of Finance. Its prime objective is enforcement of two key Acts of Government of India namely Foreign Exchange Management Act 1999 (FEMA) and Prevention of Money Laundering Act 2002 (PMLA).

38. Answer: D

Explanation:

While payment banks can offer internet banking, sell Mutual Funds, sell insurance, offer bill payment services, they cannot extend loans, offer credit cards or accept NRI deposits.

39. Answer: B

Explanation:

The Asian Tea Alliance (ATA) is a union of five tea-growing and consuming countries. It was launched in Guizhou, China. India, China, Indonesia, Sri Lanka and Japan are the participating countries.

40. Answer: A

Explanation:

Lithium triangle is made up of South America's 3 largest lithium producers: Argentina, Chile and Bolivia. The lithium triangle possesses 54% of the world's lightest metal.

41. Answer: A

Explanation:

P waves can travel in all mediums. Their velocity depends on shear strength or elasticity of the material. Velocity of P waves in Solids > Liquids > Gases. They are also called as the longitudinal or compressional waves.

42. Answer: C

Explanation:

Narrow money is a category of money supply that includes all physical money such as coins and currency, demand deposits and other liquid assets held by the central bank. This category of money is considered to be the most readily available for transactions and commerce. The narrow money supply only contains the most liquid financial assets.

43. Answer: B

Explanation:

Sudan is bordered by Egypt to the north, the Red Sea to the northeast, Eritrea and Ethiopia to the east, South Sudan to the south, the Central African Republic to the southwest, Chad to the west and Libya to the northwest.

44. Answer: A

Explanation:

There are not one but two polar vortexes in each hemisphere. One exists in the lowest layer of the atmosphere, the troposphere. The tropospheric polar vortex is the one that affects our weather. The other exists in the second-lowest, called the stratosphere. It is much more compact than the one in the troposphere.

45. Answer: C

Explanation:

- Pro-tem Speaker is the temporary speaker who presides over the first meeting after the election.
- The process by which the Speaker and the Deputy Speaker are selected by members of the Parliament is held under the Pro-tem Speaker.
- The president/governor will administer the oath of the office for the pro-tem speaker.
- Duty of a Pro-tem Speaker is to administer the oath of office to new members of the house. He also enables the House to elect the new Speaker.
- The pro-tem speaker also has same powers, privileges as that of the Speaker.
- Once the new Speaker is elected, the office of the pro tem speaker ceases to exist. He also administers the floor test

46. Answer: B

Explanation:

Cost Push Inflation occurs when the general prices of the commodities increase as a result of increase in production costs. Demand pull inflation occurs as a result of mismatch in demand. When the aggregate demand in an economy strongly outweighs the aggregate supply, prices go up. When concurrent demand for output exceeds what the economy can produce, the four sectors compete to purchase a limited amount of goods and services. That means the buyers bid prices up again and cause inflation. This excessive demand, also referred to as "too much money chasing too few goods," usually occurs in an expanding economy.

47. Answer: C

Explanation:

A proclamation imposing President's Rule must be approved by both the Houses of Parliament within two months from the date of its issue. However, if the proclamation is issued at a time when the Lok Sabha has been dissolved or the dissolution of Lok Sabha takes place during the period of two months without approving the proclamation, then the proclamation has to be approved by the Lok Sabha within 30 days from its first sitting after its reconstitution, provided the Rajya Sabha approves it in the meantime.

If approved by both the Houses of Parliament, the President's Rule continues for six months. It can be extended for a maximum period of three years with the approval of Parliament, every six months. However, it is provided that beyond one year, the President's Rule can be extended by six months at a time only when the following two conditions are fulfilled:

- A proclamation of National Emergency should be in operation in whole of India, or in the whole or any part of the state; and
- The Election Commission must certify that the general election to the legislative assembly of the concerned state cannot be held due to difficulties.

Every resolution approving the proclamation or continuance of the President's Rule can be passed by a simple majority, that is a majority of the members present and voting of that House. It must be passed both the Houses separately.

48. Answer: A

Explanation:

The Asian golden cat is a wild cat native to the North-Eastern Indian subcontinent and Southeast Asia. It is found across eastern Nepal through north-eastern India to Indonesia. Conservation status as per IUCN Red List of threatened species: near threatened.

