

PRAGNYA IAS ACADEMY

Current Affairs analysis

January 2017

Current Affairs



Highlights

- Background information and explanation added in important articles.
- Use of diagrams and maps at relevant places.
- Question and answer format for mains examination and better understanding.

INDEX

1. Arctic warming at least twice as fast as rest of the world: NOAA report
2. Digitising agriculture in face of climate change
3. Embrace of an unforgettable conservation crusade lingers on
4. India's budget just declared
5. Scientists move closer to understanding triggers for tsunamis
6. Rohingya: In need of creative diplomacy
7. The deadwood that's bureaucracy
8. Universal immunisation programme (UIP)
9. 'The world's longest human chain'
10. A sunspot with centre twice the size of Earth
11. WTO and India: the case of steel
12. Startup India's flaws are beginning to tell
13. Panel on Mahanadi and its tributaries
14. MSME Cooperation amongst Indian Ocean Rim Association (IORA)
15. CCI imposes penalty on cartelization
16. India Innovation Index
17. FIPB clears 6 FDI proposals
18. Psyche
19. Tangaliya weavers
20. Draft steel policy
21. JITSIC meeting on 'Panama Papers'
22. Ministry of AYUSH and Advertising Standards Council of India
23. Coalition for Epidemic Preparedness Innovations
24. Delhi air pollution
25. LIGO India To Be Ready By '24
26. India becomes Associate member of CERN
27. A coalition for trade pact
28. Silicon, the 'missing element'
29. Repealing of the obsolete and redundant laws
30. International Vaccine Institute (IVI), South Korea
31. 'shagun'
32. Modified Special Incentive Package Scheme
33. 11th ASER report
34. Bengaluru beats Silicon Valley to become the most dynamic city in the world
35. Sovereign digicoin

36. India and Kazakhstan
37. H1B visa issue
38. Jio case
39. North Eastern Tourism Development Council:
40. Tackling fake news and hate speech
41. 'Indian Skill Development Service'
42. India and Uruguay
43. Ken-Betwa river-linking project
44. Apple manufacturing unit
45. Mesentery
46. Japan and smart cities
47. Bitcoin: 'safe haven' asset
48. Hyperloop
49. Sponsored ads in media to be part of candidate's expenditure
50. Model Code of Conduct
51. Missions to explore solar system's asteroids
52. Ban on import of exotic skins
53. PIO vs. OCI cards
54. Reaching out to Africa
55. Publicly-funded elections
56. Whistleblower law
57. Review of RTE Act
58. Fractional doses of IPV
59. Central Vigilance Commission and Departmental inquiries
60. Bringing water into concurrent list?
61. Bilateral Advance Pricing Agreement
62. ILO report
63. Indian harvest festivals:
64. Why Norway is discarding FM for digital radio
65. Will a universal basic income work in India?
66. Revamped IDF
67. DRI
68. Scorpene submarine
69. Pravasi Kaushal Vikas Yojana (PKVY)
70. Operations in conflict zones
71. Krishna tribunal-II award
72. World's Largest LED Street Lighting Programme

73. Babur-3 Missile:
74. PAC: watchdog for govt spending; panel of consensus, controversy
75. Pact to achieve 24/7 power
76. China deepens military ties with Malaysia
77. Cash for land not enough
78. Endosulfan
79. National Youth Festival
80. Political funding
81. India-CERT mou with US-CERT
82. Air pollution a national problem
83. Cosmetics containing microbeads
84. New fault in Indian Ocean
85. Measles-rubella vaccine
86. India's first international stock exchange:
87. The Transgender Persons Bill 2016
88. Missing the Asian tailwind
89. Why do Indians want to study abroad?
90. 'Cold Start' out of the freezer
91. 14th Edition of pravasi Bharatiya Divas
92. Islamic anti-terror alliance
93. Powerful cosmic double whammy
94. China setting up highest altitude telescopes close to LAC
95. Mini-grids
96. Anti-avoidance tax rule GAAR to kick in from April 2017
97. Paper trail in evms for fair poll
98. Security Council Resolution 2322
99. Peace in Syria
100. Amended DTAA with Singapore
101. Financial Stability report
102. A divided World on Terror
103. PMUY target met
104. Financial data management body mooted
105. FIPB clears FDI proposals worth Rs 1,200 crore
106. Swachh Swasth Sarvatra initiative
107. Mobile app and Facebook page of national trust
108. Reviewing arbitration system

109. Financial inclusion in the true sense
needed

110. Safety sealing

111. New schemes for the poor

112. Cheer to digital lending firms

113. Fossil fuel formation linked to rise in
atmosphere's oxygen

114. Many new projects under namamigange
approved

115. Extension of judicial review powers

116. Seeking votes on religious basis a corrupt
act

117. Google Doodle:Savitribaphule

118. Agni-IV

119. AFSPA in manipur

1. Arctic warming at least twice as fast as rest of the world: NOAA report

Paper4 (gs 3 Global Warming, Environment, disaster management)

The Arctic Report Card is out and it isn't quite encouraging. Researchers say that the Arctic continues to warm up at an "astonishing" rate. The report, which was prepared considering a range of environmental observations throughout the Arctic, highlights the changes that continue to occur in physical and biological components of the Arctic environment. "The Arctic as a whole is warming at least twice as fast as the rest of the planet," says Jeremy Mathis, climate scientist at the National Oceanic and Atmospheric Administration (NOAA). He is also one of the authors of the report card.

Persistent warming and loss of sea ice in Arctic is triggering release of trapped carbon into atmosphere

Surface melting

The region normally remains cool because snow and ice reflect a lot of sunlight back into space. However, warmer temperatures are replacing ice with water, with the latter absorbing more of the sun's heat, thus making the Arctic warm up faster.

The report card revealed an increasing melting trend in the Greenland Ice Sheet in 2016, with enhanced melting happening in the southwest and northeast regions. Going by the report, the onset of surface melt ranked second (after only 2012) over the 37-year period of satellite record (1979 - 2016). The duration of the melting season was 30-40 days longer than usual in the northeast and 15-20 days longer along the west coast, when compared to the 1981-2010 average.

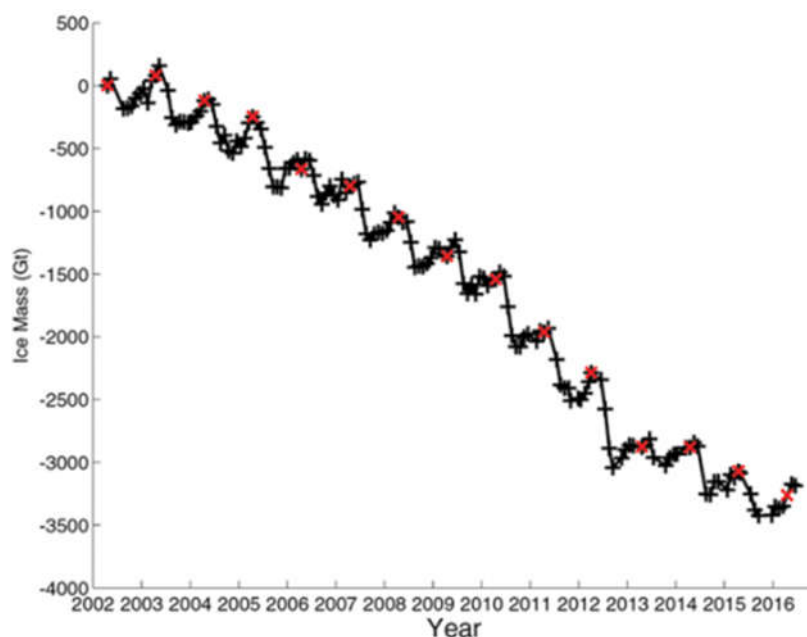
A similar report, which was released in September 2016, had shown that the **total number of ice-covered days declined** by seven to 19 days per decade in 35 years.

Estimates made by Gravity Recovery And Climate Experiment (GRACE) satellite indicate that between April 2015 and April 2016, there was a net ice mass loss of 191 giga-tonnes (Gt).

In 2016, the melt season started as early as April 10, with melt extent in April reaching values generally recorded in early June. Periods of extensive melt were also recorded in mid-May and in June. According to the report card, the melt extent from June through August 2016 was above the 1981-2010 average on 66 per cent of days.

Carbon emission

Warming of the Arctic is causing permafrost (normally frozen ground) to melt. As the permafrost is carbon-rich, when it melts, it becomes a source of greenhouse gases—carbon dioxide (CO₂) and methane. The report revealed that northern permafrost zone soils contain 1330-1580 billion tonnes organic carbon, twice the quantity currently present in the atmosphere. Warming conditions lead to microbial conversion of permafrost carbon into greenhouse gases that are released to the atmosphere, thus accelerating climate change.



Monthly change in the total mass (in Gigatonnes) of Greenland ice sheet between April 2002 and April 2016, estimated from GRACE measurements. Credit: NOAA

Highlights

- The average surface air temperature for the year ending September 2016 has been the highest since 1900. Moreover, record for monthly highs was set for January, February, October and November 2016.
- Minimum sea ice extent at the end of summer of 2016 was the second lowest since 1979.
- Snow cover extent during spring in the North American Arctic was the lowest since the US started making satellite record in 1967.
- In 2016, earlier onset of spring melting was observed. This was the second time since 1979 that such an instance was observed.
- Certain areas of the Arctic shelves experience prolonged ocean acidification events in shallow bottom waters. Cooler water temperatures and unique process of formation and melting of sea ice make Arctic waters disproportionately sensitive to ocean acidification when compared to the rest of the global ocean.

Ocean acidification:

Ocean acidification is the ongoing decrease in the pH of the Earth's oceans, caused by the uptake of carbon dioxide (CO₂) from the atmosphere. Seawater is slightly basic (meaning pH > 7), and the process in question is a shift towards pH-neutral conditions rather than a transition to acidic conditions (pH < 7). Ocean alkalinity is not changed by the process, or may increase over long time periods due to carbonate dissolution.

(Q)What are the factors that are leading to the depletion of ground water? Give the measures taken by the government to address the problem?

(Q).What is ocean acidification? What is its relevance in the present global warming condition?

2. Digitising agriculture in face of climate change

Topic: paper4 (gs 3-e technology aid to farmers, Extreme Weather Events, Agriculture, E-agriculture)

Extreme weather and changing geography threatened food security and livelihood in Africa and Asia this year. Digitising agriculture has become a necessity to battle climate change and protect the ... Progress thus far, Over 2.2 billion people in the world—or over 30 per cent of its population—earn their livelihood by farming small plots of land. The food produced by these farmers feeds most of the world. Smallholder farmer community forms majority of the world's poorest people and half of all food-insecure households globally.

Digitisation of agriculture or e-agriculture is seen as an emerging field focused on enhancing agricultural and rural development through improved information and communication processes. Digitisation interventions seek to achieve a triple bottom-line: increase farm productivity and incomes sustainably, help farmers adapt to climate change and reduce greenhouse gas emissions where possible.

E-agriculture projects have begun in many countries across the world, especially in Asia and Africa, home to a large part of world's smallholder farmers. However, most of these projects have not moved beyond the pilot stage. In a bid to facilitate countries to form national and regional strategies for digitisation of agriculture, the FAO along with the International Telecommunication Union, released a framework to guide formulation of national plans this year. The organisation offers technical assistance in the design, development and implementation of sustainable ICT solutions to address some of the key challenges in agriculture. The strategy guide was also customised for Bhutan and Sri Lanka in 2015.

As per the report, digitising agriculture can help countries meet goals effectively in many areas like agricultural extension and advisory services, promoting environmentally sustainable farming practices, disaster management and early warning system, enhancing market access, food safety and traceability, financial inclusion, insurance and risk management, capacity building and empowerment, among others.

But why is the progress slow? "E-agriculture is a multi-stakeholder process that involves bringing together many different ministries and departments as well as private sector players such as insurance, banking and mobile network operators. Countries have been experimenting with the use of technology for agriculture for a long time, however due to a lack of multi-stakeholder based approach in sustaining these initiatives, we see that many of these initiatives/solutions haven't moved from the pilot or experimenting phase," says Gerard Sylvester, regional knowledge and information management officer, FAO.

8 (Jan 2017)

ICT-based initiatives in different aspects of agriculture allow farmers access to information about agricultural value chains, risk management, market and price information, advisory services, policies. They also bring back data for agricultural research.

Even though there are no specific ICT-for-agriculture policies in many countries, e-agriculture strategy initiatives have been or are being put in place in countries such as Côte d'Ivoire, Ghana, Mali and Rwanda, and in regions such as the Caribbean.

FAO, that has 194 countries as its members, is working to scale up successful Digital Value Added Services together with our strategic partners and facilitate social entrepreneurship and relation with local governments.

Scope

Climate change adds on to the challenges facing agriculture and its largest group of stakeholders. Changing geography, including desertification and increased frequency of extreme weather events like drought, unseasonal rain have already started pushing smallholder farmers to the brink.

Regardless of their contribution to climate change, smallholder farmers will be the most vulnerable to its consequences. Without measures to help their agricultural sectors adapt to climate change, countries in Africa will face average crop losses between 10-50 per cent, as per an estimate.

Digitisation is integral to climate smart agriculture, a sector rapidly expanding. A recent market research report mentions that the smart agriculture market would be worth US\$18.45 billion by 2022.

Interventions using ICT have already taken shape. CGAIR, a partnership of international agricultural research centers, is funding some projects in India for local intervention as well as research. Major activities include test and develop portfolios of climate-smart interventions for different agro-ecological zones and farm types; climate-smart villages; weather-based insurance; dissemination of climate information based agro-advisories; mapping hotspots of germplasm collection and conservation.

The size of the potential e-agriculture sector is huge. E-agriculture provides the opportunity to many non-traditional players to be involved in the agriculture value chain. Newer revenue models and better and more efficient systems could be built using the data generated by connected systems.

'Paying for digitising agriculture is not mainstream yet'

Why do you think is e-agriculture important?

E-agriculture, describes an emerging field focused on the enhancement of agricultural and rural development through improved information and communication processes. More specifically, e-agriculture involves the conceptualization, design, development, evaluation and application of innovative ways to use information and communication technologies (ICTs) in the rural domain, with a primary focus on agriculture.

The world will need 50-70 per cent more food by 2050. Thus, the main challenge we face today is how to produce more food. A way to do that is to make the world's 500 million smallholder farmers more productive and efficient. ICT is crucial for this to happen.

Tell us more about SourceTrace and its work?

SourceTrace is a for-profit social enterprise that provides ICT solutions to a base of clients. Our services include farmer profiling, digitising certification, geo-positioning, geo-fencing, real-time data collection, crop information, among others. We have 60-70 clients across 15 countries. As per our estimate, around 300,000 farmers, involved with our clients, have benefitted from our ICT services.

How can digitisation of agriculture benefit smallholder farmers?

We can now disseminate information directly to the farmers, giving them the power of information and facilitating decision-making. It brings transparency in agricultural supply chains, removing the huge inequality that exists and guaranteeing adequate income to the farmers, who are generally at the losing end of the chain.

Another way in which digitisation will benefit smallholder farmers is by providing reliable data for research and policy-making, and to fill the current information gap. Better data will allow government as well as non-

(Q) Briefly discuss about the changing agricultural practices through ICT and to what extent it contributed for the agricultural growth?

government organisations to design farmer-friendly policies and planned interventions.

What is your biggest challenge in this sector?

The smallholder farmers function as individual units, which deprives them of bargaining power and access to credit, storage facilities and other benefits. They are economically deprived.

Another challenge is that paying for digitisation of agriculture is not a mainstream thought as yet.

3. Embrace of an unforgettable conservation crusade lingers on
Topic: paper 4 (gs 3 development, bio diversity, environment)

Impacts of Chipko are still visible in the state after four decades.

A movement cannot have an impact until people realise the need for it. But once the immediate objective is achieved, people may forget why they had embarked on it. So a movement must never cease, says our writer (left)

Women in the Himalayan villages hugged trees, braving the axes of loggers with government permits, and stopped the clear-felling of mountain slopes. This simple but effective way of protest that marked the Chipko movement and its protagonists has always intrigued me. Now that I am heading for the birthplace of the movement, a small town called Gopeshwar, anticipation and excitement sweep over me.

More than four decades have passed since the Chipko movement was born in March 1973. It was primarily a peasant's movement and at its heart was a Gandhian philosophy: self-sustenance of villages. But most villages in Uttarakhand continue to depend on the money-order economy. In fact, a staggering 3,600 of the state's 16,793 villages have turned into ghost habitations as people are abandoning agriculture and migrating to towns. The other aspect of the movement, which brought it glamour, is that it was largely led by simple, uneducated women who spent most part of the day fetching water from distant streams and foraging for firewood and fodder from steep mountainsides. In Reni village near Joshimath, women under the leadership of 50-year-old GauraDevi, drove out the lumbermen.

This is no mean feat in a society where egalitarianism is almost absent. The movement has inspired eco-feminism in India and worldwide, but has it brought liberation to the women of Uttarakhand? How does the present generation relate to its forests? And has the government changed its attitude towards forests?

Bartwal leads me to a group of women, who are leaving for home after spreading manure on their fields. Among them is Kanta Devi, who headed the village van panchayat (forest council) twice since 2002. She tells me how the lives of women have changed for better since the village grew its own forest. "Earlier, women in the village would leave home around 4 in the morning and return by 11 am. These days they collect leaves, dropped twigs and grass from the new forest and spend more time with their children," says Devi, who also plays an active role in anti-liquor campaigns. The landscape begins to change as we enter Chamoli district, bounded by Tibet in the north. Mountains become taller, forests denser and roads steeper. The sun is about to set when I spot Gopeshwar. There I meet Chandi Prasad Bhatt, the founder of the movement that swept Uttarakhand, then part of Uttar Pradesh, in the 1970s.

The movement for the first time catapulted the environment into political discourse and has shaped the understanding of environmentalism in India. But Bhatt prefers to introduce himself as a worker of the Sarvodaya Movement that worked for universal progress. He asks us to take a tour around Gopeshwar and villages in the Mandal valley—part of the Alaknanda valley—the next day before he could explain the impact of the movement.

Women turn over an oak leaf

Located at an elevation of 1,550 metres, Gopeshwar town, with a population of 100,600, spreads across the mountainside. Rows of houses and trees are neatly arranged along a steep, winding, litter-free tar road. In fact, in a sharp contrast to most Indian villages, almost all habitations in the valley appear clean. "People here do not litter as they feel responsible towards nature," says Bhupal Singh Negi from Gopeshwar, who participated in Chipko as a student and has since accompanied Bhatt in his mission.

Just below the town is a village of 300-odd households, also named Gopeshwar. It is surrounded by a thick forest of banj oak (*Quercusleucotrichophora*), an evergreen tree native to the Central Himalayas. "The village women have raised this forest," says Negi.

Inspired by the Chipko movement, the women planted the saplings on the barren village common land in the early 1980s and formed a committee to nurture them. Today, none of them is alive. But the saplings have grown into 12-18-metre-tall trees and allowed several other trees, shrubs and grass to grow underneath. Negi says young women from the village now take care of the forest. They pool funds to repair the stone wall around the forest meant to prevent cattle from straying into it. Two of them take turns to guard the forest every day. "This forest now fulfills all our needs. No woman in the village has travelled to other forests in the past 25 years," says Chandrakala Bist, a committee member.

The impact of Chipko is palpable across the valley. A study by the Space Applications Centre of the Indian Space Research Organisation, Ahmedabad, in August 1994 shows that between 1972 and 1991, at least 5,113 ha of forest has been raised outside the reserve forest boundary and in the vicinity of villages, in the watersheds of Nagolgad, Amritganga (Balkhila), Menagad and Kalpaganga and other watershed of the Alaknanda. This is 9.6 per cent of the total watershed area. Of the forest raised 1,854 ha has been exclusively on the barren land of the villages.

(Q). The Chipko movement has inspired eco-feminism in India and worldwide explain?

No forest, no gain

The impact of Chipko fades as we leave Chamoli. Slopes look increasingly bare as we pass through Pauri Garhwal and head towards Tehri Garhwal district. Vast stretches of chir pine dominate the landscape. At places deep gashes run up the sides of the mountains. Bhatt's words ring in my head: "Only forest cover can prevent landslides." At several places, farmlands are lying fallow.

"People here are losing interest in agriculture and forests," Aaranya Ranjan of Uttarakhand Jan Jagriti Sansthan

12 (Jan 2017)

(Q). Which of the following statements are correct regarding chipko movement:

- 1. a non-violent movement aimed at protection and conservation of trees and forests from being destroyed*
- 2. It was first started in the Chamoli district in the year 1973*
- 3. One of the major achievement of the Chipko movement was the ban on cutting the trees for the 15 years in the forests of Uttar Pradesh in 1980*

(a). only 1 (b) only 1 and 2 (c) only 2 (d) all of the above

Ans: (d)

(UJJS) in Jajal, Tehri Garhwal, tells me over the phone. UJJS was founded in 1983 by a group of veteran Chipko activists who wanted to make agriculture profitable. "Agriculture is no longer profitable due to attacks from wildlife and changing climate, while forests are out of bounds for people," he adds. This not only fuels large-scale migration but makes forests vulnerable to fires. Earlier, people would regularly take their cattle for grazing into the forest and collect litter from the forest to use it as bedding material and green manure. Now it remains accumulated in the forest and helps spread the fire."

"We are trying to make agriculture profitable for farmers by spreading the message of BBA. But people are leaving villages because of lack of educational and healthcare facilities," he says.

A major impact of the Chipko movement was that it prompted the Union government to amend the Indian Forest Act, 1927, and introduced the Forest Conservation Act 1980, which says forest land cannot be used for non-forest purpose. The same year, in another historical order, commercial green felling was banned in forests above the 1,000 metre altitude. "All these laws ensured conservation of forests but also disassociated people from forests," says Anil Prakash Joshi of GaonVachaoAndolan in Uttarakhand.