49. Answer: B

Explanation:

Insurance Regulatory and Development Authority of India (IRDAI) is an apex regulatory body involved in regulating and developing the insurance and reinsurance industry in India. It was constituted as a statutory body as per the provisions of Insurance Regulatory and Development Authority Act 1999. The body was created on the recommendations of the Malhotra Committee Report. All the companies wanting to run the insurance business in India are to be registered with the IRDAI. IRDAI is headquartered in Hyderabad, Telangana.

50. Answer: D

Explanation:

Indian Council Act of 1909 also popularly known as Morley-Monto Reform introduced separate electorates on the basis of religion. Therefore Lord Minto came to be known as Father of Communal Electorate in India.

51. Answer: B

Explanation:

Systematic Voters' Education and Electoral Participation program, better known as SVEEP, is the flagship program of the Election Commission of India.

52. Answer: A

Explanation:

PKVY aims at supporting and promoting organic farming, reduction in dependence on fertilizers and agricultural chemicals, in turn, resulting in improvement of the soil health while increasing the yields. The government of India came up with Paramparagat Krishi Vikas Yojana in order to boost organic farming, particularly in Northeast India. Women Self Help Groups are also being encouraged by the government to take up organic farming in clusters under National Rural Livelihood Programme.

53. Answer: B

Explanation:

NASA's Voyager 2 is the second human-made object in history to exit the Heliosphere (bubble created by solar winds). Voyager 1, crossed this boundary in 2012. Voyager 2 is the only spacecraft to have visited all four gas giant planets — Jupiter, Saturn, Uranus and Neptune — and discovered 16 moons, as well as phenomena like Neptune's mysteriously transient Great Dark Spot, the cracks in Europa's ice shell, and ring features at every planet. The Voyager mission was launched in the 1970's, and the probes sent by NASA were only meant to explore the outer planets – but they just kept on going.

54. Answer: C

Explanation:

- Strait of Hormuz is a choke-point between the Gulf and the open ocean. With Iran on its northern coast and the UAE and an Omanian enclave on the south, the Strait, at its narrowest point, has a width of 34 km.

- A third of crude oil exports transported via ships pass through the Strait, which makes it the world's most important oil artery.

55. Answer: D

Explanation:

Consisting of both annual and perennial herbs, balsams are succulent plants with high endemism. Because of their bright beautiful flowers, these groups of plants are of prized horticultural significance.

56. Answer: C

Explanation:

- A fuel cell is a device that converts chemical potential energy (energy stored in molecular bonds) into electrical energy.
- Fuel cells which are used commercially in hydrogen fuel–based cars, require good catalysts that are efficient as well as cost-effective.1
- Normally, fuel cells use expensive platinum-like elements.
- These expensive metal-based technologies perform excellently for initial few cycles, but then get degraded in performance due to many reasons.
- As a result, there is a need to change this part of the fuel cell routinely.
- The oxygen reduction reaction is a key step in the functioning of the fuel cell.

57. Answer: A

Explanation:

Bhutan has been referred to as the "Last Shangri-La".

58. Answer: C

59. Answer: A

Explanation:

The wind blowing in the Northern Plains in summer is known as Loo. Loo is a strong , dusty and a dry summer wind.

60. Answer: D

Explanation:

North-western part of India experiences the highest diurnal range of temperature. This happens because of the presence of the Thar Desert and also because the region does not have the moderating influence of the ocean. Parts of Rajasthan, Gujarat and the leeward side of the Western Ghats are drought-prone. They fall in the rain shadow area of the Aravalli.

61. Answer: B

Explanation:

The Election Commission of India is a permanent and independent constitutional body. It is established by Constitution of India under Article 324 to ensure fair and fair elections in the country. The body conducts free and fair elections to the national and state legislatures and of President and Vice-President.

62. Answer: A

Explanation:

The Chief Election Commissioner heads the Election Commission of India, a body constitutionally empowered to conduct elections in India. The appointment of the Chief Election Commissioner and other Election Commissioners is made by the President.

63. Answer: D

Explanation:

Seva Bhoj Yojana scheme envisages to reimburse the Central Government share of Central Goods and Services Tax (CGST) and Integrated Goods and Service Tax (IGST) so as to lessen the financial burden of such as Religious/Charitable Institutions who provide Food/Prasad/Langar (Community Kitchen)/ Bhandara free of cost without any discrimination to public/devotees. It is a programme of the Ministry of Culture.

64. Answer: C

Explanation:

Under 'Pariwartan' scheme government plans to warehouse stressed power projects to protect their value. Power Asset Revival through Warehousing and Rehabilitation (Pariwartan) scheme looks to warehouse around 25,000 MW stressed projects under an asset management company in a bid to protect their value and prevent them from distress sale. Scheme will be implemented by the Ministry of Power.

65. Answer: C

Explanation:

During the Vajrayana phase of Buddhism, worship of the female form was seen. The goal of spiritual practice within the Vajrayana traditions is to become a a fully awakened Buddha (Sammāsambuddha).

66. Answer: D

Explanation:

WMO It is an intergovernmental organization which originated from the International Meteorological Organization, with its secretariat headquartered in Geneva. It provides world leadership and expertise in international cooperation in the delivery and use of high-quality, authoritative weather, climate, hydrological and related environmental services by its Members, for the improvement of the well-being of societies of all nations.

67. Answer: D

Explanation:

The Gini coefficient is used to measure income inequality.

68. Answer: C

Explanation:

The Economist Intelligence Unit publishes the Democracy Index. The list has been divided into four broad categories—full democracy, flawed democracy, hybrid regime and authoritarian regime. In the list compiled by the Economist Intelligence Unit (EIU)- 2018, India has moved down from 32nd place last year to 42nd place and remains classified among flawed democracies.

69. Answer: C

Explanation:

Forwards, Futures, Options and Swaps are the types of derivatives. A derivative is a financial instrument that derives its value from an underlying asset or group of assets.

- Futures are derivative financial contracts that obligate the parties to transact an asset at a predetermined future date and price.
- An option gives the buyer the right, but not the obligation, to buy or sell an asset at a specific price at any time during the life of the contract.

70. Answer: B

Explanation:

The origin of sedition law in India is linked to the Wahabi Movement of 19th century. It is accepted that the first time, the act was invoked, was against Jogendra Chandra Bose, the editor of Bangobasi, for voicing against Age of Consent Bill, 1891.

71. Answer: A

Explanation:

SEBI was constituted in 1988 as an interim administrative body under the Finance Ministry.

Four years later, a notification awarding statutory powers to SEBI was issued (Securities and Exchange Board of India Act, 1992).

It can draft regulations, conduct inquiries, pass rulings and impose penalties, thereby making it a quasi-legislative, quasi-judicial and quasi-executive body.

72. Answer: B

Explanation:

- The Financial Action Task Force (FATF) is an inter-governmental body established in 1989 by the Ministers of its Member jurisdictions.
- The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- The FATF is therefore a "policy-making body" which works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.

73. Answer: B

Explanation:

- The Indian elephant is a Schedule-I animal under the Wildlife (Protection) Act, 1972.
- Section 9 of the Wildlife (Protection) Act, 1972 prohibits their capture from the wild.
- Capturing of wild elephants is permitted only under very limited circumstances as provided in Section 11 and 12 of the Act.

74. Answer: B

Explantion:

- The National Tiger Conservation Authority has been fulfilling its mandate within the ambit of the Wildlife (Protection) Act, 1972 for strengthening tiger conservation in the country by retaining an oversight through advisories/normative guidelines, based on appraisal of tiger status, ongoing conservation initiatives and recommendations of specially constituted Committees.
- 'Project Tiger' is a Centrally Sponsored Scheme of the Environment, Forests and Climate Change, providing funding support to tiger range States, for in-situ conservation of tigers in designated tiger reserves, and has put the endangered tiger on an assured path of recovery by saving it from extinction.

75. Answer: A

Explanation:

The theme of the G20 Summit to be held in Osaka is "Human centred future society".

76. Answer: C

Explanation:

- The normalized difference vegetation index (NDVI) is a simple indicator which tells how much of the ground is covered with vegetation.
- It basically calculates the difference between the red and near infrared components of light reflected by objects, from, say, a satellite.
- Since healthy vegetation strongly absorbs red and reflects near infrared light, this difference can indicate the presence of healthy vegetation and map it into a colour code.
- The normalized difference vegetation index (NDVI) is measured remotely from satellite data. This has been used to estimate the amount of food abundance available to herbivorous animals, for example, elephants.
- The NDVI is used, for instance, in attempts to track the presence of elephants using the vegetation they consume.