Tehri now witnesses a second wave of the movement under BBA and UJJS. In Dehradun, Chipko activists have set up Himalaya Action Research Centre that trains farmers in organic farming and micro-enterprises.

4. India's budget just declared

Topic: paper4 (gs 3 Economic development, Agriculture, Health Care)

Prime Minister Narendra Modi declares major schemes in his post-demonetisation message on New Year's Eve

Hardly a month before the Union budget, Prime Minister Narendra Modi, in his post-demonetisation public address on new year's eve, has announced major economic schemes. This declaration points towards certain

nervousness on the fallouts of **demonetisation**, especially keeping in mind the upcoming Uttar Pradesh state elections. In some ways, PM's speech has left the Union Budget 2017-18 redundant.

The crackdown on black money has led to a breakdown of rural and informal economy of the country. His new schemes seem to make an attempt to restore the rural economy and agriculture, which has been badly hit. The Prime Minister has announced incentives to increase rural consumption to push the country's GDP.

As Indians stand in line for their own money, the Prime Minister hopes to convince citizens that the continued struggle will benefit them in the future through his new schemes.

Here are some highlights from the PM's speech:

-PM has said that Rs 6,000 will be credited to accounts of all pregnant women to provide for delivery, vaccination and nutritious meals. The scheme will be implemented country-wide. This is an upgradation as the scheme allots Rs 4,000 to pregnant women in 54 districts of the country.

- He announced several tax benefits for those interested in taking home loans. As per the PM, people taking housing loan up to Rs 9 lakhs will get relief of 4 per cent and a three-per cent-relief on loans worth Rs 12 lakh and Rs 2 lakh.

- Modi added that generally, banks lower taxation on deposits when the deposit amount with them increases. He announced that senior citizens will get 8 per cent interest on deposits up to Rs 7.5 lakh. It is noteworthy that this is the current rate of interest on senior citizen account deposits.

- The PM asked for a serious discussion on the issue of combined elections in states as well as the Centre. However, he did not mention what will be the role of his government in initiating this discussion.

- He raised the credit guarantee for Micro, Small and Medium enterprises (MSME) from Rs 1 crore to Rs 2 crores, adding that loans from non-banking financial companies will also be covered in this. MSME sector employs 50 per cent of India's workforce. The sector has borne the brunt of demonetisation.

- In his speech, the PM suggested productive Rabi season and good harvest. But data doesn't seem to support his claim. As per Down To Earth's analysis, sowing reduced which led to the announcement of importing wheat.

- Modi announced interest-free loans for farmers who had taken loan from district cooperative banks during the initial 60 days of the Rabi season.

- The PM declared rural housing loans up to Rs 2 lakhs with interest subvention of three per cent. The loan will not only be for construction of new houses but also for expansion of current housing.

- The PM also announced a seemingly overambitious plan of expanding the reach of the recently inaugurated PradhanMantriAwasYojana by 33 per cent. The current target is to construct 3.3 million rural houses by end of financial year, March 2017. Interestingly, he had inaugurated this scheme in November, 2016.

- The PM said that National Bank for Agriculture and Rural Development (NABARD) will disburse farm loans worth Rs 20,000 crore.

Modi, in his speech, said that 300 million active Kisan Credit Cards (KCC) will be upgraded to RuPay credit cards. The total number of KCCs issued is around 750million.

For detailed summary of Economic Survey and Budget 2017 please refer to our other publication named ***“Economic Survey 2017 Simplified”***

Which of the following statements are true with respect to schemes introduced in post demonitisation period?

(1) Minimized the credit guarantee for msme sector

(2) Tax benefits provided for vehicle as well as house loans

(a) Only 1 (b) only 2 (c) both (d) none

Ans: (d)

5. Scientists move closer to understanding triggers for tsunamis

Topic: paper 4 and paper2 (geography, Tsunami, Natural Disasters, Disaster Management)

It's been a decade since one of the largest ever recorded earthquakes struck off the coast of Indonesia, triggering a massive tsunami which devastated coastal regions around the Indian Ocean and killed over 230,000 people.

While the world observes the passing of 10 years by holding memorial services for those who lost their lives, scientists have been working to improve their understanding of tsunamis and earthquakes.

The tsunami of 2004 was caused by a rupture in the 1,600 km stretch of the Sundamegathrust fault between Aceh (Indonesia) and Andaman islands. It was an event waiting to happen, say scientists. For more than five centuries, the Indo-Australian tectonic plate was subducting under the Sunda plate, but near the surface these plates had locked together, accumulating extremely high levels of tension along a huge stretch of the Sundamegathrust. The earth struggled to maintain its mounting pressure.

Then, in a decisive moment on December 26, 2004, the earth shrugged off its strain. In a matter of seconds, 1,600 km of ocean floor broke free and lurched upward, like a compressed spring released suddenly. The displacement of the sea floor was later calculated to be as high as six metre. It was the incredible force of this

15 (Jan 2017)

displacement that triggered the great tsunami of 2004.

The tsunami could not have been prevented, but it could have been anticipated, and the loss might have been greatly reduced. Despite the uncontrollable chaos we associate with natural disasters of this scale, there are patterns and rules governing even the greatest earthquakes and tsunamis.

Over the past decade, much scientific research has taken place along the Sundamegathrust, including the segment that ruptured in 2004.

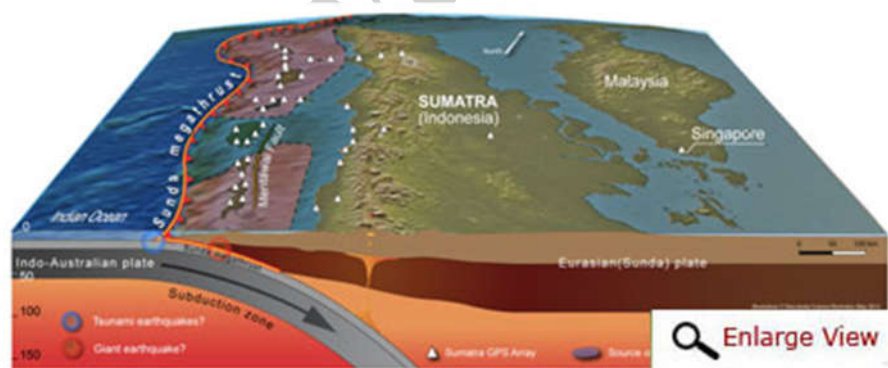
The term megathrust refers to an extremely large and active fault between convergent tectonic plates. These geological structures are responsible for all earthquakes of moment magnitude 9.0 or higher. Very few earthquakes are that powerful—a grand total of five have occurred since 1900, and the 2004 earthquake was, by far, the deadliest of these.

(Q) What is a super cycle and how it effects the occurrence of earth quakes?(150 W)

The 1,600 km stretch that ruptured during the 2004 earthquake was only one section of the 5,200 kilometer

The Sunda megathrust is a fault that extends approximately 5,500 km from Myanmar in the north, running along the southwestern side of Sumatra, to the south of Java and Bali before terminating near Australia. It is a megathrust, located at a convergent plate boundary where it forms the interface between the overriding Eurasian plate and the subducting Indo-Australian plate. It is one of the most seismogenic structures on Earth, being responsible for many great and giant earthquakes, including the 2004 Indian Ocean earthquake and tsunami that killed over 230,000 people. The Sunda megathrust can be divided into the Andaman Megathrust, Sumatra(n) Megathrust and Java(n) Megathrust.

Sundamegathrust, which arcs all the way from Burma to Australia, hugging the western coast of Sumatra.



Next big one

Since the last cluster of large earthquakes in the Mentawai region (in this case there were two) had occurred in 1797 and 1833, the records indicated that a new set of earthquakes was past due. Sieh recalled: "Just after we made this discovery—the paper had gone to the press, but not yet been printed—the first of the most recent

cycle began in September 2007." The earthquake that struck the Mentawai region had a moment magnitude of 8.5. Sieh's work on supercycles which had anticipated the earthquake was published soon after in Science in 2008.

There is widespread consensus that the 2007 earthquake marks the beginning of the latest cluster. There is widespread consensus that there is at least one greater earthquake to come in the Mentawai region.

6. Rohingya: In need of creative diplomacy

Topic: paper 3 (gs 2 India and neighbourhood relations)

The Rohingya muslims in Myanmar's Rakhine state are persecuted at home, rejected or barely tolerated in Bangladesh and elsewhere, and are sacrificed at the altar of strategic calculations by powerful neighbours. Moreover, the refugee crisis in Europe has overshadowed their plight.

Both institutionally discriminated and denied basic human rights in a legally-sanctioned manner as well as removed from the mainstream, over a million Rohingyas homeless

Recent events

The state-induced mass exodus has been taking place ever since nine police officers were killed by alleged Rohingya militants in October 2016. The result has been that hundreds of people have been killed at the hands of the military, many more hundreds have disappeared, scores of women sexually assaulted, villages razed to the ground, and tens of thousands have fled the country.

Myanmar, however, denies that its military has committed any wrong as also a government-appointed inquiry committee recently concluded that "there were no cases of genocide and religious persecution in the region".

Change, but no change

- *They are not recognised by the Myanmar government as an official ethnic group and are therefore denied citizenship in accordance with 1982 Citizenship Law promulgated by the erstwhile military junta.*
- *The false claim is that the Rohingyas were never present in Myanmar until the British engineered their migration in 1823 from East Bengal*
- *Even those who arrived in Burma post-1823 could not go back to Bangladesh now given that they have no citizenship claims there. This effectively makes them a stateless people.*

What makes the anti-Rohingya violence in Myanmar even more distressing is that all of this is now happening under the stewardship of Aung San Suu Kyi, who was awarded the Nobel Peace Prize for her courageous and inspiring "non-violent struggle for democracy and human rights".

Ms. Suu Kyi's precarious political position makes it hard for her to respond to the crisis as effectively as she could have. Despite the return of democracy in 2015, the military continues to have a strong hold over the civilian government in Myanmar, especially on key issues such as defence, border affairs and home affairs. The country's constitution also reserves one-fourth of the seats in Parliament for the military.

And yet, Ms. Suu Kyi's response to the Rohingya crisis has been both inadequate and half-hearted. For example, she has not fully acknowledged the extent of violence the Rohingyas are systematically subjected to by the government she leads. In August last year, Ms. Suu Kyi formed an advisory commission on Rakhine State under the chairmanship of Kofi Annan, former Secretary General of the United Nations, seems to be an advisory body for development and reconciliation rather than one that can objectively investigate violence committed against the Rohingya community.

Geostrategic considerations

The predicament of the Rohingyas is also a result of contemporary geopolitical realities and strategic calculations by key stakeholders in the region and elsewhere.

- The Western world is busy with the unfolding of events in Syria and the resultant refugee crisis. Hence they would not want to get bogged down with the Rohingyas, whose plight has no direct bearing on the West's interests.
- Having steadfastly invested in the pro-democracy movement led by Ms. Suu Kyi, and by recently lifting the 20-year-long sanctions against Myanmar, the U.S. finds itself in no position to bargain or put pressure on the country.
- In May 2015, when the UN Security Council held a closed-door briefing on the human rights situation in Myanmar, China made it clear that it was an internal matter of Myanmar. For Beijing, its relationship with Myanmar's Generals is important to gain access to the country's natural resources, and recruiting Myanmar for China's larger economic goals which include opening a land corridor to the Bay of Bengal.

Way forward: Need for imaginative diplomacy

Although New Delhi's reluctance to speak out publicly about the violations against the Rohingyas is understandable, it can ill afford to ignore the crisis in Myanmar.

•Even if human rights considerations are the least of New Delhi's worries, it is clearly in its interest to ensure that stability and peace return to the Rakhine state. For one, as and when peace returns to Myanmar, India can ask the latter to rehabilitate the Rohingyas (like it did vis-à-vis East Pakistan refugees after the 1971 war).

•Second, a stable and democratic Myanmar will naturally gravitate towards New Delhi. Third, and perhaps most importantly, the Rohingya crisis, if it remains unsettled, can become a path toward radicalisation and pose a greater security threat for India. There are reports of increasing radicalisation among sections of the Rohingya community.

India's calculations

India, a traditional home for Myanmar's pro-democracy activists, has been reluctant to either speak out about the violence against the Rohingyas or accommodate them in significant numbers.

- Beijing's closeness to Myanmar clearly worries New Delhi.
- Its reluctance also comes from the fact that Myanmar's assistance is seen as significant in dealing with the insurgency in the Northeast.
- Moreover, should we expect China, or for that matter India, to speak out against Myanmar's human rights violations when both have enough human rights skeletons in the cupboard?

In any case, the Rohingyas are of no strategic value to anyone. Compare this to how both India and China rushed in with aid during the earthquake in Nepal nearly two years ago.

New Delhi's record of accommodating the Rohingyas is manifestly better than that of Beijing as it has accepted thousands of Rohingyas over the past many years. Yet, this policy may already be undergoing some changes, slowly but steadily. Today, many Rohingyas are either turned away while trying to enter

18 (Jan 2017)

the country or sent to jail for illegal entry. Recall that India has not signed the 1951 United Nations Refugee Convention or its 1967 Protocol which require countries to accept refugees.

The new bill, the Citizenship (Amendment) Bill, 2016, proposes that Hindus, Sikhs, Jains, Parsis and Christians entering India from Afghanistan, Bangladesh and Pakistan not be considered as “illegal immigrants”. While the proposed amendment is technically ‘pro-minority’, it certainly is anti-Muslim.

7. The deadwood that's bureaucracy

Topic: paper3 (gs 2 governance, constitution, polity), Paper 5(gs 4 ethics, integrity, aptitude)

The Central government's recent decision to compulsorily retire two Indian Police Service (IPS) officers and one Indian Administrative Service (IAS) officer for 'non-performance' is bold and laudable.

What do the rules say?

The compulsory retirements are in pursuance of the service rules that contemplate a review either when an officer reaches the age of 50 or completes 25 years of service.

Was it the first time?

There was a similar, but feeble, attempt in the wake of the Emergency under Prime Minister Indira Gandhi. It has taken more than 40 years for the Centre to again administer a shock to a complacent and growingly dishonest civil service.

Cynics may say this is a gimmick or a symbolic act that would hardly mend the ways of the bureaucracy. This is a defeatist approach. We need to uphold the basic democratic principle of a healthy executive control over the civil service, and actions like these, undertaken clinically and without malice, are a sine qua non if we want to enhance the currently poor standards of public administration.

Well treated yet indolent

We know that our All India Services and the Central Services are paid well by Indian standards. After passing the Union Public Service Commission examination, the system takes care of you.

- Only around 10 per cent of officers remain current in their knowledge and exert themselves to keep the administrative system in shape.
- Except for a few dedicated officers, both in the higher echelons and in the lower rungs, it is a sad fact that ordinary citizens mostly cannot get through to any senior member of the bureaucracy, either in person or over the telephone, to express their grievances.
- The malady of non-performance arises from the fact that not all positions in governments at the Centre and in the States are meaningful. You have a bloated bureaucracy, and portfolios are created only to accommodate officers. As a result, many officers do not have more than a few hours of work a day.
- A product of this is indolence, and a long spell of inactivity leads to loss of initiative and a desire to be productive. It is against this backdrop that one should study the phenomenon of how some senior officers become deadwood, and how only a few select ones get to be in important positions during their careers.
- More appalling is the number of officers who choose to abandon integrity and line their pockets.
- Lack of integrity is undeniably not the monopoly of any one service. The IPS, IAS and the Indian Forest Service (IFS) each have their own sizeable number of dishonest officers. The tragedy is that many officers, early in their careers, fall into the trap and never retrace their paths.

19 (Jan 2017)

(Q)How the probity of a civil servant is undermined by the intervention of judiciary?

Models of probity

The failure to show the right way to those getting into the services is of supervisory officers and not of

Judicial intervention: The only obstacle in the way of drastic civil service reform is the judiciary that overturns or stays every administrative action against an erring senior officer. Courts should stop interfering in disciplinary matters once they are satisfied that prescribed procedures had been followed in a case coming up before them and there is no malice writ large on a decision.

the much-maligned politician who may be guilty of other misdeeds. For example: If a District Collector or a District Superintendent of Police is himself not a model of efficiency and honesty, the trainee Assistant Collector or Assistant Superintendent of Police cannot go elsewhere to learn the virtues of hard work and probity.

If the system is functioning and has not collapsed, it is because we still have a handful of outstanding men and women in the higher bureaucracy, who are motivated by a spirit of service and have the conviction that they will be models to young officers.

8. Universal Immunisation Programme (UIP)

Topic: paper 3(issues relating to development and management of social sector/services relating to health)

The basket of vaccines in India's Universal Immunisation Programme (UIP) was static for many years — until the entry of the Pentavalent [which protects against 5 infections — diphtheria, tetanus, pertussis, hepatitis B, and Haemophilus influenzae Type B (Hib) in one shot], and Japanese Encephalitis vaccines in the last decade.

There have been regular additions to the basket since, and two new vaccines — measles-rubella and pneumococcal conjugate were added along with rotavirus vaccine, was extended to more states.

What is rubella, and why is vaccination for it important?

More commonly known as German Measles, Congenital Rubella Syndrome, or CRS, is believed to affect about 25,000 children born in India every year. Symptoms can include cataracts and deafness, and the disease can also affect the heart and the brain.

- Some infants suspected to have intra-uterine infection were found to have laboratory evidence of CRS.
- Some children with congenital anomalies have laboratory evidence of CRS.
- 10-30% of adolescent females and 12-30% of women in the reproductive age-group are susceptible to rubella infection in India.

The Health Ministry will run a campaign among children aged 9 months to 15 years before making the vaccine a part of routine immunisation. Two shots will be given — one between the ages of 9-12 months, the other at age one-and-a-half. The monovalent measles vaccine is already part of the UIP basket of 10 vaccines; it will be discontinued once MR is introduced.

Expected question:

(Q) 1. Pentavalent vaccine protects against 5 infections — diphtheria, tetanus, pertussis, hepatitis B, and Hib in one shot.

2. Measles is caused by infection with the rubeola virus.

3. Measles vaccine is absent in UIP of India.

Choose the correct statements from the above:

(A) only 1 (B) only 2 (C) only 1 and 2 (D) all

Ans: (c)

And what is pneumococcal conjugate vaccine (PCV)?

PCV is a mix of several bacteria of the pneumococci family, which are known to cause pneumonia — hence 'conjugate' in the name. Pneumonia caused by the pneumococcus bacteria is supposed to be the most common.

Pneumonia and diarrhoea have long been responsible for the most child deaths in India — pneumonia is responsible for about 20% of under-5 child mortality in India, of which half are of pneumococcal origin.

Three doses will be administered at one-and-a-half months, three-and-a-half months and 9 months.

The rotavirus vaccine: The rotavirus vaccine first became a part of UIP in April 2016. Rotavirus infections are the most common cause of diarrhoea in children. An estimated 1 lakh children die every year of the disease.

9. The world's longest human chain'

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

Bihar has claimed to have formed the **world's largest human chain** to reaffirm commitment towards liquor ban. The chain was billed as a social message against addiction, and specifically in favour of prohibition. Over three crore people participated in the chain, stretching 11,400 km in all the 38 districts of the State.

Bihar prohibition and excise act, 2016:

This is a new and more stringent liquor-ban law with provisions such as arrest of all adults in the family if anyone consumes or stores alcohol.

- It aims to ensure that the ban on sale and consumption of alcohol, including Indian-made foreign liquor (IMFL), continues in Bihar.
- Those flouting the ban face up to 10 years in jail, a fine of up to Rs 10 lakh and there is also a provision to confiscate the house or premises where liquor is stored or drunk.
- Though in a rare case, it also prescribes death penalty if people die after consuming hooch.
- Enforcement of the new law, calculated to impose prohibition in a holistic manner, would repeal the previous excise laws in the state.

10. After jallikattu, kambala

Topic: paper 3(governance, constitution, polity, social justice)

With an Ordinance promulgated to lift the ban on jallikattu in Tamil Nadu, the demand for lifting the ban on kambala — buffalo racing — is gaining momentum in coastal Karnataka.



Backgrounder:

Karnataka government in November last informed the High Court, during the hearing of a PIL petition filed by PETA, that it had withdrawn the permission given to hold kambala based on the Supreme Court's order on jallikattu.

Kambala:

Kambala is an annual Buffalo Race held traditionally under the auspices of local land lords and households or Patel of village, in coastal Karnataka, India. The Kambala season generally starts in November and lasts until March.

- The contest generally takes place between two pairs of buffaloes, each pair raced in wet rice fields, controlled by a whip-lashing farmer.
- The 'track' used for Kambala is a paddy field filled with slush and mud.
- The "Kambala Committee" is formed and it usually arranges Kambala in several categories.
- People place massive bets on the buffaloes to win and one can witness more than 20,000 spectators in a well-organised Kambala, egging on and cheering the buffaloes to complete the race.
- In traditional form of Kambala, racing is non-competitive, and buffalo pairs run one by one in paddy fields.
- A ritualistic approach is also there, as some agriculturists race their buffaloes for thanks giving (to god) for protecting their animals from diseases.

22 (Jan 2017)

- The buffaloes developed for the race are carefully fed and some owners of the buffaloes have even built separate swimming pool for competing buffaloes.