77. Answer: C

Explanation:

- National Remote Sensing Centre (NRSC) is one of the primary centres of Indian Space Research Organisation (ISRO), Department of Space (DOS).
- NRSC has the mandate for establishment of ground stations for receiving satellite data, generation of data products, dissemination to the users, development of techniques for remote sensing applications including disaster management support, geospatial services for good governance and capacity building for professionals, faculty and students.
- NRSC operates through multiple campuses to meet national and regional remote sensing data and applications needs of the country.

78. Answer: C

Explanation:

- The blood sugar level is usually normal in children with encephalitis but is low in children with hypoglycaemic encephalopathy.
- In the case of encephalitis, fever (due to virus infection) for a day or two is followed by the onset of symptoms caused by the brain getting affected. However, in hypoglycaemic encephalopathy, children go to bed without any illness but manifest symptoms such as vomiting, convulsion and semi-consciousness early next morning (between 4 a.m. to 7 a.m.). At that time, the blood sugar level is low, hence the name hypoglycaemic encephalopathy.
- In encephalitis, there are more white blood cells per unit volume of cerebrospinal fluid, which is a reflection of inflammation in the brain. In contrast, no increase in white blood cells is seen in hypoglycaemic encephalopathy as there is no inflammation in the brain.

79. Answer: A

Explanation:

An Indian Naval Operation in the Persian Gulf and the Gulf of Oman to reassure Indian flagged vessels transiting through the area following the recent maritime incidents in the region. "Operation Sankalp" is an Indian Naval Operation in the Persian Gulf and the Gulf of Oman to reassure Indian flagged vessels transiting through the area following the recent maritime incidents in the region.

80. Answer: A

Explanation:

Pichhwai are traditional Rajasthani Art (scroll paintings)which portray Lord Krishna. Pichwai paintings have their roots in Nathdwara Rajasthan.

81. Answer: B

Explanation:

The MANAV Project aims to create an open and interactive atlas of human biology, compiling, curating and synthesizing data at the molecular, cellular, tissue and organismic level from scientific literature and public databases. It is an initiative towards improving knowledge on human physiology. The programme will involve gaining better biological insights through physiological and molecular mapping, develop disease models through predictive computing and have a holistic analysis and drug discovery. It was launched by Department of Biotechnology (DBT), the Ministry of Science and Technology.

82. Answer: B

Explanation:

Black Soils are poor in nitrogen, phosphates, and humus. These are clayey soils with a high moisture retaining capacity. The soils swell in the rainy season making it difficult to work on.

83. Answer: C

Explanation:

Loktak Lake is the largest freshwater lake in Northeast India and is famous for the phumdis -heterogeneous mass of vegetation, soil and organic matter at various stages of decomposition, floating over it. Keibul Lamjao National Park in Loktak lake is the only floating national park in the world.

84. Answer: D

Explanation:

GST council is a constitutional body for making recommendations to the Union and State Government on issues related to Goods and Service Tax. As per Article 279A of the Indian Constitution, the GST Council will be a joint forum of the Centre and the States. The vote of the Centre would have a weightage of one third of the total votes cast, and the votes of all the State Governments taken together would have a weightage of two-thirds of the total votes cast, in that meeting. Each state, big or small, will have equal vote.

85. Answer: C

Explanation:

Nitrification is the biological oxidation of ammonia or ammonium to nitrite followed by the oxidation of the nitrite to nitrate. It is an aerobic process performed by small groups of autotrophic bacteria and archaea.

86. Answer: C

Explanation:

The time immediately following the Question Hour has come to be known as Zero Hour. It starts at around 12 noon and members can, with prior notice to the Speaker, raise issues of importance during this time. It is not mentioned in any rule book but is there is existence since 1962 by convention. It is an Indian innovation in the field of parliamentary procedures.

87. Answer: B

Explanation:

Magmas that form basalt, are hotter and less viscous than more silica-rich magmas. Low viscosity leads to gentler, less explosive eruptions. Most magmatic liquids are rich in silica.