The controversy

- In recent times, Jallikattu has attracted protests from animal rights organizations in India. People for the Ethical Treatment of Animals (PETA) and Federation of India Animal Protection Agencies (FIAPA) have been at the forefront of opposing Jallikattu since as long back as 2004.
- The Animal Welfare Board of India (AWBI) first filed a case in the Supreme Court of India for an outright ban on Jallikattu because of the cruelty to animals and the threat to public safety involved.
- The AWBI argued that the sport exploits the bulls' natural nervousness as prey animals by deliberately placing them in a terrifying situation and forcing them to run away. It also pointed out that sometimes, spectators get injured or even die. There have also been cases of bulls getting injured.
- In 2010, the Supreme Court permitted the Tamil Nadu government to allow Jallikattu for five months in a year, and directed the District Collectors to make sure that the animals that participate in Jallikattu are registered to the Animal Welfare Board. An AWBI representative was also allowed to be present at Jallikattu events.
- However, in 2011, the Ministry of Environment and Forests under the UPA government banned the use of bulls for sport, thereby effectively banning the festival. However, the Tamil Nadu Regulation of Jallikattu Act 2009 enabled Jallikattu to carry on unabated in the state.
- Between 2010 and 2014, at least 17 people were killed and 1000-odd injured during Jallikattu events.
- Finally, in May 2014, the apex court struck down the 2009 Act, and banned the practice. It further said that any flouting of the ban would result in penalties under the Prevention of Cruelty to Animals Act, 1960. The Supreme Court also ruled that cruelty is inherent in these events, as bulls are not anatomically suited for such activities and undergo 'unnecessary pain and suffering' as a result of the festival.
- The tug of war between the apex court and the Central government continued however, with the government on January 8, 2016 allowing the practice of Jallikattu under certain conditions, through a notification. The Supreme Court then reimposed the ban on the event in July of the same year.
- Supreme Court reasoning
- The Supreme Court said "bulls cannot be allowed as performing animals, either for Jallikattu events or bullock-cart races in the state of Tamil Nadu, Maharashtra or elsewhere in the country."

Jallikattu has been known to be practiced during the Tamil classical period (400-100 BC). It was common among the ancient people Aayars who lived in the 'Mullai' geographical division of the ancient Tamil country. Later, it became a platform for display of bravery and prize money was introduced for participation encouragement. A seal from the Indus Valley Civilization depicting the practice is preserved in the National Museum, New Delhi. A cave painting in white kaolin discovered near Madurai depicting a lone man trying to control a bull is estimated to be about 2,500 years old.

- The SC order also identified "the five freedoms" of animals, including freedom from hunger, thirst and malnutrition, freedom from fear and distress, freedom from physical and thermal discomfort, freedom from pain, injury and disease, and freedom to express normal patterns of behaviour.

- Also, through various reports, affidavits and photographs, The Animal Welfare Board of India(AWIB) had argued that Jallikattu bulls are physically and mentally tortured for the pleasure and enjoyment of human beings. They had also produced visual evidence for torture and cruelty to bullocks in Maharashtra's bullock-cart races.
- According to AWBI, Jallikattu or bullock-cart races conducted in this way have no historical, cultural or religious significance in Tamil Nadu or Maharashtra, and that the Prevention of Cruelty to Animals (PCA) Act, 1960, must supersede any such practice.
- A research conducted by PETA's investigators also found that the bulls were being disoriented, deliberately. The bulls' tails were allegedly bitten and twisted; stabbed, punched and dragged on the ground.
- Present outrage
- In 2016, the Environment Ministry modified its earlier notification and declared that the sport could continue despite the existing ban. This was in direct contravention with the top court order, and was duly challenged by animal welfare organisation such as People for the Ethical Treatment of Animals (PETA).
- Subsequently, a stay order was issued by the court. Questioning the "necessity of such festivals", the Supreme Court bench had restrained the Tamil Nadu government from conducting Jallikattu.
- Protests in favour of Jallikattu began once again in early January 2017, before Pongal. The Supreme Court on January 12 rejected a plea by lawyers seeking urgent ruling on a batch of petitions filed before it against the ban on Jallikattu. This prevented Jallikattu from taking place during Pongal and infuriated large sections of the Tamil Nadu populace.
- Defying the Supreme Court ban, the event was held in some places in the state, especially in Madurai, where the police arrested hundreds of people. The protest which began in the rural areas, soon found support from the students, IT professionals and even sports persons and actors in urban areas.
- Protesters arguments
- They consider it symbolic of Tamilian pride as it is an ancient tradition that has been carried on for years. Jallikattu witnesses thousands of participants, attempting to tame the bulls by latching to their horns or humps. Its innumerable references could be found in Dravidian Literature and the indigenous population of Tamilnadu has held this event for years. The Jallikattu protests are fuelled by the view that the ban impinges on the cultural identity of the populace.
- The Supreme Court's decision to ban Jallikattu has brought down prices of the sport bulls. From Rs 2 lakh to Rs 3 lakh, they began selling at mere Rs 5,000. This has stirred anger amongst the people.
- Apart from the cultural angle, there is a small economy involved. Rearing of sport bulls not only give small farmers and the rural poor a chance to make a low investment in a calf and get a big return if it performs well in a Jallikattu; rearing a Jallikattu bull also supports a range of rural poor who make accessories for the bull.
- Decades ago, the government started discouraging rearing of native breeds of bulls through various laws. Cows of the native breed yield far less milk than the cross-bred cows such as Jersey and Holstein Friesian. Increasing foreign cattle breeds was one government measure to raise milk yield in India. But supporters of native breeds argue that foreign breeds might not be a better option in the long run. And Jallikattu is one big way people keep on rearing native cattle.
- Also, since the government wanted to encourage cross-bred cattle, it had forcibly neutered native bulls to decrease the number of native cows or put stringent controls on breeding through native bulls. The supporters of native breeds argue that this has led to foreign companies creating monopoly on semen. Artificial insemination, where semen from one bull can impregnate scores of cows, is criticised because it is believed to destroy the genetic diversity of cattle. Events such as Jallikattu incentivise people to rear native bulls which ultimately help preserve genetic diversity.
- The milk of native breeds is also believed to be more nutritious than of the foreign breeds. In the future, the low-yield milk of native cows can generate a huge demand as increasingly people perceive it to be more nutritious. If native breeds are preserved, as Jallikattu does, it can lead to

24 (Jan 2017)

a new phenomenon in the dairy sector in future. People may be willing to pay more for the milk of a native cow which can offset the loss due to low yield.

- Tamil Nadu Governor has now promulgated an ordinance for the conduct of jallikattu. The Union government has also cleared the state's draft ordinance to amend the Prevention of Cruelty to Animals Act, 1960, enabling the conduct of jallikattu.
- The state government has issued ordinance after obtaining the necessary prior instructions of the President as envisaged under Article 213 of the Constitution. Now, the jallikattu will be conducted with the customary fervour all over the state with all necessary safeguards.
- The protesters say their fight is for their culture and Tamil pride and reject the allegation that Jallikattu is cruel to the bulls. They have also demanded that animal rights organisation PETA, which has lobbied against Jallikattu, be banished from the state. The protesters say the law on cruelty to animals must be amended to include Jallikattu bulls on a list of trained animals used in the military or for educational and scientific purposes.
- The Jallikattu has emerged as a lightning rod for a spectrum of issues, ranging from drought relief to farm debt in the state. In fact, protestors across Tamil Nadu have hinted that their passion for Jallikattu stems from anguish over rural distress. In dealing with the street protests, the political establishment in Tamil Nadu ought not to be blind to the big picture.
- The proper course for the Centre and the State government is to persuade the Supreme Court that a jallikattu that does not involve, or at least almost eliminates, cruelty to animals and that guarantees the safety of spectators and participants alike is indeed possible. It is all right if popular sentiment can influence legislation, but it cannot undermine the rule of law.

11. A sunspot with centre twice the size of Earth

Sunspots: Sunspots are darker, cooler areas on the surface of the sun in a region called the photosphere. The photosphere has a temperature of 5,800 degrees Kelvin. Sunspots have temperatures of about 3,800 degrees K. They look dark only in comparison with the brighter and hotter regions of the photosphere around them. Sunspots can be very large, up to 50,000 kilometers in diameter.

Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

A new view of the dark, contorted centre of a sunspot that is nearly twice the diameter of the Earth, along with other invisible details of our Sun, has been unveiled by scientists.

- The Atacama Large Millimetre/submillimetre Array (ALMA) antennas image the millimetre-wavelength light emitted by the Sun's chromosphere – the region that lies just above the photosphere, which forms the visible surface of the Sun.
- Researchers including those from European Southern Observatory (ESO), produced the images as a demonstration of ALMA's ability to study solar activity at longer wavelengths of light than are typically available to solar observatories on Earth.

ALMA telescope:

The Atacama Large Millimeter/submillimeter Array (ALMA) is an international partnership of the European Southern Observatory (ESO), the U.S. National Science Foundation (NSF) and the National Institutes of Natural Sciences (NINS) of Japan, together with NRC (Canada), NSC and ASIAA (Taiwan), and KASI (Republic of Korea), in cooperation with the Republic of Chile.

- ALMA -the largest astronomical project in existence- is a single telescope of revolutionary design, composed of 66 high precision antennas located on the Chajnantor plateau, 5000 meters altitude in northern Chile.

25 (Jan 2017)

- ALMA allows scientists to unravel longstanding and important astronomical mysteries, in search of our Cosmic Origins.

12. WTO and India: the case of steel

Paper 2 Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

Why in news?

Japan is threatening to take India to the WTO over restrictions that nearly halved its steel exports to the South Asian nation over the past year, a step that could trigger more trade spats as global tensions over steel and other commodities run high.

Concerned

With global trade friction increasing, Japan's defence of an industry that sells nearly half of its products overseas is getting more vigorous.

Besides concern over India's protection of its domestic steel industry, Japan is also worried about the more rough and tumble climate for global trade being engendered by incoming U.S. President Donald Trump, and feels it must make a strong stand for open and fair international markets.

Way ahead:

The two countries will shortly discuss over this issue. But, if consultations fail to resolve the dispute, Japan may ask adjudication by a WTO panel.

13. Startup India's flaws are beginning to tell

Topic: paper4 technology and economic development

Government's ambitious 'Startup India, Stand Up India' campaign aimed at boosting entrepreneurship completed one year. The Startup India initiative received few applications of which half were recognized as startups by the Department of Industry Policy and Promotion (DIPP).

"Startup India, Stand Up India"

Start-ups and entrepreneurship are critical to India's efforts to restart private investment into the economy, in the face of risk aversion, stalled or slow investments from corporate India. Start-up India' initiative was launched to help start-ups and catalyse entrepreneurship.

India imposed duties of up to 20% on some hot-rolled flat steel products in September 2015, and set a floor price in February 2016 for steel product imports to deter countries such as China, Japan and South Korea from undercutting local mills.

Tokyo says India's actions are inconsistent with WTO rules and contributed to the plunge Japan's position from 11th largest exporter to India from 5th largest.

The Start-up India Action Plan lists out a comprehensive set of structural and regulatory reforms – Income tax exemption, easing compliance through reduction of regulations and having fixed qualifications as to what a ‘start-up’ is.

- The action plan also provided an 80% waiver on patent filing fees by start-ups and advisory services.
- It also created a Rs.10,000 crore fund-of-funds which is to be managed by professionals drawn from the private sector.

Unable to meet expectations

- A tax break of three years has been given in the scheme. Anyone who has business sense knows that only a few of start-ups will be profitable in the first three years and so this handful can avail themselves of the tax break.
- When it comes to the ‘fund of funds’ under the initiative, Rs500 crore has already been provided as fund corpus in 2015-16 and Rs. 600 crore has been earmarked for 2016-2017. Cumbersome procedures to access funds from the Rs. 10, 000 Cr. corpus have, however, made the plan a non-starter and SIDBI has committed only Rs. 129 crore to Venture capitalists so far. So, the progress has been slow.
- Under the scheme, bank only puts in 15% of the total corpus, while it is the VC that has to bring the remaining 85% to the table. And, this year, VCs have struggled to raise that kind of money.
- There is also the government’s requirement that participating investors have to be registered with the Securities and Exchange Board of India. But some of the biggest VCs aren’t, and the government has essentially shut them out.
- There is still no exemption is MAT (Minimum Alternate Tax) which could’ve helped businesses to cut losses.
- A lot of entrepreneurs and investors think that demonetization and the lack of exits in start-ups by investors are adding to the gloom; After demonetisation, the investors are afraid to exit their investment due to slump in the IPO (initial public offering) market.
- The scheme sets up an ‘Inter-Ministerial Board’ led by the Department of Industrial Policy and Promotion which ‘validates’ the innovative nature of an enterprise, thereby qualifying it as a start-up – an involvement of government in this ecosystem that is hardly desirable.
- It also exempts start-up from inspection under a fixed number of labour laws — six to be specific. But, there are about 45 laws at the central level and about four times this number at the state level. The Centre needs to work with the States to ensure a smooth rollout of the benefits under the Action Plan and avoid discord between policies at the two levels.
- It also requires a ‘recommendation’ from an incubator setup by the government or be supported by an incubator in a post-graduate institution recognised by the government — this need for validation and recommendation goes against the very steps the Action Plan takes to reduce government involvement. This additional layer of bureaucracy could slow down the starting up process and needs to go.

Around 800 start-ups founded after 2011 have shut shop already, signaling a deteriorating health of the sector. The year 2015 had seen an 87% increase in the number of startups being founded, the number dropped by 67% in 2016. Funding has also decreased in 2016 by around 47.7%.

A year on since the launch of Startup India Stand Up India campaign, the mood is slightly muted

While initiatives like start up certification, roping in bodies like CBDT to give tax breaks to entrepreneurs, setting up incubators and tinkering labs have been lauded there is a lot more that could have been done. While the progress is slow, the ecosystem feels much supported as the government put light on their struggles and achievements. However, there is a lot more that can be done in programming and implementation of start-up India action plan.

27 (Jan 2017)

Start-up India is consistent with the PM's call for innovation when he launched Digital India. The Start-up India Action plan is a good start to this – but will need continued support and evolution to make this a true, deep revolution for the youth of India.

14. Panel on Mahanadi and its tributaries

Paper 2 Topic: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

Ministry of Water Resources, River Development and Ganga Rejuvenation has constituted a negotiations committee to assess availability and utilisation of waters of Mahanadi and its tributaries.

The committee has been set up with reference to complaint of State of Odisha under section 3 of the ISRWD Act, 1956 regarding utilisation of waters of Mahandi Basin.

- The committee will also examine existing water sharing agreements on river Mahanadi and will consider claims of Odisha, Chhattisgarh, Madhya Pradesh, Maharashtra and Jharkhand regarding availability and utilisation of waters of these rivers.

What's the dispute?

The 850km length of the Mahanadi river is divided almost equally between Chhattisgarh, where it is born, and downstream Odisha. Last year Odisha government opposed barrages that Chhattisgarh has been constructing.

Odisha government alleges that these barrages are meant to feed industrial projects and will block the flow of water into Odisha whose dependence on the river is greater. Chhattisgarh has denied this allegation pointing out that much of the river in Odisha flows untapped and straight into the sea.

15. MSME Cooperation amongst Indian Ocean Rim Association (IORA)

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

Workshop on MSME Cooperation amongst Indian Ocean Rim Association (IORA) Member countries was recently held in India. This workshop aims to strengthen economic relationship amongst the member countries in the field of trade and investment facilitation especially in MSME sector.

This Workshop will facilitate exchange of ideas, concerns and experiences of IORA member states and would help evolve a common MoU to address the emerging challenges in the region in MSME sector.

Indian Ocean Rim Association (IORA)

- The IORA is a regional forum, tripartite in nature, bringing together representatives of Government, Business and Academia, for promoting co-operation and closer interaction among them.
- It is based on the principles of Open Regionalism for strengthening Economic Cooperation particularly on Trade Facilitation and Investment, Promotion as well as Social Development of the region.
- It seeks to expand mutually beneficial cooperation through a consensus-based, evolutionary and non-intrusive approach.
- IORA is the only regional forum linking most countries on the Indian Ocean rim through an annual Foreign Ministers' meeting.
- The Coordinating Secretariat of IORA is located at Ebene, Mauritius.
- The Association comprises 20 member states and 7 dialogue partners, the Indian Ocean Tourism Organisation and the Indian Ocean Research Group has observer status.

It is an international organisation consisting of coastal states bordering the Indian Ocean. IORA was established in 1997 to promote cooperation in the Indian Ocean region. It was formerly known as the Indian Ocean Rim Initiative and Indian Ocean Rim Association for Regional Cooperation (IOR-ARC).

16. CCI imposes penalty on cartelization

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

Competition Commission of India is a body responsible for enforcing The Competition Act, 2002 throughout India and to prevent activities that have an adverse effect on competition in India. It was established on 14 October 2003. It became fully functional in May 2009.

The Competition Commission of India (CCI) has imposed penalties on three firms for bid rigging of tenders floated by Indian Railways for procurement of Brushless DC fans in the year 2013.

CCI:

- CCI consists of a Chairperson and 6 Members appointed by the Central Government.
- The duty of the Commission is to eliminate practices having adverse effect on competition, promote and sustain competition, protect the interests of consumers and ensure freedom of trade in the

markets of India.

- The Commission is also required to give opinion on competition issues on a reference received from a statutory authority established under any law and to undertake competition advocacy, create public awareness and impart training on competition issues.

The Competition Act, 2002 prohibits anti-competitive agreements, abuse of dominant position by enterprises and regulates combinations (acquisition, acquiring of control and Merger and acquisition), which causes or likely to cause an appreciable adverse effect on competition within India.

17. India Innovation Index

Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

The World Economic Forum, NITI Aayog, the World Intellectual Property Organization and the Cornell University are working together to develop an India Innovation Index that will provide impetus to Indian states to drive the innovative spirit.

- This index will encourage states to compete with each other and, in turn, lead to better policies for inclusive growth.
- The first ranking is expected to be released at the India Economic Summit in New Delhi in October 2017.
- The index will be based on key pillars of innovation and sub-indices that together will assist in tailoring policies that promote inclusive growth. The pillars include the strength of institutions, capacity of human capital and research, supporting infrastructure and the level of business sophistication, among others.
- The index will measure and rank the innovation performance of all Indian states with the aim of moving India towards an innovation-driven economy.
- The index will spur competition and ensure progress towards innovation at the local level in India.

The Foreign Investment Promotion Board (FIPB), housed in the Department of Economic Affairs, Ministry of Finance, is an inter-ministerial body, responsible for processing of FDI proposals and making recommendations for Government approval.

•It considers and recommends foreign direct investment (FDI) which does not come under the automatic route.

•It provides a single window clearance for proposals on FDI in India.

18. FIPB clears 6 FDI proposals

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

Inter-ministerial body FIPB has approved six investment proposals

India allows FDI in most sectors through the automatic route, but in certain segments considered sensitive for the economy and security, the proposals have to be first cleared by FIPB.

FIPB

Composition

- Secretary to Government, Department of Economic Affairs, Ministry of Finance – Chairperson
- Secretary to Government, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry
- Secretary to Government, Department of Commerce, Ministry of Commerce & Industry
- Secretary to Government, Economic Relations, Ministry of External Affairs
- Secretary to Government, Ministry of Overseas Indian Affairs.

On what basis decisions on FDI are taken by the FIPB?

The extant FDI Policy, Press Notes and other related notified guidelines formulated by Department of Industrial Policy and Promotion (DIPP) in the Ministry of Commerce and Industry are the bases of the FIPB decisions.

Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

19. Psyche

NASA is preparing to send a spacecraft to a giant “metal” asteroid that may tell scientists the secret of how our solar system was formed.

- The mission is called “Psyche”. It is focused to know whether the asteroid, called “16 Psyche” and thought to be made of iron and nickel, could be part of what was an earlier planet perhaps as large as Mars.
- Psyche robotic mission will launch in October 2023 and will arrive at the asteroid in 2030, following an Earth gravity assist spacecraft manoeuvre in 2024 and a Mars flyby in 2025.

‘16 Psyche’ is the only known object of its kind in the solar system. It is nearly three times farther away from the sun than is the Earth. The asteroid measures about 210 kilometres in diameter.

Scientists believe that the asteroid might have lost its outer core through a series of collisions and the mission could shed light on how planets and other masses broke up into cores, mantles and crusts years ago.

Paper 1 Topic: Indian culture will cover the salient aspects of Art Forms, Literature and Architecture from ancient to modern times.

20. Tangaliya weavers

Government of India has decided to facilitate Tangaliya weavers in purchase of looms, by providing them an assistance amounting to 90% of the price of looms. The government has also announced the formation of a special association of Tangaliya workers, which will work for their interest.

Tangaliya

Tangaliya is a 700-year-old indigenous weave of Gujarat which employs an exquisite technique of weaving, using raw wool yarn.

Tangaliya is a dotted woven textile of Surendranagar district, Saurashtra. It is found only in Gujarat.

- It is usually worn as a wraparound skirt by the women of the Bharwad shepherd community.
- Tangalia designs are used for preparing Shawl, Dupatta, Dress material and products of Home décor & accessories such as bedsheets, pillow covers etc.
- The patterns formed during weaving process to create design in dots for floral and geometrical motifs by using cotton or woollen yarn.

Paper 3 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

21. Draft steel policy

The new draft National Steel Policy of 2017 has been released. The Ministry of steel has invited comments on the policy from all the stakeholders and the public.

The proposed National Steel Policy 2017 (NSP 2017) is an effort to steer the industry to achieve its future potential and strategy to deal with various impediments like high input cost, availability of raw materials, dependency on imports, financial stress etc.

- Under the policy, the Steel Ministry has proposed setting up greenfield steel plants along India's coastline to tap cheap imported raw materials such as coking coal and export the output in a more cost-effective manner.
- The policy, which envisages to more than double India's domestic steel production capacity to 300 million tonnes by 2030-31, anticipates a requirement of ₹10 lakh crore of fresh investments to meet that goal and expects at least 11 lakh new jobs being created in the process.
- The draft policy also aims at increasing per Capita Steel Consumption to 160 kg by 2030-31 and encouraging industry to be a world leader on energy and raw material efficient steel production by 2030-31, in a safe and sustainable manner.
- The draft policy lays out two alternatives of its vision — "to create a globally competitive steel industry that promotes inter-sectoral growth" or "to create a self-sufficient steel industry that is technologically advanced, globally competitive and promotes inclusive growth."
- It also focuses on impediments like high input costs, availability of raw materials, import dependency and financial stress plaguing the sector.
- To cut down reliance on expensive imports of coking coal, the policy has mooted gas-based steel plants and technologies such as electric furnaces to bring down the use of coking coal in blast furnaces.