88. Answer: C

Explanation:

Motion of Thanks is a motion in Indian Parliament which follows the address of the President of India to the joint sitting of Lok Sabha and Rajya Sabha at the commencement of first session of a new Lok Sabha and first session of every year. Motion of thanks must be passed in both of the houses. A failure to get motion of thanks passed amounts to defeat of government and leads to collapse of government. This is why, the Motion of Thanks is deemed to be a no-confidence motion.

89. Answer: A

Explanation:

Salinity of the oceans decreases to pole wards. The highest salinity is observed between 20 to 40 degrees North latitude. Near the equator, the tropics receive the most rain on a consistent basis. As a result, the fresh water falling into the ocean helps decrease the salinity of the surface water in that region.

90. Answer: B

Explanation:

Kalaripayattu: Kalaripayattu also known as Kalari is an Indian martial art and fighting system that originated in Kerala and practiced by warriors of Kerala and Tamil Nadu.

Silambam: Silambam is a weapon-based martial art of India, more specifically from Tamil Nadu, where it originated around 1000 BCE.

Huyen langlon: Huyen langlon is a martial art from Manipur.

91. Answer: D

Explanation:

Saint Tukaram was a 17th-century Hindu poet and sant of the Bhakti movement in Maharashtra. He was a part of the Varkari devotional tradition. The saint is well known for having composed Abhanga and kirtans. His poetry is dedicated to Vithoba, an avatar of lord Vishnu – the presiding deity of Pandhrapur.

92. Answer: B

Explanation:

Navegaon National Park is located in the Arjuni Morgaon subdivision of Gondia district in state of Maharashtra. This area is also known as Navegaon Bandh locally, because of the presence of the water body. Mostly tribal people reside in this area.

93. Answer: C

Explanation:

Exceptions under the anti-defection law:

- Under the circumstance where 2/3rd of the legislators of a party decide to merge into another party, neither the members who decide to merge, nor the ones who stay with the original party will face disqualification.
- A split in a political party won't be considered a defection if a complete political party merges with another political party.
- Any person elected as speaker or chairman could resign from his party, and rejoin the party if he demitted that post.
- The law initially permitted splitting of parties, but that has now been outlawed.

94. Answer: A

Explanation:

Earth's first atmosphere was comprised of hydrogen and helium (two most abundant gases found in the universe). Through the process of outgassing, the outpouring of gases from the earth's interior, many other gases were injected into the atmosphere.

95. Answer: A

Explanation:

UNCCD addresses the land degradation in arid, semi arid and dry sub humid areas, known as the drylands.

Established in 1994, the United Nations Convention to Combat Desertification (UNCCD) is the sole legally binding international agreement linking environment and development to sustainable land management.

96. Answer: C

Explanation:

It is the total stock of money that is circulating in an economy. It is also called money supply.

97. Answer: C

Explanation:

Anti-dumping duty is a protectionist duty levied on such imports that are believed to have been price below their domestic price. It is mainly levied in order to uphold the practice of fair trade.

Countervailing duty is additional duty levied by the importing country on specific goods. It is generally equal to the excise duty paid by manufacturers when the same product is produced in the home country. It is mainly levied in order to neutralize the effect of subsidies in the exporting country on the price and domestic market of the importing country.

98. Answer: D

Explanation:

Dnyaneshwar was a 13th-century Marathi saint, poet, philosopher and yogi. Saints Eknath (16th Century), Tukaram (17th Century) were his followers. He is one of the foundations of the Varkari Bhakti movement tradition of Hinduism in Maharashtra.

99. Answer: A

Explanation:

Indravati National Park is a national park located in Bijapur district of Chhattisgarh state of India. It is home to one of the last populations of rare wild buffalo

100. Answer: C

Explanation:

Hojagiri dance performance involves three to four young women balancing themselves on an earthen pitcher. It is from the state of Tripura.

101. Answer: C

Explanation:

- The Sun's corona, which is like the Sun's atmosphere, although hotter than its interior, is less dense and therefore emits fewer photons.

- The Sun's magnetic field lines stretch out from the surface and permeate the corona.
- Solar plasma wind and storms including flares and coronal mass ejections are born in coronal magnetic field.

102. Answer: C

Explanation:

- Dendrochronology is the analysis of tree rings to infer things about the past. This study can now be used to understand the future. A study, published in Nature Communications, of tree rings of living and dead conifers suggested that slowly growing trees sequester more carbon than fast-growing ones.
- This finding can inform environmental policies that rely on plantations of fast growing trees to mitigate global warming.

103. Answer: C

Explanation:

- The Regional Comprehensive Economic Partnership (RCEP), which is a proposed Free Trade Agreement between ten ASEAN member states and their six Free Trade Agreement (FTA) partners namely India, Australia, China, Japan, New Zealand and Republic of Korea, is expected to provide market access for India's goods and services exports and encourage greater investments and technology into India
- It would also facilitate India's MSMEs to effectively integrate into the regional value and supply chains.
- On the other hand, India is not a member of the Asia-Pacific Economic Co-operation (APEC) which is a grouping of twenty-one countries in the Asia Pacific region with an aim to deepen and strengthen economic and technological cooperation amongst APEC member countries.

104. Answer: C

Explanation:

- PUNCH, stands for "Polarimeter to Unify the Corona and Heliosphere".
- The mission is focused on understanding the transition of particles from the Sun's outer corona to the solar wind that fills interplanetary space.s

MAINS PRACTICE QUESTIONS

1. Addressing rural distress is an important priority area that needs to be remedied urgently if the government's vision of doubling farmer's income by the year 2022 is to be realized.

2. To what extent can Indo-Israel relations be a defining partnership for India. Elaborate keeping in mind the changing geopolitical situation in the Middle East.

3. What is Gene Editing? Comment on some of the issues concerning the ethicality of the CRISPR–Cas9 gene-editing technique, citing recent developments.

4. The decision taken by the U.S. Government of ending trade privileges extended to India under the Generalized System of Preferences (GSP) can potentially have serious ramifications.

5. In the last two decades, the prevalence of illicit drug trafficking has assumed alarming proportions in India, highlighting the need for a national policy to tackle drug abuse.

6. With a worsening water crisis, India will be formally categorized as a "water stressed" country by 2020. A country where per capita availability of water is less than 1,000 cubic metres or less. Can a new water ministry tackle the worst water crisis in India's history? Critically analyse.

7. There is neither credible evidence of a jobs crisis in India, nor of its absence. Discuss the need for a statistical system to provide precise and real time estimates of several such critical indicators.

8. Critically comment on the impact of urbanization on the socio-economic situation in India.

9. Despite the progress made by the government in improving both the scale and quality of skilling, learners face a multitude of challenges on their skilling journey. Discuss.

10. The citizen's Charter is an ideal instrument of organizational transparency and accountability but it has its own limitations. Identify the limitations and suggest measures for greater effectiveness of the Citizens Charter.

11. Comment on the influence jet streams on Indian monsoon.

12. India's Bay of Bengal outreach is a well-judged attempt to expand regionalism. Critically comment.

13. Marginal Cost of Funds based Lending Rate (MCLR) has failed to perform as an effective and transparent policy transmission benchmark. Two previous interest rate cuts by the central bank have failed to meaningfully bring the lending rates down. Critically Analyse.

14. Critically evaluate the National Education Policy 2019.

15. Digitisation has brought in enormous data and will impact the economies of the world. Thus, data protection becomes crucial. Discuss.

16. Caste system is assuming new identities and associational forms thereby making it difficult for it to be eradicated from the Indian society.

17. What do you understand by 5G? What are its benefits to India?

18 Where non-violence is practised, democracy is honoured. Elucidate with examples.

19. At a time where digital technologies are revolutionising the way of life, digital exclusion is a real danger.

20. According to India's latest employment survey, India's female Labour Force Participation Rate (LFPR) has fallen to a historic low. Low LFPR is a matter of concern for the country. Discuss.

21. Buddhism constitutes a bridge between India and South Asia. Discuss.

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22. Discuss the evidences that support the Continental Drift Theory.

23. Relations with our neighbours, irrespective of how we define our neighbourhood, will always be complex and need deft political management. Comment on India's foreign policy challenges.

24. There is an urgent need for reforms to increase farm productivity and make Indian agriculture more competitive, enabling higher exports. Discuss with the initiatives taken by government so far.

25. The Right to Information Act is not all about citizens' empowerment alone; it essentially redefines the concept of accountability. Discuss.

26. Throw light upon the impediments in disposing huge quantities of discarded solid wastes. Suggest measures to safely remove the toxic wastes that have been accumulating in our habitable environment.