Background:

In 2015, India was the only large economy in the world where steel demand continued to demonstrate positive growth at 5.3%, as against negative growth in China, and Japan

India's growing urban infrastructure and manufacturing sectors indicate that demand is likely to remain robust in the years ahead. Notwithstanding the current challenges, Indian steel industry still has significant potential for growth, underscored by the fact that the per capita steel consumption in the country at 61 kg is much lower than the global average of 208 kg.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

22. JITSIC meeting on 'Panama Papers'

India participated in the Joint International Taskforce on Shared Intelligence and Collaboration (JITSIC) meeting held recently in Paris where 30 Revenue Authorities shared their findings on investigations arising from the Panama Papers.

- The meeting included sharing of best practices and information between participating member countries based on legal instruments under the tax treaties and OECD and Council of Europe Multilateral Convention.
- The sharing of this information within a group of this size is unique and sets the basis for greater cooperation amongst tax administrations.

Since the last JITSIC meeting of this group, significant achievements have been made including the

development of uniform approaches to requesting information between treaty partners, clearer understanding of the evasion typologies adapted by intermediaries, and new techniques for collating intelligence.

Joint International Task force on Shared Intelligence and Collaboration

The JITSIC brings together 36 of the world's national tax administrations that have committed to more effective and efficient ways to deal with tax avoidance. It offers a platform to enable its members to actively collaborate within the legal framework of effective bilateral and multilateral conventions and tax information exchange agreements – sharing their experience, resources and expertise to tackle the issues they face in common.

Panama papers:

The 'Panama Papers' leaks contain an unprecedented amount of information running into more than 11 million documents covering 2,10,000 companies in 21 offshore jurisdictions. The names were released by the International Consortium of Investigative Journalists (ICIJ).

- *About 500 Indians figure in the list which includes prominent businessmen, film celebrities and those belonging to lucrative professions.*
- *The government has created a Multi-Agency Group (MAG) of probe agencies, comprising the I-T department, the RBI, Financial Intelligence Unit and the Enforcement Directorate, to go into these cases.*

- Open to all members of the OECD's Forum on Tax Administration (FTA), the JITSIC operates through a Single Point of Contact (SPOC) in each country. It is supported by the FTA Secretariat based at the OECD.
- JITSIC was originally established in 2004 as the Joint International Tax Shelter Information Centre to combat cross-border tax avoidance. Building on its initial achievements, the JITSIC was re-established in 2014 with many new members from across the FTA.

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

23. Ministry of AYUSH and Advertising Standards Council of India

In order to curtail malpractices in the advertisement of AYUSH drugs, the Ministry of AYUSH has signed a MoU with the Advertising Standards Council of India (ASCI).

- Addressing the cases of misleading advertisements with respect to Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy drugs, treatments and related services, ASCI will comprehensively monitor these advertisements across print and electronic media through its Consumer Complaints Council (CCC).
- The Ministry of AYUSH will also redirect complaints against misleading advertisements they receive, to the ASCI, which will be reviewed using ASCI's code and guidelines.
- The MoU also requires ASCI to report to the Ministry of AYUSH, all advertisements in potential violation of the Drugs and Magic Remedies (Objectionable Advertisements) Act, 1954 and Rules thereunder as well as non-compliance of ASCI's CCC recommendations for the Ministry of AYUSH to take further action.

ASCI's goals include monitoring, administering and promoting standards of advertising practices in India with a view to:

ASCI:

The Advertising Standards Council of India (ASCI), established in 1985, is committed to the cause of Self-Regulation in Advertising, ensuring the protection of the interests of consumers.

•ASCI was formed with the support of all four sectors connected with Advertising — Advertisers, Advertising Agencies, Media (including Broadcasters and the Press) and others like PR Agencies and Market Research Companies.

•ASCI is not a Government body, nor does it formulate rules for the public or for the relevant industries.

- Ensuring truthfulness and honesty of representations and claims made through advertising and safeguarding against misleading advertising.
- Ensuring that advertising is not offensive to generally accepted norms and standards of public decency.
- Safeguarding against indiscriminate use of advertising for promotion of products or services which are generally regarded as hazardous to society or to individuals or which are unacceptable to society as a whole.
- Ensuring that advertisements observe fairness in competition and the canons of generally accepted competitive behavior.

CCC:

ASCI encourages the public to complain against advertisements which they consider to be false, misleading, offensive or unfair. All of these complaints are evaluated by an independent Consumer Complaints Council (CCC).

- The Consumer Complaints Council examines and investigates the complaints received from the consumers and the general public, including the members of the Company, regarding any breach of the Code of Conduct and/or advertising ethics and recommend the action to be taken in that regards.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

24. Coalition for Epidemic Preparedness Innovations

A global coalition to create new vaccines for emerging infectious diseases, designed to help give the world an insurance policy against epidemics was recently launched at the World Economic Forum in

CEPI, Coalition for Epidemic Preparedness Innovations, is a “public-private coalition that aims to derail epidemics by speeding development of vaccines”.

•It will seek to outsmart epidemics by developing safe and effective vaccines against known infectious disease threats that could be deployed rapidly to contain outbreaks, before they become global health emergencies.

•CEPI will initially target the MERS-CoV, Lassa and Nipah viruses, which have known potential to cause serious epidemics. It aims to develop two promising vaccine candidates against each of these diseases before any epidemic, so these are available without delay if and when an outbreak begins.

•CEPI will also scope out potential support for vaccines against multiple strains of the Ebola and Marburg viruses. and Zika.

Davos, Switzerland. The coalition is named- Coalition for Epidemic Preparedness Innovations.

Topic: paper 4 (conservation, environmental pollution and degradation)

25. Delhi air pollution

The union Environment Ministry recently notified a 'Graded Response Action Plan' against air pollution for Delhi and the National Capital Region. The plan puts governments under the lens and holds out the promise of improvement in air quality, if followed properly.

Background:

The plan was prepared by the Supreme Court-mandated Environment Pollution Control Authority (EPCA), which held meetings with stakeholders from all states over several months.

Working of the system

The concentration of pollutants will be communicated to EPCA by a task force that will primarily comprise officials from the respective pollution control boards and India Meteorological Department. This will be an average for the entire city.

- The job of ensuring implementation of the action plan will be EPCA's, which will delegate the responsibility to the concerned departments.
- Each body has been set a task that it will have to carry out when EPCA asks it to, based on the concentration of pollutants.

A 'graded response': A graded response lays down stratified actions that are required to be taken as and when the concentration of pollutants, in this case particulate matter, reaches a certain level.

• At the current level of pollution, that is oscillating between poor and moderate, the measures that are to be enforced under GRAP include strict ban on garbage burning, closing brick kilns, mechanised sweeping of roads, enforcing ban on fire-crackers among others.

• If pollution climbs to the next level, very poor, tougher measures are to be enforced including hiking parking fees by up to 4%, banning diesel generator sets and increasing frequency of metro.

• Under the plan, odd-even car rationing scheme and halt on construction activities may be imposed across Delhi-NCR if air quality remains at the emergency level for 48-hours.

• Importantly, unlike the two rounds of odd-even car rationing scheme implemented last year, any such future action under the graded plan when pollution touches emergency level will also have two-wheelers under its ambit.

• The plan is not restricted to just the Centre and the state government of Delhi. Neighbouring states also have to play their parts as environmental problems always spill over borders.

Challenges

A large number of agencies, from different states, will have to work together — this in itself is a huge challenge. That a coordination agency — EPCA — has been appointed is the silver lining.

- Some agencies have already pointed out problems in implementing the plan. During an air quality emergency, for example, odd-even has to be imposed. The Delhi government has, however, stated that it will be very difficult to implement the scheme without a notice of at least a week, so that alternative arrangements for public transport can be made and an awareness drive launched.

- The municipal corporations, which have to hike parking rates by 3-4 times if the air quality is very poor, have to hold an elaborate meeting each time they change these rates.

- A system will have to be devised to smooth out these problems. The next month is expected to see a flurry of meetings involving all concerned agencies, especially pollution control authorities and state governments.

Now that the situation is alarming, India's fight against air pollution must assume a sense of urgency. Examples around the world, particularly Beijing in the recent past, show that air quality can improve if governments make it a priority. It's important to, in the first place, have accurate air quality measurements all across our cities to give us a real-time indication of the extent of the problem. Only that, in combination with trying out a variety of measures suggested by experts, can tell us what works and what doesn't.

Conclusion:

Involvement of Supreme Court in this issue is a significant moment in India's battle for clean air, emphasising the need for a comprehensive plan presenting systemic solutions and reminding governments that a plan can be executed successfully only if all stakeholders work in tandem. This template should also be adapted for other Indian cities that suffer appalling air quality. Air pollution extracts an enormous price in terms of health, particularly of children. Combating it must become a

Paper 3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.

26. LIGO India To Be Ready By '24

The LIGO India project is likely to be commissioned in 2024. The LIGO India centre, which will study cosmic gravitational waves, will only be the third one in the world. However, this would require Indian universities to churn out young researchers trained in the science, according to the announcement made by LIGO Laboratory.

LIGO India

The LIGO (Laser Interferometer Gravitational-wave Observatory) is a massive observatory for detecting cosmic gravitational waves and for carrying out experiments. The objective is to use gravitational-wave observations in astronomical studies.

- The project operates three gravitational-wave (GW) detectors. Two are at Hanford in the state of Washington, north-western US, and one is at Livingston in Louisiana, south-eastern US. The proposed LIGO India project aims to move one advanced LIGO detector from Hanford to India.
- LIGO research is carried out by the international LIGO Scientific Collaboration (which includes the GEO Collaboration and the Australian Consortium for Interferometric Gravitational Astronomy) and the Virgo Collaboration in Europe.
- LIGO India will be set up as a joint scientific collaboration between LIGO laboratories of the California Institute of Technology (Caltech), Massachusetts Institute of Technology (MIT), the US, and three lead Indian institutions, namely, the Inter-University Centre for Astronomy and Astrophysics (IUCAA), Pune, Institute for Plasma Research (IPR), Gandhinagar, and Raja Ramanna Centre for Advanced Technology (RRCAT), Indore.

Gravitational Waves

Gravitational waves are the ripples in the pond of spacetime. The gravity of large objects warps space and time, or "spacetime" as physicists call it, the way a bowling ball changes the shape of a trampoline as it rolls around on it. Smaller objects will move differently as a result – like marbles spiraling toward a bowling-ball-sized dent in a trampoline instead of sitting on a flat surface.

Uses

These waves will be particularly useful for studying black holes (the existence of which was first implied by Einstein's theory) and other dark objects, because they'll give scientists a bright beacon to search for even when objects don't emit actual light.

- With this, mapping the abundance of black holes and frequency of their mergers could get a lot easier.
- Since they pass through matter without interacting with it, gravitational waves would come to Earth carrying undistorted information about their origin.
- They could also improve methods for estimating the distances to other galaxies.

Difficult to detect these waves

The reason that gravitational waves have been so difficult to detect is that their effects are tinier than tiny. In fact, the signals they produce are so small that scientists struggle to remove enough background noise to confirm them.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

27. India becomes Associate member of CERN

India has officially become an Associate member of CERN with the Indian government completing its internal approval procedures in respect of the agreement it had signed with CERN in 2016.

- As an Associate member India will have full access to all data generated at CERN. As there are many experiments in CERN, there will be plenty of information available.
- As an Associate member, India can participate in all experiments.
- Also, whenever any CERN facilities get upgraded and go through maintenance, it will provide opportunities for Indian industries to participate. Indian industry will be entitled to bid for CERN contracts, which will allow it to work in areas of advanced technology.
- Since Indian scientists will become eligible for staff appointments, it will also enhance the participation of young scientists and engineers in operation and maintenance of various CERN projects.

CERN:

CERN is the world's largest nuclear and particle physics laboratory, where scientists and engineers are probing the fundamental structure of the Universe by using the most sophisticated scientific instruments and advanced computing systems.

- *CERN is based in Geneva on the French-Swiss border. The CERN convention was signed in 1953 by the 12 founding state.*



India and CERN:

In 1991, India and CERN signed a Cooperation Agreement, setting priorities for scientific and technical cooperation. India and CERN have signed several other protocols since then. But India's involvement in CERN began in the 1960s with researchers from the Tata Institute of Fundamental Research, Mumbai participating in experiments at CERN. In the 1990s scientists from Raja Ramanna Centre for Advanced Technology, Indore too got involved in CERN experiment. Researchers from TIFR, Raja Ramanna Centre for Advanced Technology and other institutes built components for an accelerator (LEP) and detectors (L3, WA93 and WA89). India was granted Observer status to the CERN Council in 2002.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

28. A coalition for trade pact

India's top industry bodies are attempting to build a coalition with counterparts in other nations with similar interests to give a fillip to the country's proposal for a Trade Facilitation in Services (TFS) Agreement at the World Trade Organisation (WTO)-level.

The proposed TFS pact, among other things, aims to make it easier for professionals and skilled workers to move across borders for short-term work, as well as ensure portability of their social security contributions.

Backgrounder:

India is making the case for this pact in line with the Trade Facilitation Agreement (TFA) in goods, signed by WTO in 2014. It aims at expediting movement, release and clearance of goods as well as co-operation on customs compliance issues.

- Pitching for a trade facilitation agreement in services in WTO, India argues the pact will reduce transaction costs by doing away with unnecessary regulatory and administrative burden on trade in services.
- India had proposed simplification of procedures and clarity in work permits and visas for smooth movement of professionals.
- It said the TFS Agreement will address the key issues that are pertinent to facilitating trade in services, such as transparency, streamlining procedures, and eliminating bottlenecks.

Paper 1 Topic: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., geographical features and their location- changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

38 (Jan 2017)

29. Silicon, the 'missing element'

Earth's core is made up of Iron and nickel, but there is a third element which has eluded identification till now. However, now scientists have been able to identify the third and elusive element as silicon. Researchers have identified silicon as the missing element deep in the core of the planet.

Background:

The core of the Earth is believed to be made of mainly Iron and Nickel. It was known for long that iron –nickel core under the core pressure is denser than the core. This made a possibility of the core having some lighter elements like Silicon Oxygen or Sulfur. The presence of this solid core which is entirely different from the liquid outer layer was first discovered by scientists after studying seismic waves which were being deflected by the solid core in the center.

Topic: paper 4(technology, economic development, infrastructure-railways)

30. Mission 41k:

- It is a mission launched by Indian Railways to save Rs 41,000 crore on the Indian Railways' expenditure on energy consumption over the next 10 years.
- This target will be achieved by taking a slew of measures which include moving 90% of traffic to electric traction over diesel. Presently, this is at 50 %of the total rail traffic. The Railways ministry plans to achieve this target by doubling the current pace of electrification.
- The railways also aim to procure more and more electricity at cheaper rates through open market instead of sourcing it through DISCOMs and thereby hope to save as much as 25% on its energy expenses.
- New technologies are also being explored to bring down electric consumption.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

31. Repealing of the obsolete and redundant laws

The Union Cabinet has given its nod to a Law Ministry proposal to bring the Repealing and Amending Bill, 2017 to scrap 105 redundant laws which have been clogging the statute books.

The two-member committee constituted by the PMO, the Law Commission and the Legislative Department had identified 1824 redundant and obsolete Central Acts for repeal. Four Acts have so far been enacted to repeal 1175 Central Acts between 2014 and 2016 by the Parliament.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

32. International Vaccine Institute (IVI), South Korea

The Union Cabinet has given its approval to the proposal for India's taking full membership of the International Vaccine Institute (IVI) Governing Council. The move involves payment of annual contribution of US \$ 5,00,000 to the International Vaccine Institute (IVI), Seoul, South Korea.

Backgrounder:

In the year 2007, with the approval of Cabinet, India joined IVI. India is a long-term collaborator and stake-holder of IVI. As per the new governance structure of IVI, a member State has to contribute to the IVI by paying a portion of its core budget.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to

International Vaccine Institute (IVI), Seoul, South Korea, established in 1997 on the initiatives of the UNDP, is an international organization devoted to developing and introducing new and improved vaccines to protect the people, especially children, against deadly infectious diseases.

•Created initially as an initiative of the UN Development Programme (UNDP), IVI began formal operations as an independent international organization in 1997.

•Currently, IVI has 40 countries and the World Health Organization (WHO) as signatories to its Establishment Agreement.

•The Institute has a unique mandate to work exclusively on vaccine development and introduction specifically for people in developing countries, with a focus on neglected diseases affecting these regions.

Health, Education, Human Resources.

33. 'ShaGun'

The government has launched a dedicated web portal 'ShaGun' for the SarvaShiksha Abhiyan.

- 'ShaGun' aims to capture and showcase innovations and progress in Elementary Education sector of India by continuous monitoring of the flagship scheme – SarvaShiksha Abhiyan (SSA).

SSA:

It is Government of India's flagship programme for achievement of Universalization of Elementary Education (UEE) in a time bound manner, as mandated by 86th amendment to the Constitution of India making free and compulsory Education to the Children of 6-14 years age group, a Fundamental Right.

- It is being implemented in partnership with State Governments to cover the entire country and address the needs of 192 million children in 1.1 million habitations.
- It seeks to open new schools in those habitations which do not have schooling facilities and strengthen existing school infrastructure through provision of additional class rooms, toilets, drinking water, maintenance grant and school improvement grants.
- Existing schools with inadequate teacher strength are provided with additional teachers, while the capacity of existing teachers is being strengthened by extensive training, grants for developing teaching-learning materials and strengthening of the academic support structure at a cluster, block and district level.

- It also seeks to provide quality elementary education including life skills. SSA has a special focus on girl's education and children with special needs. SSA also seeks to provide computer education to bridge the digital divide.

ShaGun, which has been coined from the words 'Shala' meaning Schools and 'Gunvatta' meaning Quality, has been developed with a twin track approach:

- First, is the Repository with an engaging interface that focuses on positive stories and developments in the field of School Education. In this repository, best practices will be documented in the form of videos, testimonials, case studies, and images, which will display state-level innovations and success stories that are driving improvements in performance under SSA. This repository has a decentralized management structure that enables State governments to choose, upload and manage their own content.
- Secondly, it has an online monitoring module to measure state-level performance and progress against key educational indicators. It has been developed to collect and report data which will enable the government and administrators to track the efficiency with which SSA funds are being utilized and the results that this is delivering.

Paper 2 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

34. Modified Special Incentive Package Scheme

The Union Cabinet has given its approval for amendment in the Modified Special Incentive Package Scheme (M-SIPS) to further incentivize investments in Electronic Sector and moving towards the goal of 'Net Zero imports' in electronics by 2020.

- Besides expediting investments into the Electronics System Design and Manufacturing (ESDM) sector in India, the amendments in M-SIPS are expected to create employment opportunities and reduce dependence on imports.
- The Policy covers all States and Districts and provides them an opportunity to attract investments in electronics manufacturing.

M-SIPS:

In 2012, the M-SIPS was initiated to provide a special incentive package to promote large scale manufacturing in the Electronic System Design and Manufacturing (ESDM) sector.

- The scheme provides subsidy for capital expenditure – 20% for investments in Special Economic Zones (SEZs) and 25% in non-SEZs.
- The Scheme was amended in August, 2015 for scope enhancement and simplification of procedure.
- The Scheme has attracted investments in the ESDM sector to the tune of Rs. 1,26,838 crore, of which investments of around Rs. 17,997 crore have been approved by the MeitY. The M-SIPS has been able to create positive impact on investment in electronics sector.

The salient features of the amendment are:

- *The incentives will be available for investments made within 5 years from the date of approval of the project.*
- *A unit receiving incentives under the scheme, will provide an undertaking to remain in commercial production for a period of at least 3 years.*
- *The Appraisal Committee recommending approval of project will be chaired by Secretary, Ministry of Electronics and IT.*

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

35. 11th ASER report

The eleventh Annual Survey of Education Report (ASER), released recently, has given a glimmer of hope by acknowledging improvements in learning levels, largely driven by government schools.

- This year there is an improvement in children's reading ability and arithmetic understanding — especially in early grades in government schools. This is the first year since 2010 that there is an upward trend in arithmetic figures.
- ASER 2016 notes that the proportion of children in the Class 3 who are able to read at least class 1 level text has gone up from 40.2% in 2014 to 42.5% in 2016 with a substantial increase of 7% up among children in government schools in states like Punjab, Uttarakhand, Haryana, Chhattisgarh, Gujarat, Maharashtra and Telangana.
- The proportion of children in Class V who could read a Class II level text improved by more than 5 percentage points from 2014 to 2016 in Gujarat, Maharashtra, Tripura, Nagaland and Rajasthan. This improvement is driven by gains in learning levels in government schools in these state.
- The all India (rural) figures for basic arithmetic have improved for class III. In 2014, 25.4% of class III children could do a 2-digit subtraction, the number in 2016 is 27.7% with the improvement registered primarily from government schools which showed an increase from 17.2% in 2014 to 20.2% in 2016. In almost all states there is some improvement in the arithmetic levels of children enrolled in government schools in Class III.
- Enrolment levels continue to increase and there is also a significant increase in the number of useable toilets for school goers — an improvement that may possibly be attributed to government's flagship Swachh Bharat Abhiyan. Out of school children, however, have increased in certain states including Uttar Pradesh.
- Enrollment continue to show an upward swing up from 96.7% in 2014 to 96.9% in 2016 for age group 6-14 and 83.4% in 2014 to 84.7% in 2016 for the age group 15-16.
- For children (age 6-14), it has increased between 2014 and 2016 — Madhya Pradesh (3.4% to 4.4%), Chhattisgarh (2% to 2.8%), and Uttar Pradesh (4.9% to 5.3). In other states, the proportion of out-of-school girls (age group 11-14) also remains greater than 8%. These states are Rajasthan (9.7%) and Uttar Pradesh (9.9%). Joining them in 2016 is Madhya Pradesh (8.5%).
- There is no significant increase in private school enrollment between 2014 and 2016. However, both in Kerala and Gujarat, there was an increase in government school enrolment while Uttarakhand (Arunachal Pradesh and Assam showed increase in private school enrolment in in the 6-14 age group.

Nationally, no change happened in the availability of computers in schools since 2014. However, some states stand out in terms of high provision of computers- Kerala, 89% of schools visited had computers; 75.2% in Gujarat, 55.1% in Maharashtra and 57.3% in Tamil Nadu.

The proportion of schools with libraries has fallen from 78.1% in 2014 to 75.5% in 2016. However, children were seen using library books in more schools in 2016.

Topic: paper 4 (technology, economic development)

36. Bengaluru beats Silicon Valley to become the most dynamic city in the world:

Bengaluru is followed by Ho Chi Minh City of Vietnam and Silicon Valley in the U.S.

Other cities in Top 10 category include Shanghai, Hyderabad, London, Austin, Hanoi, Boston and Nairobi.

Asia-Pacific cities comprise half of the top 30 fastest-changing cities. India has taken over from China as home to some of the world's most dynamic cities. Six Indian cities feature in the CMI Global Top 30, with the country's primary technology hub, Bengaluru, moving into the top spot for the first time.

Topic: paper 4 economic development and technology

37. Sovereign digicoin

Given the social cost of cash payment, and privately issued bitcoins' challenge for "trust," the argument for central bank's digital currency seems natural. In fact, several central banks have already changed their operations, or started developing digital currencies in coordination with the private sector.

- In this context, the report of committee on digital payments, which was recently submitted to RBI, has asked the Reserve Bank of India (RBI) to evaluate the possibility of RBI-issued digital currency and testing proof of concept. The report notes several benefits of introducing a central bank digital currency (CBDC).

Mechanics of issue

Design of CBDC:

The report of committee on digital payments notes that a CBDC would be like "e-cash", essentially a non-interest-bearing liability of the central bank issued in digital form. That is correct but it need not be issued merely as e-cash. The central bank may choose to issue the CBDC as an interest-bearing instrument as well.

• Experts say, it would be more consequential to financial stability and more relevant to monetary policy if the RBI were to issue it as an interest-bearing instrument.

• Issued simply as "e-cash", it would function exactly as physical cash functions presently, as a medium of exchange between peer-to-peer and peer-to-business transactions and as a counter-cyclical store for value.

• Issued as an interest-bearing instrument, it would compete with the deposits issued by commercial banks. Given that it would be issued by the central bank, it is possible that subject to its widespread accessibility, it would raise the cost of capital for commercial banks as households may flock to it.

Three elements appear critical here:

- Unlike private currencies that do not have a specific issuer and essentially rely on the trust of the participants to circulate, a CBDC will create a **liability on the balance sheet of the RBI**. Operationalizing the CBDC would also sequentially require validation and settlement.
- **Validation** is necessary to avoid the so-called "double-counting" problem that arises in the context of digital currencies. Simplified, it means ensuring that the payer has not already used the "same" CBDC to pay another payee prior to the current transaction.

- Borrowing from the Bitcoin architecture, the RBI may choose to outsource the validation function to several licensed nodes on the blockchain. Again, on the lines of Bitcoin, these payment system participants may perform the validation function against the incentive of receiving CBDCs, the value whereof is contingent upon the complexity of the mathematical code-crunching that goes into validation.
- Finally, **settlement finality** is critical; the RBI may develop a standard consensus procedure that determines the precise moment at which the “transfer” from the payer to the payee is completed; this may involve determining the number of “nodes” necessary to validate the transfer for it to be deemed complete by the payment-system participants. A key challenge would be to balance the competing interests of latency and robustness.

Concerns

- First, banks could lose their dominant position in the payments business if individuals have direct access to the central bank clearing house for a digital currency.
- Second, people directly holding base money with the central bank will undermine bank business models that are based on credit creation through the fractional reserve system.
- Third, the existing monetary policy consensus could be overturned as central banks shift back to directly targeting money supply rather than interest rates.

Development of digital currencies around the world:

- Nederland: In March 2016, National Bank of Nederland (DNB) published it would develop a prototype of digital currency, called “DNBcoin,” by applying blockchain.
- Russia: In October 2016, Central Bank of Russia published it had successfully developed a prototype block chain for transactions confirmation, called “Masterchain,” with leading financial market players.
- Canada: In June 2016, Bank of Canada published it was partnering Canadian banks, fintech entrepreneurs and other companies to test this.
- United Kingdom: In June 2016, the Governor of Bank of England(BOE) stated it would explore the use of digital currency in bank’s core activities, including the operation of real-time settlement system.
- China: In January 2016, People’s Bank of China published it had a “mid-term” strategy of issuing its own digital currency, and would try to launch it as early as possible.



Need for a central bank digital currency (CBDC): The emergence of cryptocurrencies like Bitcoin have led central banks around the world to develop a research agenda around digital currencies, both private and sovereign.



These are still early days. Digital currencies still have a lot of issue, and the wild swings in bitcoin prices are not exactly a good advertisement as far as those who are bothered about monetary stability. These are teething problems in what could be a dramatic shift in the way the world transacts, if the technology needed for digital currencies keeps pace with demand from the new payments ecosystem. These are interesting times for monetary thinkers.

Conclusion: The various prerequisites for an eventual move towards a cashless economy are gradually falling into place. India already has a new digital platform for mobile payments that is perhaps one of the best in the world. It has now decided to join the revolution. A bit of futurism would not be a bad idea at all. A few US economists have talked about a Fedcoin—or a Fed version of the bitcoin. Maybe it is time for a similar discussion in India.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

38. India and Kazakhstan

Salient features of the Protocol are as under:

- The Protocol provides internationally accepted standards for effective exchange of information on tax matters. Further, the information received from Kazakhstan for tax purposes can be shared with other law enforcement agencies with authorisation of the competent authority of Kazakhstan and vice versa.
- The Protocol inserts a Limitation of Benefits Article, to provide a purpose test to prevent misuse of the DTAC and to allow application of domestic law and measures against tax avoidance or evasion.
- The Protocol inserts specific provisions to facilitate relieving of economic double taxation in transfer pricing cases.
- This is a taxpayer friendly measure is in line with India's commitment under Base Erosion and Profit Shifting (BEPS) Action Plan to meet the minimum standard of providing Mutual Agreement Procedure (MAP) access in transfer pricing cases.
- The Protocol inserts service PE provisions with a threshold and also provides that the profits to be attributed to PE will be determined on the basis of apportionment of total profits of the enterprise.
- The Protocol replaces existing Article on Assistance in Collection of Taxes with a new Article to align it with international standards.

India and Kazakhstan have signed a Protocol to amend the existing Double Taxation Avoidance Convention (DTAC) between the two countries which was earlier signed on 9th December, 1996 for the avoidance of double taxation and for the prevention of fiscal evasion with respect to taxes on income.



Paper 2 Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

39. H1B visa issue

A bill to curb the use of H-1B visas, on which the Indian IT sector is particularly dependent, has been introduced in US congress.

What is a H1-B visa?

The H1-B visa is a non-immigrant visa given by the United States to employ skilled workers from other countries for various specialised fields of occupation for a certain period of time.



- The new bill would require workers on the H-1B visa pay a minimum of \$100,000, up from \$60,000 currently.
- The bill also removes the Master's degree exemption to the cap on the number of visas available.
- The Bill prohibits companies from hiring H1-B employees if they employ more than 50 people and more than 50% of their employees are H1-B and L-1 visa holders.

- The Bill encourages companies to recruit American workers. This provision would crack down on outsourcing companies that import large numbers of H-1B and L-1 workers for short training periods and then send these workers back to their home country to do the work of Americans.
- It explicitly prohibits replacement of American workers by H1-B or L-1 visa holders.
- The Bill seeks to give the Department of Labour enhanced authority to review, investigate and audit employer compliance as well as to penalise fraudulent or abusive conduct.

Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential;

40. Jio case

Telecom tribunal TDSAT has asked sector regulator Trai to decide on Reliance Jio's free 4G service within "reasonable time". A TDSAT bench heard arguments of both sides — Airtel and Trai.

The TDSAT direction came while hearing a petition filed by Bharti Airtel, which has moved the tribunal against Trai's decision allowing Reliance Jio to continue with its free promotional offer beyond the

TDSAT: The Telecom Disputes Settlement and Appellate Tribunal (TDSAT) was established to adjudicate disputes and dispose of appeals with a view to protect the interests of service providers and consumers of the telecom sector and to promote and ensure orderly growth of the telecom sector.

• *Telecom Disputes Settlement Appellate Tribunal (TDSAT) was established in 2000 through an amendment of the TRAI 1997 act.*

• *The primary objective of TDSAT's establishment was to release TRAI from adjudicatory and dispute settlement functions in order to strengthen the regulatory framework.*

• *Any dispute involving parties like licensor, licensee, service provider and consumers are resolved by TDSAT. Moreover, any direction, order or decision of TRAI can be challenged by appealing in TDSAT.*

stipulated 90 days, alleging that the regulator acted as "a mute spectator" to violations.

Topic: paper 4 economic development and paper 3 welfare schemes and constitution of bodies

41. North Eastern Tourism Development Council:

- The government has announced the formation of exclusive “North-Eastern Tourism Development Council” (NETDC) on a public-private partnership (PPP) mode under the auspices of Union Ministry of DoNER.
- This is for the first time that the Government has decided to set up a separate tourism development agency, devoted to a particular region of the country.

Topic: paper 3 social justice paper 4 technology paper 5 ethics

42. Tackling fake news and hate speech

Some incidents in the past few years have shown that society and its conflicts manifest themselves in what has come to be known as “fake news” — and the internet does aid its rapid distribution. That is not the malaise of the internet or social media platforms, however. It is the actors, very often, competing political and other special interests which are producers of such content. But, fake news is a huge problem and demands an urgent solution.

Why be concerned about this?

In our country, there are roughly 240 million smartphone users and over 500 million feature phone users with 370 million connected to internet, where everyone is a publisher.

- This is a staggering community of people; all of diverse backgrounds and viewpoints. It is in this chaotic, complex, sociological and political sphere that different actors, including the internet and social media platforms, operate. This presents both new opportunities and complex challenges for society.

But, why it's a difficult problem to solve?

By its very nature, social media and the online world at large is democratic in nature. Every user claims the right to view content s/he seems fit, and expects that right to be maintained and defended.

- If there happens to be some sort of ‘corrective action’ taken by a social media site such as Facebook or Twitter, users tend to go up in arms.
- Even if these actions are triggered to maintain law and order or a software bug, users would consider this as a bias against their points of view or an attempt to clampdown on dissent.

What needs to be done?

- The lasting and most powerful antidote to rumours, fake news and hate speech is more speech. That is a strong logical counter-speech — a strong rebuttal of the rumours and real-time reassurance to the affected people by the state, the community, newsmen and the media.
- The current climate also underscores the importance of independent fact-checkers. They will help nurture a culture of fact-checking and an atmosphere where each individual will be more rigorous in their assessment when engaging with different types of information on different media and diverse platforms.
- Human editors are also an option and it is highly likely that any solution will have to incorporate some form of human input on a regular basis.
- There is also an effort being made to burst the filter bubbles of readers by showcasing to them news from across their reading spectrum.

- The last gasp approach, however, might be to just censor news that is construed to be fake or misleading. This though would be a folly and would go against everything the Internet holds dear – primarily the freedom of speech. However, commercial institutions such as Facebook might find this the easiest way out as evidenced by their previous actions.

So, what is the risk of keeping quiet?

- Almost all the solutions currently being put forward seem to be emanating from the West and primarily the US. While Silicon Valley and its ilk have generally been at the forefront of most technological upheavals in the last decade, the subject of news monitoring and filtering is just too important and delicate to be entrusted to just an elite few.
- Furthermore, there is also the risk that solutions devised in the West might be ill-suited for other parts of the globe due to socio-cultural differences. For example, solutions devised for balancing discourse in a two-party system such as in the US might struggle with the subtle distinctions in a country hosting close to two thousand parties each catering to the needs of the country's myriad communities.
- Furthermore, the entwinement between industry, media and government runs far deeper in the developing world as compared to much of the West. It is easy to see how an ill-construed mechanism hinged on the credibility of major publications can skew the balance of democratic power in a developing country.
- Also, standing by on the sidelines, waiting for someone else to solve the problem would be akin to handing over the reins of our entire public discourse, which is today increasingly being shaped by social media, to external entities.
- Needless to say that the consequences of such inaction could be calamitous. We need to stand up and speak now, or else risk having our entire public discourse directed by algorithms which we had no say in designing.

Conclusion

Social media platforms are modern-day establishments enabling different forms and types of self-expression. However, the need for checks around credibility and authenticity seem to have long forgone. What stays is the need for freedom.

Internet intends to bring people together, discover ideas, unlock opportunities and form communities. In this connected world, while we try and build all safeguards by investing in fact-checking tools and processes that prevent the spread of hate and fake news on the internet, ultimately we all have to think and reflect upon our own behaviour.

We have to decide whether we want to build a Hobbesian world where a human being's life is "solitary, poor, nasty, brutish and short" or a world where we push the boundaries of openness, debate and integrity. The latter is crucial for preserving the sanity and purity of fact.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

43. Indian Skill Development Service'

The Ministry of Skill Development and Entrepreneurship (MSDE) has issued the notification of setting up of Indian Skill Development Services (ISDS). This service has been created for the Training Directorate of the Ministry of Skill Development and Entrepreneurship.

- With notification of this service the skill ecosystem is expected to get strengthened and modernised in line with the current scientific and industrial development in the country.
- The purpose of instituting a formal service in Group 'A' category was initiated almost two years back when the Ministry was formed.
- ISDS will be a Group 'A' service where induction will take place through Indian Engineering Service Examination conducted by UPSC.
- ISDS will be a Group 'A' service of the technical cadre of the Ministry of Skill Development & Entrepreneurship (MSD&E).

Purpose

- To improve skill development administration in the country.
- To enhance the capacity and efficiency of the organization.

Significance:

It is an attempt to attract young and talented administrators for Skill Development. The knowledge acquired by the engineers recruited will give new impetus to the initiative of the government to the skill development and also efficient and effective implementation of the schemes. This is also a step forward to meet the target of skilling 500 million people by 2022.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

44. India and Uruguay

The Union Cabinet has approved signing and ratifying an Agreement between India and Uruguay regarding Cooperation and Mutual Assistance in Customs Matters.

- The Agreement will help in the availability of relevant information for the prevention and investigation of Customs offences.
- The Agreement is also expected to facilitate trade and ensure efficient clearance of goods traded between the countries.
- The Agreement would provide a legal framework for sharing of information and intelligence between the Customs authorities of the two countries and help in the proper application of Customs laws, prevention and investigation of Customs offences and the facilitation of legitimate trade.

Background:

Uruguay is an important trading partner of India among members of the MERCOSUR, a trading block in Latin America. India signed a Preferential Trade Agreement (PTA) with the MERCOSUR which came into effect from 1st June, 2009. Trade between India and the Uruguay has been expanding gradually.

Roles:

• *The new cadre of officers will run the skill development and entrepreneurship ministry, help implement various skill and apprenticeship schemes conducted by the ministry as well as those by the Directorate General of Training (DGT).*

• *The new officers will help formulate skill policies, devise a road map for improving the apprenticeship system, revamping ITIs and also help revamp course work for various schemes.*



What is Mercosur?

Mercosur is an economic and political bloc comprising Argentina, Brazil, Paraguay and Uruguay. Bolivia, Chile, Colombia, Ecuador, Guyana, Peru, and Suriname are associate members.

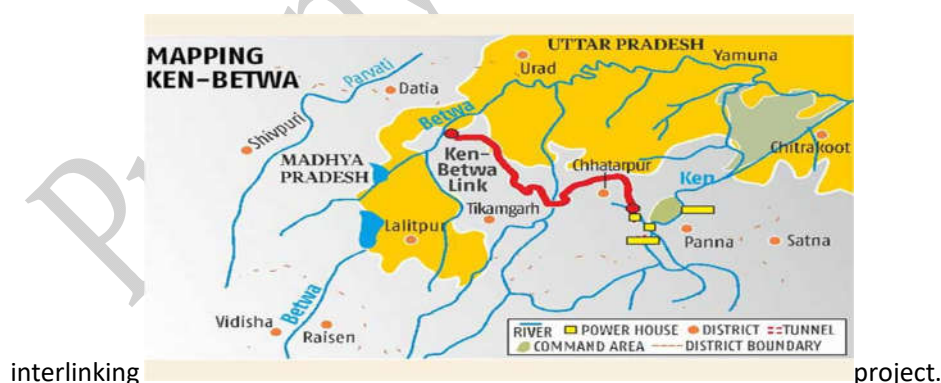
Its purpose is to promote free trade and the fluid movement of goods, people, and currency. The official languages are Spanish, Portuguese and Guarani. It is now a full customs union and a trading bloc.

Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

45. Ken-Betwa river-linking project

A new hurdle has come in the way of the Ken-Betwa river interlink project in its terms of financing. The NITI Aayog (National Institution for Transforming India) has recommended that Madhya Pradesh contribute 40% of the project cost, with the Centre contributing 60%. The Ministry of Water Resources (MoWR) has opposed this and requested that 90% of the funds be routed through the Centre.

A lack of clarity on the funding pattern could mean more delays to the first ever inter-State river



- The project was given a go-ahead by the National Board for Wildlife (NBWL) last August. An environment clearance panel has also cleared the project.

Background

The Ken and Betwa rivers in the states of Uttar Pradesh (UP) and Madhya Pradesh (MP) are to be linked under an historic agreement that marks the first such project in India's ambitious and controversial national river-linking project.

- The Rs. 10,000-crore Ken-Betwa project will irrigate the drought-prone Bundelkhand region but, in the process, also submerge about 10% of the Panna Tiger Reserve in Madhya Pradesh, feted as a model tiger conservation reserve.
- The main feature of the project is a 230-km long canal and a series of barrages and dams connecting the Ken and Betwa rivers that will irrigate 3.5 lakh hectares in Madhya Pradesh and 14,000 hectares of Uttar Pradesh in Bundelkhand.
- The key projects are the Makodia and Dhaudhan dams, the latter expected to be responsible for submerging a major chunk of tiger habitat in the Panna Tiger Reserve.

Paper 3 Topic: Effects of liberalization on the economy, changes in industrial policy and their effects on industrial growth.

46. Apple manufacturing unit

The commerce and industry ministry is not in favour of extending concessions to US-based iPhone maker Apple for setting up manufacturing unit in India as no other firm has asked for any incentive.

Apple had asked for several tax and other incentives to enter India in the manufacturing sector. Currently, Apple's products are manufactured in six countries, including Korea, Japan and the US. The company sells its products through Apple-owned retail stores in countries such as China, Germany, the US, the UK and France, among others. It has no wholly-owned store in India and sells its products through distributors.

Why the government is not in favour of extending any concessions?

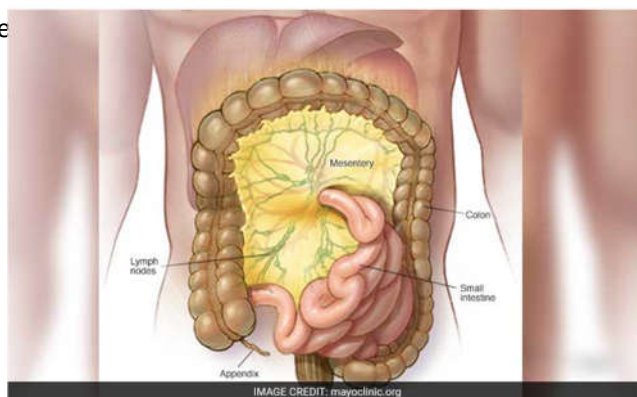
It is because the government already provides benefits under the Modified Special Incentive Package Scheme (MSIPS) to boost electronic manufacturing in the country. The scheme provides financial incentives to offset disability and attract investments in the electronics hardware segment. It also gives a subsidy for investments in Special Economic Zones, among other benefits.

- *Also, the MSIPS policy incentivizes electronics and component makers to manufacture domestically by providing them a host of incentives including 20-25% subsidy on capital expenditure.*

Paper 3 Topic: Science and Technology- developments and their applications and effects in everyday life Achievements of Indians in science & technology; indigenization of technology and developing new technology.

47. Mesentery

Irish scientists have _____ in the digestive system for



hundreds of years.

- Named as the mesentery, the organ connects the intestine to the abdomen and had for hundreds of years been considered a fragmented structure made up of multiple separate parts.
- Mesentery is a fold of the peritoneum which attaches the stomach, small intestine, pancreas, spleen, and other organs to the posterior wall of the abdomen.
- During the initial research, the researchers have found that the mesentery, which connects the gut to the body, was one continuous organ.
- Better understanding and further scientific study of the mesentery could lead to less invasive surgeries, fewer complications, faster patient recovery and lower overall costs.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

48. Japan and smart cities

Japan has decided to be associated with the development of Chennai, Ahmedabad and Varanasi as smart cities.

So far, leading countries have come forward to be associated with development of 15 smart cities. These include: United States Trade Development Agency (USTDA) –Visakhapatnam, Ajmer and Allahabad, UK- Pune, Amaravati(Andhra Pradesh) and Indore, France-Chandigarh, Puducherry and Nagpur and Germany –Bhubaneswar, Coimbatore and Kochi.

Smart City mission

Under the scheme that was launched in 2014, around 100 cities in the country will be developed.