27. Do you think integrating early child care into the draft National Education Policy 2019 is the panacea for India's falling standards in the Education Sector. Critically examine.

28. What is 'Peri-Urban agriculture'? Elaborate on its contribution in dealing with climate change.

29. Discuss the aims of Shanghai Cooperation Organisation and analyse how SCO presents both challenges and opportunities for India

30. Describe the economic benefits of Migration. Why is migration mostly seen as unfavourable by the recipient states?

31. The recent flood of 'unregulated' tourists has prompted measures from pristine Himalayan kingdom of Bhutan. Examine the threats that tourism poses to some of India's ecologically sensitive regions and suggest measures that can be employed to mitigate the same.

32. The NITI Ayog has come under criticism recently. There have been opinions voiced against it stating that it has not been able to act as a substitute of the erstwhile Planning Commission. Critically examine.

33. SAARC holds the key to South Asia's economic integration. Crafting good relations with Pakistan is the fundamental building block of a truly peaceful and economically integrated sub-region, which can become the driver of economic prosperity. Critically analyse

34. What is coral bleaching? State the reasons for Coral bleaching and suggest measures to prevent it.

35. The quality of democracy will suffer with the absence of an opposition leader. Discuss the importance of the Leader of Opposition in Indian polity.

36. The Shanghai Cooperation Organisation is becoming vital to India's Eurasia policy critically comment.

37. One nation – one election is a mirage in the desert of electoral politics. Discuss with special emphasis on practical alternatives to the idea.

38. The nation-wide doctor's strike has flagged the fault lines in the doctor-patient relationship. It underscores the need for institutional initiatives to restore the relationship. Elucidate.

39. Critically examine the various facets of economic policies of the British in India from mid-eighteenth century till independence.

40. India has a major problem of Malnutrition among children. In the light of rising toll of deaths due to acute encephalitis syndrome (AES) in Bihar's Muzaffarpur, discuss the need to address the problem of malnutrition in the country and suggest measures.

41. Is India falling behind the rest of the world on crop yields by resisting GM crops. Critically comment.

42. The practice of manual scavenging, officially banned since decades, continues to exist in Indian society and is the worst surviving symbol of untouchability. Discuss.

43. A significant step in curbing terrorism would be to strike at its root, i.e. at terror funding. Examine.

44. "National leaders must redouble their efforts to raise education, health and living standards for people everywhere." Examine this statement in light of the recently published UN's World Population Prospects 2019 report.

45. Facebook's announcement that it is going to launch a global digital currency by the first half of 2020 raises important concerns.

46. Discuss the effectiveness of satellite technology as a means to aid and assist disaster mitigation and relief efforts.

47. Discuss why Coastal India is susceptible to tropical cyclones. Comment on the benefits they bring with them.

48. Discuss the role of 'Digital India' programme in improving agricultural productivity and doubling farmers' income.

49. The GST impact goes beyond revenues and rates of duty. It has transformed our federal polity for the good. Critically comment.

50. The growing tensions between the U.S and Iran and the war-like situation is bound to hurt India. Discuss.

51. India is facing one of its major and most serious water crisis. It is high time the country makes water diplomacy an important tool of its regional foreign policy.

52. The newly launched Jal Shakti Ministry is a right step towards cleaning up and saving Indian Rivers. Critically Analyse.

53. Independence of the judiciary as an institution is different from independence of judges as the fountainheads of justice.

54. Explain the concept of El-Nino and its effect on the Indian Monsoon.

55. Combining the Ministries of Agriculture and Farmers Welfare, Rural Development and Panchayati Raj under the same minister is a step in the right direction for achieving the objective of doubling farmers' income by 2022-23.

56. Reservations have become a policy device for employment creation and power-sharing. Discuss in the light of Bombay High Court's judgement upholding the Maratha Reservation Bill.

57. Natural disasters are increasingly affecting large parts of India. The country has to design a holistic process of disaster response involving response, rehabilitation and rebuilding. Discuss.

58. Explain and illustrate the life-cycle of a temperate cyclone and also describe the weather associated with it.

59. Examine the concerns regarding the Regional Comprehensive Economic Partnership mooted by ASEAN.

60. Examine the difficulties to quantify unaccounted income both within and outside the country. What are the steps the government can take?

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