- Bottom-up approach has been the key planning principle under Smart City Mission.
- These cities will be developed to have basic infrastructure through assured water and power supply, sanitation and solid waste management, efficient urban mobility and public transport, IT connectivity, e-governance and citizen participation.
- The mission will provide central funding of Rs 48,000 crore to the selected cities for improving their infrastructure and service delivery through application of better technology and e-governance.
- States and Urban local Bodies (ULBs) will play a key supportive role in the development of Smart Cities. Smart leadership and vision at this level and ability to act decisively will be important factors determining the success of the Mission.
- The implementation of the Mission at the City level will be done by a Special Purpose Vehicle (SPV) created for the purpose. The SPV will plan, appraise, approve, release funds, implement,

manage, operate, monitor and evaluate the Smart City development projects. Each smart city will have a SPV which will be headed by a full time CEO and have nominees of Central Government, State Government and ULB on its Board.

Paper 3 Topic: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.

49. Bitcoin: 'safe haven' asset

Bitcoin is at its all-time high. It is all set to become a new safe haven asset as the world grapples with growing economic uncertainty. It has fluctuated wildly since it was created in 2009.

Recently Bitcoin broke the \$1,100 barrier on the Bitcoin Price Index to continue a dizzying rise that made it the best performing currency of 2016.

Bitcoins

They are encrypted digital coins created by supercomputers and then traded online or exchanged for goods and services. They are not supported by any country's government or central bank.

Why in more demand now?

Experts say, the chaotic withdrawal of high value bills in India and restrictions on buying foreign currency in China as the yuan slides against the dollar have increased the demand. Also, Exacerbating the rocketing demand is a tightening supply of fresh bitcoins.

Bitcoin Price Index

Bitcoin Price Index represents an average of bitcoin prices across leading global exchanges that meet criteria specified by the . It is intended to serve as a standard retail price reference for industry participants and accounting professionals.

Paper 3 Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

50. Hyperloop

The government has referred the proposal to set up a hyperloop transportation system in the country to Niti Aayog. Niti Aayog may now call for a trial run for the technology at some small stretch after which the government will be able to take a call on the matter.

Hyperloop transportation system

It is a transportation system where a pod-like vehicle is propelled through a near-vacuum tube

Operation :

In hyperloop transportation, custom-designed capsules or pods are expected to zip smoothly through continuous steel tubes which are held at partial vacuum. The pod which sandwiches the passenger compartment between an air compressor upfront and a battery compartment in the rear is supported by air caster skis at the bottom. The skis float on a thin layer of air provided under high pressure, eliminating rolling resistance and allowing for movement of the pods at high speeds. These capsules are expected to be driverless with estimated speeds of 1,000 km/h.

Linear induction motors that are placed along the tube control the speed of the pod. Electronically-assisted acceleration and braking determines the speed of the capsule.

connecting cities at speeds matching that of an aircraft.

The hyperloop concept is a brainchild of Tesla founder Elon Musk. US-based Hyperloop Transport Technology (HTT) claimed it costs \$40 million per kilometre to build a hyperloop system while building a high-speed train line would cost almost twice. The hyperloop system is being designed to transport passengers and freight.

Paper 2 Topic: Salient features of the Representation of People's Act.

51. Sponsored ads in media to be part of candidate's expenditure

Election Commission has said that sponsored advertisements on social media platforms such as Facebook and Twitter would be included in the total election expenditure of a candidate.

- Voice messages of candidates, even if they were received from other states, would be added to the expenditure of the candidate.
- Total amount of expenditure in connection with general elections to the Legislative Assembly by any candidate, is Rs28 lakh.
- EC has also asked printing press owners to print the names and addresses of printer and publisher of any election pamphlets, posters and such other material printed by them. Any violation would invite action, including revocation of license of the printing press.
- Flying squads have been formed to register cases against both the giver and the taker of bribe and for taking action against those who are engaged in threat and intimidation of electors.

Paper 2 Topic: Salient features of the Representation of People's Act.

52. .Model Code of Conduct

Model Code of Conduct has come into force following the poll dates announcement in UP. With the Model Code of Conduct in place, the state government has also been directed not to initiate any bureaucratic transfers and asked not to go ahead with any new launches, announcements and inaugurations.

When it comes into force?

The Model Code of Conduct comes into force immediately on announcement of the election schedule by the commission. The Code remains in force till the end of the electoral process.

What is MCC?

These are the guidelines issued by the Election Commission of India for conduct of political parties and candidates during elections mainly with respect to speeches, polling day, polling booths, election manifestos, processions and general conduct. It aims to ensure free and fair elections.

Status:

The need for such code is in the interest of free and fair elections. However, the code does not have any specific statutory basis. It has only a persuasive effect. It contains what is known as "rules of electoral morality". But this lack of statutory backing does not prevent the Commission from enforcing it.

What it contains?

The salient features of the Model Code of Conduct lay down how political parties, contesting candidates and party(s) in power should conduct themselves during the process of elections i.e. on their general conduct during electioneering, holding meetings and processions, poll day activities and functioning of the party in power etc.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources, issues relating to poverty and hunger.

53. Haryana's sex ratio improves

Civil Registration System (CRS) data showed that Haryana achieved a sex ratio of 900 girls as against 1000 boys in 2016. This is much in contrast to the statistics of 2011, when Haryana had the worst sex ratio of 834:1000 among all states in the country.

- The state government had been making concerted efforts to improve the sex ratio, and now it has taken a leap forward by achieving marked improvement in the Sex Ratio at Birth (SRB).
- The state had launched a massive drive against sex selection, selective abortion and female feticide.
- About 400 FIRs have been registered under Pre-Conception and Pre-Natal Diagnostic Techniques and Medical Termination of Pregnancy Acts against the offenders after successful raids, including 75 raids conducted across the border in adjoining states in the last about one year.

Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

54. Missions to explore solar system's asteroids

Aiming to find important clues to the earliest history of the solar system, NASA has announced two missions — one to explore Jupiter's mysterious Trojan asteroids and the other to study a unique metal asteroid.

- The missions, known as Lucy and Psyche, were chosen from five finalists and will proceed to

Lucy:

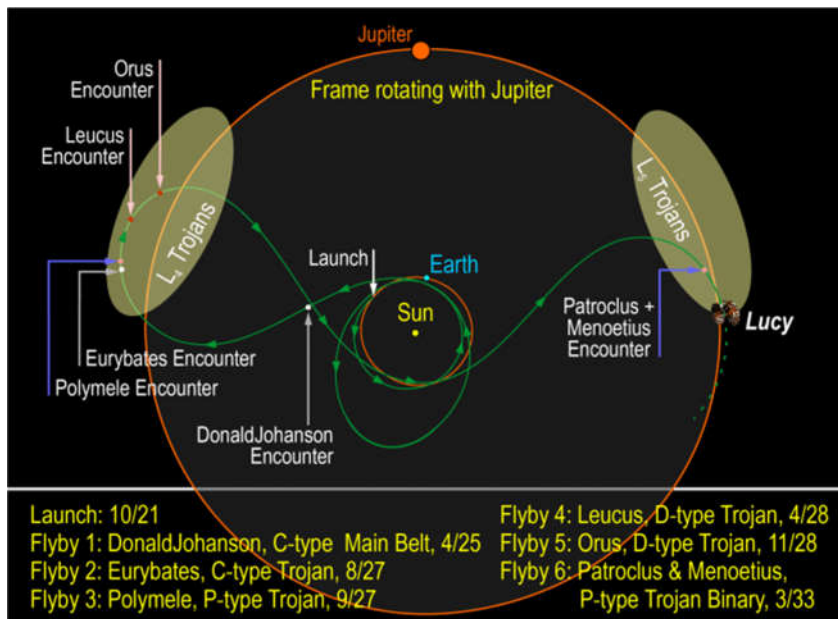
Lucy will visit the environment of Jupiter's mysterious Trojan asteroids. Lucy, a robotic spacecraft, is scheduled for October 2021 launch. It is slated to arrive at its first destination, a main belt asteroid, in 2025. From 2027 to 2033, Lucy will explore six Jupiter Trojan asteroids.

•These asteroids are trapped by Jupiter's gravity in two swarms that share the planet's orbit, one leading and one trailing Jupiter in its 12-year circuit around the sun.

•The Trojans are thought to be relics of a much earlier era in the history of the solar system, and may have formed far beyond Jupiter's current orbit.

•This is a unique opportunity because the Trojans are remnants of the primordial material that formed the outer planets, they hold vital clues to deciphering the history of the solar system. Lucy, like the human fossil for which it is named, will revolutionize the understanding of our origins.

mission formulation, with the goal of launching in 2021 and 2023, respectively.



Psyche:

The Psyche mission will explore one of the most intriguing targets in the main asteroid belt – a giant metal asteroid, known as 16 Psyche, about three times farther away from the sun than is the Earth.

- This asteroid measures about 130 miles (210 kilometers) in diameter and, unlike most other asteroids that are rocky or icy bodies, is thought to be comprised mostly of metallic iron and nickel, similar to Earth's core.
- The mission will help scientists understand how planets and other bodies separated into their layers – including cores, mantles and crusts – early in their histories.
- Psyche, also a robotic mission, is targeted to launch in October of 2023, arriving at the asteroid in 2030, following an Earth gravity assist spacecraft manoeuvre in 2024 and a Mars flyby in 2025.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

55. Ban on import of exotic skins

In a landmark decision that will spare the lives of tens of thousands of animals from the exotic leather industry, the Directorate General of Foreign Trade has banned the import of skins of reptiles and fur of minks, foxes and chinchillas.

- Animal rights bodies have hailed the decision by the Centre to ban such imports, saying that the country is now emulating other nations across the world in adopting “cruelty-free” alternatives to exotic skins.

This decision comes in the wake of campaigning for a ban by People for Animals (PFA), Humane Society International/India (HSI/India) and People for the Ethical Treatment of Animals (PETA). The Ministry of Environment and Forest and Climate Change, and the Animal Welfare Board of India had supported the ban proposal

Topic: paper 3(governance, constitution, polity, international relations)

56. PIO vs. OCI cards

The Pravasi Bharatiya Diwas, this time held at Bengaluru, is held regularly to celebrate the Indian diaspora across the worlds and their contribution to India—both in India and abroad. At the event, the PM urged the diaspora community to switch from their PIO cards to OCI cards.

Benefits of a PIO card:

A PIO card holder doesn't need a visa to visit India. The holder also doesn't require a student or employment visa to acquire employment or academic opportunities in India. The holder was exempted from registering at the foreigner regional registration office (FRRO) during the duration of stay in India.

Categories

People who go and live abroad from India can be categorised in three broad categories-NRIs, PIOs and OCIs. While NRIs (Non-Resident Indians) is essentially a term for Indians that live in another country, PIOs and OCIs are people who want to stay connected and involved with India more closely. For that same reason, the government of India issues PIO cards and OCI cards to them according to their needs.

The holder also enjoys parity with NRIs in concern to economic, financial and educational matters. These may include matters related to property transfer or acquisition, holding, disposal, investment, admission of children in educational institutions under general category quota for NRIs. Separate immigration counters are provided at all International airports in India for PIO card holders.

Drawbacks of PIO card:

It does not provide voting rights to the holder. Prior permission is needed to undertake mountaineering expeditions or any such related research work in protected areas. Meanwhile, the PM promoted the idea of converting their PIO cards with OCI cards. The OCI cards also provided several benefits. OCI is essentially a lifetime visa status offered by India to an Indian person who has given up his citizenship.

The benefits of OCI cards are substantial.

OCI cards give you lifetime multiple entry visa to India. Also, you never have to register with the FRRO no matter how long your stay is. If you remain an OCI for 5 years, you can attain Indian citizenship and then live in India for a period of one year including short breaks. Special immigration counters are provided at all international airports in India for OCI card holders.

An OCI cards holder can open special bank accounts in India just like NRIs and make investments. OCI holders can also buy non-farm property and exercise ownership rights.

An OCI card allows you to apply for a driver's license, PAN card or open a bank account in India. You get same economic, financial and educational benefits like NRIs and you can also adopt children.

Restrictions for OCI card holders

An OCI card holder cannot vote, hold a government job or purchase agricultural or farm land. The person can also not run for public office or travel to restricted areas without permission.

57. Reaching out to Africa

Kenya hungry for more

Bilateral trade, valued at \$4.23 billion in 2014-15, has the potential for rapid growth if Indian companies are willing to be active in a competitive market.

- Kenya, the earliest home to Indian investments, is hungry for more. Diverse sectors in Kenya, such as energy, pharmaceuticals, textiles, agriculture and financial services, will welcome greater involvement of India Inc.
- Some major Indian corporates, including the Tatas, Reliance, Essar, Kirloskars and Dr. Reddy's, are flourishing in Kenya.
- The government must approve additional Lines of Credit in strategic areas to secure mutual interests. Education and health are other promising fields.

Strategic and economic interests coalesce as India tries to leverage the intense competition among Asian nations for Kenya's affections. Kenya has developed close relations with China but he needs other partners too. Japan and India are committed to enhance long-term collaboration in Africa. By participating jointly in key infrastructure development projects in Kenya and the surrounding region, Indian and Japanese companies can offer an innovative model.

India's over all policy

India's Africa policy is broadly in line with Agenda 2063, promoted by the African Union. However, some recalibration in New Delhi's approach may be needed because issues such as UN reform, counterterrorism, climate change and international solar alliance will inevitably take longer to show results. Meanwhile, India must concentrate on actions that strengthen its economic cooperation with select African countries.

India should build on the path forged so far. That is: holding the India-Africa Forum Summit in 2015 and an unprecedented political outreach to Africa through visits by the President, Vice-President and Prime Minister to a dozen countries in 2016. The time is ripe to implement the agreements that have been signed.

Strategic partnerships don't mean much, anymore

India and Rwanda announced a strategic partnership after a meeting at the Vibrant Gujarat summit this week, promising to enhance their exchanges and tighten cooperation between them. But the move raised eyebrows both within the External Affairs Ministry and outside, with officials conceding that they have "lost count" of the number of such strategic partnerships announced by India in the past two decades.

The start: Since signing its first strategic partnership with France in 1998, India has announced 30 such. Also there is no "official list" of strategic partners nor does the EAM have "formalised any criterion" for which a country qualifies for the term.

The case of Kigali: In the case of Rwanda India has signed a "strategic partnership" despite the fact that New Delhi does not even maintain a mission in the Rwandan capital of Kigali.

It is hard to see what 'strategic' interests India has in Rwanda at present. At present, the Indian High Commission in Uganda is concurrently accredited to Rwanda and Burundi, though Rwanda opened its mission in Delhi in 1999 and has posted an Ambassador here since 2001.

The impact of elevation

The larger problem is that "really important" strategic partnerships with countries such as the U.S., Russia, France and Germany and neighbours such as Afghanistan lose some value every time the government associates a country with the title that does not have the same strategic importance.

East African Community

The East African Community (EAC), comprising Kenya, Tanzania, Uganda, Rwanda, Burundi and South Sudan, has emerged as one of the most successful of Africa's Regional Economic Communities. Having established a customs union, it is building a single market and wants to set up a monetary union.

While progress is slow, it remains set on its path to grow as a market of 168 million consumers and a combined GDP of \$161 billion. The bulk of foreign investment now comes from China.

The Indian government and India Inc. need to devise a trade and industrial cooperation strategy to upgrade existing links with the EAC. But India has to tread with caution as the traditional rivalry between Kenya, the regional economic powerhouse, and Tanzania, the largest member-state, has been renewed.

India enjoys friendly and cooperative relations with all EAC members and is in a position to enhance its engagement with the region.



Topic: paper 3 governance, constitution, polity

58. Publicly-funded elections

Purpose

Competitive political parties and election campaigns are central to the health of democracies. Parties and campaigns require significant resources to be effective. India has developed complex election expenditure, political party funding, and reporting and disclosure laws. However, these laws may have perverse impacts on the electoral system: they tend to drive campaign expenditure underground and foster a reliance on unaccounted funds or "black money." This tends to lead to an adverse selection system, in which those willing and able to work with black money dominate politics. In this context, experts have suggested to go for publicly-funded elections.

Its main purpose is to make it unnecessary for contestants to take money from powerful moneyed interests so that they can remain clean. Countries keep changing laws relating to state funding depending on experience and financial condition.

What is state or public funding of elections?

This means that government gives funds to political parties or candidates for contesting elections.



Direct and indirect state funding of elections

Direct funding means giving funds directly to political parties (or candidates). Indirect funding takes the form of various subsidies or access. Indirect funding can take the form of subsidized or free media access, tax benefits, free access to public spaces for campaign material display, provision of utilities and travel expenses, transport, security etc.

Status in India: Current state funding measures include

- Provision of free time on public broadcasters for national parties in general elections and for registered state parties in state legislature elections.
- National parties are provided some benefits like security, office space, utility subsidies etc.
- Another form of indirect state funding available in India is that registered political parties do not have to pay income tax, as laid down in S.13A of the Income Tax Act.

Recommendations of commissions and committees

Some major reports on state funding include those given by the Indrajit Gupta Committee on State Funding of Elections (1998), Law Commission Report on Reform of the Electoral Laws (1999), National Commission to Review the Working of the Constitution (2001) and the Second Administrative Reforms Commission (2008)

Suggestions

- Such funding should be limited to parties recognised as 'national' or 'State' by the Election Commission of India, and to candidates directly fielded by such recognised parties.

- To allay budgetary constraints, a start could be made with partial funding — that is, with the state taking care of certain expenditures of the recognised parties. The aim should be to discourage political parties from seeking external funding (except through a nominal membership fee) to run their affairs, carry out their programmes and contest elections.

- A separate Election Fund with an annual contribution by the Centre and a matching amount by all States put together should be created.

- Only those parties which have submitted their income tax returns up to the previous financial year could avail of state funding.

- Every candidate of the party eligible for state funding should be given a specified quantity of fuel for vehicles during an election campaign and a specified quantity of paper to prepare electoral literature.

The opaque and gargantuan nature of electoral finance is at the root of the twin evils of corruption and black money. The only permanent solution is to strike at its foundation.

Why public funding is good?

- Political parties and candidates need money for their electoral campaigns, to keep contacts with their constituencies, to prepare policy decisions and to pay professional staff. Therefore, public funding is a natural and necessary cost of democracy.
- Public funding can limit the influence of interested money and thereby help curb corruption.
- Public funding can increase transparency in party and candidate finance
- If parties and candidates are financed with only private funds, economical inequalities in the society might translate into political inequalities in government.
- In societies where many citizens are under or just above the poverty line, they cannot be expected to donate large amounts of money to political parties or candidates. If parties and candidates receive at least a basic amount of money from the State the country could have a functioning multi-party system without people having to give up their scarce resources.

except for the 2001 report, all other recom

mended partial state funding only, given the economic situation of the country.

- The 1998 report said that state funds should be given only to registered national and state parties and that it should be given in kind only.
- The 1999 report concurred with this but also recommended first putting a strong regulatory framework in place including internal elections, accounting procedures etc.
- The 2001 report said that first a regulatory framework needs to be established before thinking about state funding.

Efficacy in question

There are divergent views on the efficacy of state funding of elections. Some have been dismissive of the idea. Those against this idea wonder how a Government that is grappling with deficit budgets, can provide money to political parties to contest elections.

- They also warn that state funding would encourage every second outfit to get into the political arena merely to avail of state funds.
- Also, given that state expenditure on key social sectors such as primary healthcare is "pitifully small", the very idea of the Government giving away money to political parties to contest polls, is revolting. Therefore, opponents ask the government to channelize public resources towards and not diverted from such essential services.

Elsewhere

It isn't India alone that has been struggling with the idea of state funding of political parties; other democracies too have

grappled with it. Some like Finland, Italy, Israel, Norway, Canada, the US, Japan, Australia and South Korea implemented the concept with mixed results. Italy, Israel and Finland, for instance, did not see any significant reduction in state expenditures due to public funding, despite the many checks and balances. In most of these countries, the argument against state intervention has been that political parties, being a free association of citizens, are independent entities, and that they cannot be bound by financial strictures. It's an argument that can well be applied to India by anti-state interventionists.

Paper 2 Topic: Separation of powers between various organs dispute redressal mechanisms and institutions.

59. Whistleblower law

The court observed that Parliament is already seized with the law and the judiciary would be encroaching on the legislature's turf by entertaining allegations now.

Background

The law provides a mechanism to investigate allegations of corruption and misuse of power by public servants while protecting those who tip off investigative agencies against officials.

- In 2014, the Whistleblowers Protection Act replaced a 2011 legislation aiming to strengthen the legal framework. However, the central government is yet to set up a mechanism under the 2014 law as certain amendments are being debated in parliament.
- The amendment proposed to exclude from the purview of the Whistleblowers Act, categories like cabinet proceedings, scientific interests and the security of India.
- The Whistleblower Protection Act, which was passed in May 2014 after an inordinate delay, lays down the rules that protect whistle blowers in non-corporate cases.
- Under this Act, the Central Vigilance Commissioner has to receive complaints, review public disclosure requests and ensure that the complainants are protected. The Act stipulates imprisonment of up to two years and fine of up to ₹30,000 if the complaint is false. The government has proposed a few amendments to these rules.
- The amendment bill is pending in the parliament.

The Supreme Court has refused to examine a petition alleging dilution in the Whistleblower Protection Act and seeking interim measures to protect whistleblowers who expose corruption in public administration and governance.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

60. Review of RTE Act

The issue

The Right To Education (RTE) Act, which aims to provide primary education to all children aged 6-14 years, stipulates that no child can be held back in a grade, regardless of his performance, all the way up to the eighth grade. This means that a child is entitled to an eighth grade diploma even if he cannot recognise a single letter or a number if he has spent eight years in school.

Though the purpose behind this move is to minimise drop-out rates, the Niti Aayog pointed out that this provision has a detrimental effect on learning outcomes, since it takes away the pressure to learn and to compete.

Status

Presently, the proportion of children aged 6-14 years enrolled in school in rural areas has been above 96% for the past six years, according to Annual Status of Education Report (ASER) 2014. But, the ASER report finds that more than 50% of the fifth graders cannot read second standard level text. Hence, the Niti Aayog has said that the quality of education should be more important.

The Niti Aayog has called for a review of the provisions of the Right To Education Act that stipulate that children who don't perform well cannot be held back up to class VIII. It said the good intention behind the norm is detrimental to the learning process.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

61. Fractional doses of IPV

According to a latest report by WHO, amid a global shortage of injectable inactivated polio vaccine (IPV) polio vaccine, countries in the South East Asian region have now opted for fractional doses of IPV, first adopted by India, to tackle these “challenging conditions”.

WHO also observed that by introducing fractional doses of IPV, nations are not only saving vaccine cost but also not compromising on the protection that it provides to the children against polio.

Backgrounder

Since polio-free certification on March 27, 2014, all countries in WHO South East Asia Region have been working towards timely implementation of the global polio endgame strategy to achieve a polio-free world.

IPV:

IPV is produced from wild-type poliovirus strains of each serotype that have been inactivated (killed) with formalin. As an injectable vaccine, it can be administered alone or in combination with other vaccines.

- IPV provides serum immunity to all three types of poliovirus, resulting in protection against paralytic poliomyelitis.

- IPV is an evidence-based intervention that not only ensures continued protection of children against all types of polio viruses, but also helps save vaccine — a move bound to positively impact global vaccine supply in the coming years.

- Studies have confirmed that two fractional doses (one fractional dose is one-fifth of a full dose) of IPV, given twice to infants — first at the age of six weeks and then at 14 weeks — provide the same protection against all polio viruses as does one full dose of IPV.

- India became the first country globally to introduce

- South East Asia was the first WHO Region to complete the polio vaccine switch from the traditionally used trivalent oral polio vaccine (tOPV) to the bivalent vaccine (bOPV) to prevent any paralysis caused by type 2 polio virus strain in tOPV.

Central Vigilance Commission:

- It was created via executive resolution (based on the recommendations of Santhanam committee) in 1964 but was conferred with statutory status in 2003. It is the apex vigilance institution.
- Presently, the body consists of central vigilance commissioner along with 2 vigilance commissioners.
- They are appointed by the President of India on the recommendations of a committee consisting of Prime Minister, Union Home Minister and Leader of the Opposition in Lok Sabha (if there is no LoP then the leader of the single largest Opposition party in the Lok Sabha). Their term is 4 years or 65 years, whichever is earlier.
- It submits its report to the President of India.
- The Central Vigilance Commissioner or any Vigilance Commissioner can be removed from his office only by order of the President on the ground of proved misbehavior or incapacity after the Supreme Court, on a reference made to it by the President, has, on inquiry, reported that the Central Vigilance Commissioner or any Vigilance Commissioner, as the case may be, ought to be removed.

- As a part of the global polio endgame strategy, countries in the Region have introduced IPV to supplement the oral polio vaccine (OPV), and ensure protection against all types of polio viruses.

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

62. Central Vigilance Commission and Departmental inquiries

Irked over delay in completion of departmental inquiries, the Central Vigilance Commission (CVC) has asked all departments to ensure that such proceedings are completed in time, so that honest officials are not harassed

As per rules, a departmental inquiry against a government employee needs to be completed within six months and a final decision has to be taken by authorities concerned on it in the next two months.

Suggestions

The Sarkaria Commission thought that a change was unnecessary.

- The erstwhile Planning Commission has also suggested water law on the lines of the European Union where water is under one directive.
- The Public Accounts Committee (PAC) has also recommended bringing water in the concurrent list of the Constitution. The panel, in a report titled 'Water Pollution in India', urged the Centre to come up with a national legislation on water.
- The Parliamentary Standing Committee on Water Resources too had urged the Centre to initiate "earnest" efforts to build a national consensus for bringing water into the Concurrent List of the Constitution so that a comprehensive plan can be prepared for water conservation.

Topic: paper 3 functions and responsibilities of union and states, issues and challenges pertaining to the federal structure, devolution of powers and challenges their up on

63. Bringing water into concurrent list?

Opposite viewpoint

- A move to put water into the Concurrent List at this stage will be generally regarded as a retrograde step that runs counter to the general trend towards decentralisation and enhanced federalism, and it will face serious political difficulty because there will be stout opposition from the States.
- It seems sensible to use that enabling provision, and also re-activate the River Boards Act, rather than pursue the difficult idea of a constitutional amendment to bring water on to the Concurrent List.

The Union Ministry of Water Resources has for long been arguing for a shift of water to the Concurrent List without any serious expectation of its happening, but has now begun to pursue the idea more actively.

Present constitutional position

The general impression is that in India water is a State subject, but the position is not quite so simple.

- The primary entry in the Constitution relating to water is indeed **Entry 17 in the State List**, but it is explicitly made subject to the provisions of **Entry 56 in the Union List** which enables the Union to deal with inter-State rivers if Parliament legislates for the purpose.
- This means that if Parliament considers it “expedient in the public interest” that the “regulation and development” of an inter-State river, say the Ganga or Yamuna or Narmada, should be “under the control of the Union”, it can enact a law to that effect, and that law will give the Union legislative (and therefore executive) powers over that river.
- That enabling provision has not been used by Parliament. No law has been passed bringing any river under the control of the Union.
- Under Entry 56, Parliament did enact the **River Boards Act 1956** providing for the establishment of River Boards for inter-State rivers, but no such board has been established under the Act. That Act is virtually a dead letter. The reasons are political, i.e., strong resistance by State governments to any enhancement of the role of the Central government.

Why water should be placed in the concurrent list?

- Water as a subject is larger than rivers; ponds and lakes, springs, groundwater aquifers, glaciers, soil and atmospheric moisture, wetlands, and so on, are all forms of water and constitute a hydrological unity. Hence, keeping the environmental, ecological, social/human, and rights concerns relating to water, it seems necessary to place this subject under the concurrent list.
- In the recent past, there have been serious concerns relating to groundwater — rapid depletion of aquifers in many parts of the country, the emergence of arsenic and fluoride in many States, etc. It is also interesting to note that there is no explicit reference to groundwater or aquifers in the Constitution. Hence, in this context, some experts want the subject to be moved to the concurrent list.
- The sense of water scarcity and crisis now looms large. It is clear that while action will be called for at the State and local levels, the perception of a crisis casts a great responsibility on the Centre: national initiatives will definitely be called for.
- A new factor not foreseen even a few decades ago is climate change and its impact on water resources. This is a subject which is still under study and research, but it is clear that coordinated action will be called for not only at the national level but also at the regional and international levels. The Central government has necessarily to play a lead role in this regard.
- Finally, it appears that to the Constitution-makers ‘water’ meant essentially river waters and irrigation. This is quite evident from the wording of the entries. In that context, it might have appeared appropriate to assign the primary role to the States, and provide a specific role for the Centre in relation to inter-State rivers. But, since most of our important rivers are in fact inter-State, and inter-State river water disputes are on rise, it is argued that the centre should assume a greater role.

There is a need to recognise water as a finite and vulnerable resource. The Government should take urgent action to set the stage for enactment of a comprehensive national legislation on water after evolving a broad national consensus to bring it in the concurrent list and formulate an over-arching

national legal framework for effective water management, conservation, development and equitable distribution with adequate provisions for devolution necessary authority to the lower tiers of Government.

Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

64. Bilateral Advance Pricing Agreement

The Central Board of Direct Taxes (CBDT) has entered into a Bilateral Advance Pricing Agreement (BAPA) with Indian subsidiary of a Japanese trading company.

With this, total three Bilateral APAs are now signed with Indian subsidiaries of Japanese companies all including rollbacks. The total number of bilateral APAs entered into by the CBDT is now eight.

Signing of bilateral APA is an important step towards ascertaining certainty in transfer pricing matters of

BAPA: Under BAPA, certainty in tax treatment is provided for the next 5 years while rollback provides dispute redressal for a maximum of four past years preceding APA years.

• A BAPA may be preferred by multinational companies since finalisation of the same involves reaching an understanding between the tax administrations of the two countries and for the transfer pricing adjustment done in the hands of the Indian entity, corresponding adjustment is available in the hands of related foreign entity, thereby relieving economic double taxation.

multinational company cases and dispute resolution.

Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

65. ILO report

The International Labour Organisation (ILO) has released its report on World Employment and Social Outlook for 2017.

Way ahead

Entering 2017, working poverty is projected to continue to decline in Asia-Pacific, in both rate and absolute numbers, while vulnerable employment numbers look set to rise, despite decreases in the vulnerable employment rate, largely as a result of population growth.

• The number of jobless will increase from 17.7 million in 2016 to 18 million by 2018 even though the country's unemployment rate is expected to go down from 3.5% to 3.4% in 2017.

• Globally, the number of jobless people will increase by 3.4 million in 2017. The global unemployment rate is expected to rise modestly from 5.7 to 5.8% in 2017 as the pace of labour force growth outstrips job creation.

• Vulnerable forms of employment, which include contributing family workers and own account workers, are expected to stay above 42% of total employment.

• The number of workers earning less than \$3.10 per day is even expected to increase by more than 5 million over the next two years in developing countries.

• Global uncertainty and the lack of decent jobs are, among other factors, underpinning social unrest and migration in many parts of the world.

• Asia Pacific region, with nearly 60% of the global workforce, saw net employment rise by over 20 million (or 1.1%) in 2016, and a similar expansion is anticipated in 2017.

• Southern Asia has created most of the new employment, with employment expanding by 13.4 million in 2016, underpinned by population-driven labour force growth. The majority of this new employment was created in India.

The report also notes that a co-ordinated effort to provide fiscal stimulus and an increase in public investment that takes into account each country's fiscal space, would provide an immediate jump-start to the global economy and reduce global unemployment in 2018 by close to 2 million compared to our baseline forecasts.

Topic: paper 2 Indian heritage and culture

66. Indian harvest festivals:

The Harvest season is on and festivities have gripped the nation from the north to down south.

- The festival of **Makar Sankranti** is being celebrated today when the Sun enters the Makar zodiac and the days begin to lengthen compared to nights.
- In South India and particularly in Tamil Nadu, it's the festival of **Pongal** which is being celebrated over 4 days at harvest time.
- In Assam and many parts of the North East, the festival of **Magha Bihu** is celebrated. It sees the first harvest of the season being offered to the gods along with prayers for peace and prosperity. People in Assam celebrate this festival wearing colourful and bright clothes.
- Gujarat celebrates it in the form of the convivial **kite festival of Uttarayan**.
- In Punjab, Makar Sankranti is celebrated as **Maghi**. Bathing in a river in the early hours on Maghi is important.
- In Shimla District of Himachal Pradesh, Makara Sankranti is known as **Magha Saaji**. Saaji is the Pahari word for Sankranti, start of the new month. Hence this day marks the start of the month of Magha.
- The festival is known as **Kicheri** in Uttar Pradesh and involves ritual bathing.

Topic: paper 3 international

67. Why Norway is discarding FM for digital radio

Norway is all set to become the first country in the world to start shutting down its FM radio network in favour of digital radio, a bold move watched closely by other countries around Europe.

Why Norway is shifting to DAB?

- Part of the reason Norway is the first country to switch away from traditional analogue transmission is to do with topography – it is expensive to get FM signals to a small population scattered around a landscape riven with fjords and high mountains.
- The issue of cost savings is also involved. It is estimated that there will be around 200m Norwegian kroner (£19m) savings a year. The savings let broadcasters invest more in programming, and give listeners a better and more reliable sound that will be more easily receivable in a country with lots of mountains and rocks.
- Digital audio also offers better quality without all the fuzziness between stations.
- Digital allows for more stations. Norway only has five stations on FM, compared to 26 on DAB.

Background:

FM or Frequency Modulation was invented in the United States 1933 and made widely available in the 1950s. Digital audio broadcasting (DAB) was developed by researchers in the 1980s.

Norway, generally a technology-friendly country, has been preparing for the switchover for years — DAB and FM have existed side-by-side since 1995. There are currently 22 national digital stations, along with around 20 smaller ones.

Why DAB is good?

- Supporters of Digital Audio Broadcasting say DAB offers better sound quality and more channels at an eighth of the cost of FM (frequency modulation) transmission, which was first launched in the U.S. in 1945.
- The authorities also say DAB offers better coverage, allows listeners to catch up on programmes they have missed and makes it easier to broadcast emergency messages in times of crisis.

What is digital radio? Is it better than AM and FM radio?

Digital radio is to normal radio what digital television is to your standard analog TV. It's the most significant upgrade to happen since the introduction of FM in Australia in the 1970s and the leap in quality is comparable to FM versus AM. Digital radio works by turning sound into digital signals for transmission and then decoding them at the other end using digital radio receivers; the result is close-to-CD-quality sound output.

While AM/FM radio quality can suffer from interference caused by signals bouncing off walls, buildings, hills and other structures, digital radio receivers have built-in technology that cleans and filters transmissions, making interference practically non-existent. The downside is that you either get signal or you don't.

As well, digital radios are also usually easier to tune — instead of fiddling with a dial to find the strongest frequency for a station, listeners choose a station by name from a menu, with the digital radio automatically locking on to the appropriate frequency at a push of a button.

- Along with the song, DAB also lets radio stations broadcast other digital information like which song is currently playing, the name of the artiste, album art etc, which can be displayed on the screens of phones or cars.
- Along with being much clearer, digital signals are also easier to tune, as users don't need to browse through a frequency range in order to locate their favourite radio channel. They can instead just pick the radio station or broadcast they want from a menu.

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Jasmeet Singh Sandhu
AIR - 3



Yogesh Kumbhejkar
AIR - 08



Anurag Chander Sharma
AIR - 11

13 in top 100 - 41 in top 500
93 in the final list

Why are some people against this move?

A poll in December 2016 found 66% of Norwegians are against shutting down FM, with only 17 %in favour. There are varying reasons for this:

- While around three quarters of the population have at least one DAB radio set, many motorists are unhappy as only about a third of cars currently on the road are equipped. Converting a car radio involves buying an adaptor for between 1,000 and 2,000 kroner (110 to 220 euros), or getting a whole new radio. Hence, they feel the move is expensive and the shift is premature.
- While the switchover is expected to reduce the cost of transmission for broadcasters, it is the listeners who will pick up much of the cost of the transition.
- Many fishermen for whom radio is vital, are also said to be ill-equipped. Critics have warned that emergency traffic messages – often vital in Norway’s inclement winters – may go unheard.
- Although DAB has the potential to provide better sound quality than FM, in reality, governments may end up filling the DAB bandwidth with as many channels as possible which may divide the bit-rate (the rate of data transfer) among these broadcasts. As a result, if the DAB bandwidth is choked, it may suffer a drop in quality.

Topic: paper 4 technology, economic development

68. Will a universal basic income work in India?

The persistence of high inequality and the prospect of job losses owing to automation in the advanced world has led several advanced economies to consider the idea of a universal basic income (UBI) to guarantee their citizens a minimum level of income support. The same idea seems to be gaining favour among a growing number of economists and policymakers in India.

Why the idea of UBI is good in the Indian context?

The idea of the UBI is more relevant for India than for the advanced economies which have been considering it so far since governments in India tend to ‘mess up’ when it comes to distinguishing the poor from the non-poor. As a result, the poor get very little of what is spent in their name. Also, it is argued that many of the subsidies benefit the rich more than the poor.

But is such an idea feasible in India?

An acceptable level of the UBI could be an income equivalent of the poverty line (the Tendulkar committee poverty line), which is about Rs1,090 per month for every individual, in 2015-16 prices. The total cost of providing this income to all Indians would amount to 12.5% of GDP, which is nearly equal to the size of the Union Government’s budget. Thus, such an exercise does not appear to be feasible because of budget constraints.

(For more exhaustive details please refer to our “Economic Survey 2017 simplified” publication)

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

69. Revamped IDF

The **India Development Foundation of Overseas Indians (IDF)** is set to transform the Indian landscape where people from the Indian diaspora can contribute for building infrastructure in the country.

- At the Pravasi Bharatiya Divas, it received more donations than last year.

The IDF platform existed earlier too but contributions were never significant as there were many legal hurdles and lack of transparency. Taking these matters into account, the Centre has now made it a more dependable and transparent platform that can help build infrastructure anywhere in the country.

IDF:

India Development Foundation of Overseas Indians (IDF-OI) is a not-for-profit Trust set-up by the Government of India to facilitate philanthropic contributions by Overseas Indians to social and development projects in India.

- Presently, IDF-OI is promoting flagship programmes of Government of India- Swachh Bharat Mission and National Mission for Clean Ganga; and projects identified by the State Govts, for funding by Overseas Indians.
- Working with State Governments in areas such as sanitation; education; drinking water; women's empowerment etc, IDF-OI is offering projects for funding by Overseas Indians. Overseas Indians can contribute as an individual, or a group of individuals or even through their respective Indian Associations.
- IDF-OI does not recover any administrative cost from contributions received from Overseas Indians.

Paper 3 Topic: Challenges to internal security through communication networks, role of media and social networking sites in internal security challenges, basics of cyber security; money-laundering and its prevention.

70. DRI

The recently-released data by the Directorate of Revenue Intelligence (DRI) and the Customs show a 50% jump in smuggling of Indian, foreign and counterfeit currency notes over the previous years. The figures are for the financial year 2014, 2015 and 2016 (up to March). The figures do not mirror the impact of demonetisation.

DRI:

The Directorate of Revenue Intelligence was constituted on 4th December 1957, for dealing exclusively with the work relating to the collection and study of information on smuggling activities and the deployment of all anti-smuggling resources at the all India level, besides arranging training for the intelligence and Investigation officers of the Custom Houses and Central Excise Collectorates deployed on similar work.

- DRI is the major intelligence agency which eradicates smuggling of drugs, gold, diamonds, electronics, foreign currency, counterfeit Indian currency, etc.
- It functions under the Central Board of Excise and Customs in the Ministry of Finance, Department of Revenue.
- The Directorate is run by officers from Central Excise and Customs. Though its early days were committed to combating smuggling in of gold, it has now tuned itself to the changing nature of crimes in the field of narcotics and economic crimes.

Paper 3 Topic: Indigenization of technology and developing new technology.

71. Scorpene submarine

Khanderi, the second Scorpene submarine under Project-75 being built at Mazgaon Docks Limited (MDL) in Mumbai is all set to be launched.

- Khanderi is named after the Island fort of Maratha forces, which played a vital role in ensuring their supremacy at sea in the late 17th century.
- The state-of-the-art features of this Scorpene class submarine include superior stealth and the ability to launch a crippling attack on the enemy using precision guided weapons.
- The attack can be launched with torpedoes, as well as tube-launched anti-ship missiles, whilst underwater or on surface. The stealth features will give it an invulnerability, unmatched by many submarines.
- The submarine is designed to operate in all theatres, including the tropics.
- It can undertake multifarious types of missions typically undertaken by any modern submarine like anti-surface warfare, anti-submarine warfare, intelligence gathering, mine laying and area surveillance.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

72. Pravasi Kaushal Vikas Yojana (PKVY)

Prime Minister Narendra Modi, on the sidelines of the 14th Pravasi Bharatiya Divas Convention, has announced a scheme to skill Indian youth seeking jobs abroad- **Pravasi Kaushal Vikas Yojana (PKVY)**.

- The Pravasi Kaushal Vikas Yojana (PKVY) is aimed at skilling Indians seeking employment abroad.
- The programme is also aimed at boosting the confidence of the Indian youth so that they don't feel like strangers when they land in a country of their choice for vocation.
- PKVY will train and certify Indians, who are keen on overseas employment in select sectors, in line with international standards.
- It will be implemented by the National Skill Development Corporation through its training partners and in consultation with the Ministry of External Affairs and the Skill Development Ministry.

Paper 3 Topic: Disaster and disaster management.

73. Operations in conflict zones

A leading global think tank, the Carnegie Endowment for International Peace, has recommended putting in place a formal doctrine or emergency plan and developing standard operating procedures to facilitate evacuation of expatriates from conflict zones.

Recommendations:

In the report- 'India's Expatriate Evacuation Operations', the think tank has made recommendations including training and preparing diplomatic corps and military personnel, and establishment of a permanent coordinating mechanism among various government departments at national and international level for a smooth evacuation of expats.

Background:

India has extensive experience in conducting evacuation operations. Successive Indian governments have conducted more than 30 evacuation operations across West Asia, Africa and Europe since 1990, including the largest ever civilian airlift of 110,000 people from Kuwait in 1990. About 20 million Indians travel abroad annually and another 11 million Indians reside overseas.

As India's diaspora continues to grow, so will be challenges New Delhi faces in protecting this diverse and geographically diverse and geographically dispersed population. To overcome these issues, the Indian government will have to institutionalise best practices, bolster its diplomatic and military capabilities, and improve coordination

Paper 2 Topic: Functions and responsibilities of the Union and the States, issues and challenges pertaining to the federal structure, devolution of powers and finances up to local levels and challenges therein.

74. Krishna tribunal-II award

The Supreme Court has dismissed a Telangana government petition against a decision of the Krishna Water Dispute Tribunal-II to limit the re-allocation of the river water only to the two successor States of Andhra and Telangana, and not dabble with the share of water enjoyed by the other two riparian States — Maharashtra and Karnataka.

Background:

The Krishna Water Disputes Tribunal II headed by Justice Brijesh Kumar had decided to confine the reallocation of Krishna water between Andhra Pradesh and Telangana. In its recent verdict delivered in October 2016, the KWDT-II decided to maintain status quo on the allocation made to upper riparian States Maharashtra and Karnataka and take up further action on distribution of water to Telangana and Andhra Pradesh out of the allocation made to the erstwhile united State.

Krishna Water Disputes Tribunal (KWDT):

Krishna Water Disputes Tribunal (KWDT) was set up under Inter-State River Water Disputes Act, 1956 to adjudicate upon the water dispute regarding the Inter-State river Krishna and the river valley thereof.

The tribunal gave its award in 1973. The KWDT in its award outlined the exact share of each state. The award contended based on 75% dependability that the total quantum of water available for distribution was 2060TMC. This was divided between the three states in the following manner.

- Maharashtra 560 TMC.
- Karnataka 700 TMC.
- Andhra Pradesh 800 TMC.

Topic: paper 4 technology and economic development

75. World's Largest LED Street Lighting Programme

- Union Minister of Power, Coal, New & Renewable Energy and Mines, Shri Piyush Goyal recently dedicated the LED based Street Lighting National Programme (SLNP), currently running in the South Delhi Municipal Corporation (SDMC) area, to the Nation.
- It is the World's Largest Street Light Replacement Programme, which is being implemented by the Energy Efficiency Services Limited (EESL), a joint venture under the Ministry of Power, Government of India.
- The SLNP programme is presently running in Punjab, Himachal Pradesh, Uttar Pradesh, Assam, Tripura, Jharkhand, Chhattisgarh, Telangana, Andhra Pradesh, Kerala, Goa, Maharashtra, Gujarat and Rajasthan.

Topic: paper 3 governance, polity and constitution

76. PAC: watchdog for govt spending; panel of consensus, controversy

After asking the RBI Governor tough questions and threatening to call in the PM to explain demonetisation, Parliament's PAC is back in the news. Though the Public Accounts Committee (PAC) is quite often referred to as a post-mortem committee, it has a significant role in India. The committee's job of scrutinising accounts is a continuous process and it enjoys the prerogative of looking at the present as well as the future.

PAC:

The **Committee on Public Accounts** was first set up in 1921 in the wake of the Montague-Chelmsford Reforms. W M Hailey was its first president, and Bhupendra Nath Mitra its first Indian president. The last president before Independence was Liaquat Ali Khan.

- With the Constitution coming into force on January, 26, 1950, the Committee became a Parliamentary Committee functioning under the Speaker with a **non-official Chairman appointed by the Speaker from among the Members of Lok Sabha** elected to the Committee.
- It is the oldest of all House panels and its job is to keep a vigil on the spending and performance of the government, to bring to light inefficiencies, wasteful expenditure, and indiscretion in the implementation of policies and programmes approved by Parliament, and to make recommendations to streamline the administration for efficient, speedy and economical implementation of policy.
- This **22-member Committee comprises 15 members and 7 members from Lok Sabha and Rajya Sabha**, respectively. **No Minister is allowed to be a member of this panel.** The objective behind this standard practice is to eliminate the chance of ruling party influencing or manipulating PAC's decisions.

Roles & Responsibilities of the PAC:

- Since PAC's job is to keep a tab on where and how the public money is being spent, it has the authority to examine the accounts relating to the Railways, Defence, and other ministries.
- It is the primary role of this parliamentary panel to assess whether the government has judiciously spent the money.
- If it comes to the notice that there has been an overspending or underutilization of funds, the Committee examines the justifications put forward by the government and analyses the circumstances that could have caused such digressions.

- Be it the cases of financial irregularities or tax evasion, the Committee refers and scrutinizes CAG (Comptroller and Auditor-General) reports before making its observations.

Importance of PAC:

The Public Accounts Committee examines the accounts of the Government. The Government expenditures are thoroughly examined and ensured that the Parliamentary limits are not breached. The Government and ministers stay alert while making expenditures because they know that the financial breaches, if any, will be revealed during the examination by P.A.C.

- Because of the overwhelming importance of the Public Accounts Committee (P.A.C.) both the government and the opposition try to gain control over the P.A.C. The government has an inbuilt advantage in that, inevitably the majority of members of the P.A.C. belong to the ruling party.
- But the opposition also has an advantage. It has now become a convention that the chairman of the P.A.C. is a member of the opposition. But since the chairman is nominated by the Speaker, whether an effective and assertive member of the opposition will be the chairman depends on the strict neutrality of the Speaker.
- The independent functioning of the PAC enables it to come up with unbiased reports. The panel remains a vital entity that helps the Parliament exercise its control over the revenues and expenditures of the government.

Functioning of the PAC:

The panel performs a crucial exercise, which is to prepare and submit a report to the Lok Sabha on the basis of the irregularities observed. The report is then tabled in the Parliament for discussions and future recommendations. However, before the PAC starts working on the accounts details of any particular ministry, it interrogates the representative. In the process, the committee is assisted by the CAG.

- As a mechanism for effective oversight, the public accounts committee makes recommendations to the government, following which the latter submits action taken notes to the panel.
- In certain circumstances, the Committee appoints sub-Committees or working groups to examine specific issues.

Challenges:

- Lack of consensus is the biggest problem plaguing the PAC's functioning over the past few decades. Members from different political parties in the panel often have contradictory views over the same issue. While the PAC cannot finalise any report without consensus, the lack of consensus has frequently seen controversy over the role of the Chairman.
- While other Department Related Standing Committees can adopt reports with dissent notes by some members, the PAC must adopt all reports by consensus. This is unique about the PAC, and helps it maintain neutrality. This has, however, led to the slow functioning of the committee in the recent past.
- The lack of technical expertise also hinders the PAC's examinations. Officers are sometimes able to dodge PAC summons, which has prompted suggestions that it should have the power to hand out harsher punishments.
- It is also argued that PAC has been reduced to being a toothless watchdog. The fault lies at the door of the government. This has resulted in shying away from accountability to Parliament and the people.

What needs to be done?

- PACs have larger role in the auditing of governments' accounts. At the moment, PAC's procedures are not open to the media or to the public. Their procedures should be made more transparent.
- PACs feel that their reports are not being taken seriously by the government departments at the Centre or at the States. Governments have to come out with explanations for not considering their reports seriously.
- A broad platform should be built to share and learn from the experiences of PAC functioning and discuss, debate and find solutions to enhance the level of functioning.
- They should be given 'Constitutional Status' similar to that of the Election Commission and the Comptroller and Auditor General.
- The panel should also be given more teeth to efficiently monitor the government spending. It should have powers to examine Public-Private Partnership projects. Services of experts should be availed on technical matters.
- It is also felt that since each PAC operates in a specific political context and faces issues unique to the legislature it serves, its major focus should be on the administration of policy rather than policy itself, to avoid political wrangling.

The Public Accounts Committee has kept the executive accountable to Parliament, thereby lending an additional dimension to the nation's fiscal policies and programmes. The committee has been able to bring to light certain cases where parliamentary authority on the administration of tax laws had been diluted by the executive fiat, and other cases of the government not carrying out the intentions of Parliament as expressed in laws. Therefore, it is necessary to further strengthen the committee which leads to general efficiency of the administration.

Paper 3 Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

77. Pact to achieve 24/7 power

All states and Union Territories barring Uttar Pradesh have inked agreements with the Centre to achieve the milestone of providing '24x7 Power for All (PFA)'.

What is the 24x7 "Power For All" Plan?

'Power for All' is a joint initiative of the Centre in collaboration with State governments for supply of quality and reliable 24 x 7 power to agricultural, industrial and domestic consumers.

- The scheme is aimed at addressing all the key aspects and activities to be undertaken across generation, transmission and distribution, including achieving 100% household electrification.
- The plan aims to provide each household access to electricity, 24x7 reliable power supply and adequate supply to agricultural consumers as per state policy by 2019.
- The plans for each State/UT envisions reduction of AT&C losses by increasing the collection efficiency and effective metering so as to achieve financially viable 24x7 Power Supply.
- It also emphasizes on the development of transmission and sub transmission network which plays vital role in providing round the clock power supply.

Paper 2 Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

78. China deepens military ties with Malaysia

For the first time, a Chinese submarine has docked at a port in Malaysia, signalling deepening military ties between the two countries, which are already partners in the development of the Beijing-led Maritime Silk Road.

- Analysts say docking of Chinese submarine signals the emergence of special ties between Beijing and Kuala Lumpur.
- Submarine port visits can only happen when mutual trust between two navies has reached new heights, as submarine operations are very secretive and sensitive. Therefore, this move is being seen as a trigger for elevated tensions in the South China Sea (SCS). The Malaysian port has a naval base facing the SCS.

Why South China Sea is considered so important?

The SCS is a busy international waterway, being one of the main arteries of the global economy and trade. More than \$5 trillion of world trade ships pass through the SCS every year. The SCS is also resource rich, with numerous offshore oil and gas blocks.

What is the dispute about?

There are a few hundred small islands in the SCS, a part of the Pacific Ocean. Some of the main ones are Spratly Islands, Paracel Islands and Scarborough Shoal — the bone of contention between China and the Philippines. China claims most of these islands as its own. Vietnam, Malaysia, Brunei, the Philippines and Taiwan have rival claims. China has said it will not permit other nations to infringe on what it considers its sovereign rights in the strategically vital area.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

79. Cash for land not enough

Agreeing to hear the plight of the landless victims of the Sardar Sarovar Project in detail, the Supreme Court recently observed that giving cash instead of land to farmers who lost their fertile lands to the mega dam project is “tentatively” not acceptable. The court also observed that farmers in the region should not be left to suffer due to land acquisition.

Earlier, the apex court had dismissed an application by the Madhya Pradesh government and the Narmada Valley Development Authority for a modification of the apex court judgments of 2000 and 2005 upholding land rights for adult sons of the Sardar Sarovar Project-affected farmers.

Sardar Sarovar project:

The Sardar Sarovar Dam is a gravity dam on the Narmada river near Navagam, Gujarat in India. It is the largest dam and part of the Narmada Valley Project, a large hydraulic engineering project involving the construction of a series of large irrigation and hydroelectric multi-purpose dams on the Narmada river. The project took form in 1979 as part of a development scheme to increase irrigation and produce hydroelectricity. The project will irrigate more than 18,000 km² (6,900 sq mi), most of it in drought prone areas of Kutch and Saurashtra.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

80. Endosulfan

The Supreme Court has given the Kerala government three months to disburse Rs 500 crore as compensation for over 5,000 persons who suffered from various deformities and health complications after using Endosulfan pesticides in the state.

Background:

The directive came while the bench disposed off a public interest petition in 2012, which complained about the adverse effects of Endosulfan.

Both the Centre and Kerala were opposed to the ban of the pesticide due to their effectiveness on pests, but the top court stopped its usage in 2012. The Supreme Court had ordered the immediate ban of Endosulfan while disregarding pleas of over 150 private export companies. It had said “any decision affecting human life, or which may put an individual’s life at risk, must call for the most anxious scrutiny.”

Endosulfan:

Endosulfan is one of the most toxic pesticides available in the market. It is an organic contact insecticide, first registered in Germany in 1954. Endosulfan has been banned in over 80 nations due to its ‘high toxicity, potential for bioaccumulation, and role as an endocrine disruptor’.

Topic: paper 3 issues relating to development and management of human resources

81. .National Youth Festival

- National Youth Festival is organized every year by the Department of Youth Affairs of Union Ministry of Youth Affairs and Sports on the birth anniversary of Swami Vivekananda on January 12.
- This time the festival was organized in Rohtak, Haryana.
- Theme- Youth for Digital India.
- The Mascot of the festival has also been decided in view of the long standing skewed sex ratio especially in a state like Haryana. Selection of ‘Lado’ reflect the sensitivity of the state government towards the gender inequality in the state and to bring women at par with men which both the government is committed to combat.

Topic: paper 3 governance, constitution, polity

82. Political funding

The Supreme Court of India has rejected a plea to make it mandatory for parties to declare source of funds. With this, political parties will continue to enjoy income tax exemption for the funds they collect. The court has observed that there is no illegality in the exception made to keep parties out of the tax net.

- The decision puts to rest the debate over whether the exemption was an unfair privilege granted to political parties. The apex court said the matter was one of executive determination and parties needed money to propagate their beliefs.

Background:

A petition was filed in the Supreme Court challenging the constitutional validity of Section 13A of the Income Tax Act which grants exemption to political parties.

Section 13A of the IT Act says *any income of a registered political party which is chargeable under the head "income" from house property or from other sources or any income by way of voluntary contributions received by a political party from any person shall not be included in the total income of the previous year of such political party.*

Why are funds to political parties not taxed?

- As per current rules, political parties in India are barred from undertaking any commercial activity and thus they are not deemed to be engaged in acts that make them liable to pay any income tax.
- Also, CBDT says exemption is provided in recognition of the role played by organised political parties in the democratic set-up of the country and to provide further necessary incentives to promote the activities of such political parties as are recognised by the Representation of People Act, 1951.
- Political parties also require funds in order to carry out a variety of activities including contesting of elections, organising meetings and rallies, publishing literature among others. Also these activities are both of a regular nature, such as organising of rallies and bringing out publications, and also periodic with respect to certain matters such as conducting elections. Accordingly political parties have been granted certain exemptions and deductions to that they are able to utilise maximum funds for the public purpose of political activity.

What are the main concerns now?

- Donations below 20,000 rupees, currently, are not required to be reported to the ECI but they have to be reported in the ITR. Political parties are essentially not required to disclose details of those donating below 20,000 rupees. This exemption is being misused by political parties. Simple study of IT returns of any political party will show that maximum donations to them are from such 'unknown' sources.
- With this exemption parties can take money and show them as donations below 20,000 rupees and try to convert it into white money for a 'cut'.
- Section 80GGB is a new insertion in the Income-tax Act, 1961. This enables Indian companies to get full deduction in their income-tax assessments for contributions made to political parties. Interestingly, there is no ceiling fixed on the amount of such contribution. Section 80GGC gives similar deduction for non-company taxpayers. This has also raised concerns among others.
- Presently, there are 1,848 registered political parties and some parties misuse the law to hold unaccounted money.

What needs to be done to increase the transparency?

- Tax exemption limit should be reviewed. The government should consider lowering the current limit of Rs 20,000 for anonymous donations.
- Parties that have been inactive and are suspected to be using their status largely to launder unaccounted and illegal money should be de-registered.
- The Income tax details of parties should be made public. This will need an amendment to the Representation of Peoples act and the IT act.
- Unrecognized political parties can be brought under the tax net. There are now close to 2,000 political parties in India and there is no reason why a de-recognised party should get this benefit, at a time when there is concern at the proliferation of parties and votes getting split because of non-serious contenders being in the contest.

- The mother-of-all-reforms is to clean up political funding. Every political party should disclose its spending and sources of financing those expenses. These claims can be contested by other parties and watchdog bodies, with the Election Commission making the final verification.

Poll funding has been a source of funnelling black money and cleaning up the poll process is necessary. Looking at the number of parties in India, it is easy to suspect that some of them have been floated by national or state parties to park their income from dubious sources, because such parties are not subject to the Election Commission's scrutiny.

The strange paradox of democracy is that while it is a tool to create an equitable society, its props, of which political parties are the main, sometimes give rise to opposite forces. So it is strong institutions such as the Election Commission that can provide a cushion against the forces that can subvert democracy. Legitimate political funding holds the key to stemming the generation of black money.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

83. India-CERT MoU with US-CERT

India and the US have signed a Memorandum of Understanding (MoU) for close cooperation and exchange of information pertaining to cyber security. The MoU was signed between Indian Computer Emergency Response Team (CERT-In) and US CERT.

Since, 2011 regular interactions between CERT-In and US CERT are taking place to share the information and discuss cyber security related issues. In continuation to the cooperation in cyber security areas both have renewed the MOU.

CERT-In:

CERT-In (the Indian Computer Emergency Response Team) is a government-mandated information technology (IT) security organization. CERT-In was created by the Indian Department of Information Technology in 2004 and operates under the auspices of that department.

Purpose:

- The purpose of CERT-In is to respond to computer security incidents, report on vulnerabilities and promote effective IT security practices throughout the country.
- According to the provisions of the Information Technology Amendment Act 2008, CERT-In is responsible for overseeing administration of the Act.

Paper 3 Topic: Conservation, environmental pollution and degradation, environmental impact assessment.

84. Air pollution a national problem

According to an analysis of 2015 data by Greenpeace India, pollution levels in various cities across the country are alarming.

- Of the 168 cities studied by Greenpeace India, 154 were found to have an average particulate matter level higher than the national standard.

- None of the cities studied had air quality matching the standard prescribed by the World Health Organisation.
- While air quality in North and Central India saw dangerous levels of particulate matter, South India appeared to have comparatively cleaner air.
- All 10 of the least polluted cities surveyed were in the South and the East: eight in Karnataka and one each in Odisha and Tamil Nadu.
- Looking at the sources of pollution, the report found that fossil fuels were the biggest contributors to the particulate matter.
- The study noted, "Due to the Himalayas and the cooler weather as well as big industrial clusters, the levels of pollution are higher in the North. Southern India has the benefit of the mixing of sea breeze. However, pollution is a national-level problem and has to be treated as such."

Ranking of the cities:

Using data from various State pollution control boards, accessed from their websites and through RTI queries, the report ranked the cities based on the annual average of PM10, which are all particles less than 10 microns in diameter. These include the very harmful fine particles, PM2.5.

- Delhi was found to be the most polluted city, with the annual average for PM10 being 268 micrograms per cubic metre, or over four times the 60 micrograms/cubic metre limit prescribed in the National Ambient Air Quality Standards of the Central Pollution Control Board.
- Ghaziabad, Allahabad and Bareilly in Uttar Pradesh and Faridabad in Haryana followed closely, making for the worst five cities in terms of PM10 levels, the annual average concentrations being four times or more than the standard.

Paper 3 Topic: Conservation, environmental pollution and degradation, environmental impact assessment.

85. Cosmetics containing microbeads

The National Green Tribunal has directed the Centre to test cosmetic products containing microbeads after a plea sought a ban on their use on the ground they are extremely dangerous for aquatic life and environment.

The court also said that it is the duty of the government to ensure that no "dangerous" product is allowed to be manufactured or sold to public and directed the Central Drugs Standard Control Organisation to analyse the products in laboratory.

Background:

The order came on a petition seeking a complete ban on the use of microbeads in the manufacture, import and sale of various cosmetics or personal care products. The petitioner also argued that the unregulated production and usage of plastic in microbeads in various cosmetic products and their excessive usage by the end user is leading to water pollution across the globe.

What are microbeads?

Microbeads are tiny plastic substances measuring less than five millimetres that act as exfoliators (agents which remove dead cells) on skin and teeth when used in soap, toothpaste and other products. Many brands manufacturing beauty products use microbeads.

Concerns:

Over 299 million tonnes of plastic was produced worldwide in 2013 some of which made its way to oceans, costing approximately \$13 billion per year in environmental damage to marine ecosystems, says a June 2015 report by the United Nations Environmental Programme that investigated the possible harm by microbeads/microplastics.

Paper 1 Topic: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., geographical features and their location- changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

86. .New fault in Indian Ocean

Scientists have found a new plate boundary being formed on the floor of the Indian Ocean as a result of the largest earthquake that shook the Andaman-Sumatra region in 2012. Scientists warn that the new fault system could trigger more quakes in the future.

- Researchers have found evidence for this plate on the floor of the Indian Ocean in the **Wharton Basin**.

How this plate boundary may have been formed?

A slip-strike quake occurs when two plates slide horizontally against one another. Such quakes can be caused by deformations that occur in plates distant from fault lines as pressure builds up across a plate. They can lead to inter-plate earthquakes and cause a plate to break, resulting in a new boundary and this in turn can lead to even more quakes. It is this scenario that the researchers believe happened in 2012 when two earthquakes struck the Andaman-Sumatran region (north-west part) of the Indian Ocean — the largest inter-plate earthquakes ever recorded.

Paper 2 Topic: Issues relating to development and management of Social Sector/Services relating to Health, Education, Human Resources.

87. Measles-rubella vaccine

Three years after the national vaccine advisory body recommended the introduction of the measles-rubella vaccine (MR) in the Universal Immunisation Programme (UIP), the vaccine is all set to be introduced in five states and Union territories as a part of the basket of preventive medications that every child born in India is entitled to.

- The UIP basket already has ten vaccines of which measles is one; once MR is introduced, monovalent measles will be discontinued.

About the disease:

Rubella, or German measles, is a contagious viral infection that causes a distinctive red rash. Though there are no statistics on its prevalence, the health ministry says the disease is endemic in India.

- It spreads when an infected person coughs or sneezes and can also be passed on from mother to the newborn.
- Experts say more than two lakh children in India are born deaf, blind, or with heart or brain damage every year due to the congenital rubella syndrome.

Topic: paper 4 science and technological developments and their application, environment and biodiversity

Topic: paper 4 technology and economic development

88. India's first international stock exchange

- India's first international exchange-India INX- was recently inaugurated by PM at International Financial Services Centre (IFSC) in Gujarat International Financial Tech City (GIFT) located in Gandhinagar.
- India International Exchange (INX), the wholly-owned subsidiary of the Bombay Stock Exchange (BSE), through its global bourse, will start trading initially in equity derivatives, currency derivatives, commodity derivatives including Index and Stocks. Subsequently, depository receipts and bonds would be offered once the required infrastructure for the same is in place.
- India INX is one of the world's most advanced technology platforms with a turn-around time of 4 micro seconds. It will operate for 22 hours a day to allow international investors and Non Residents Indians to trade from anywhere across the globe.
- It will act as a gateway to raise capital for the country's infrastructure and development needs. In parallel, it would provide cross-border opportunities of investment with a comparatively low cost of transaction in the world's most technologically advanced platform.

Topic: paper 3 governance, constitution, polity

89. The Transgender Persons Bill 2016

A disturbing facet of lawmaking in India is that laws are often drafted without in-depth research, as a result of which they are misinformed and remain paper tigers. Another is that a culture of tokenism prevails regarding pressing social issues, seen most recently in The Transgender Persons (Protection of Rights) Bill, 2016.

Historical antecedents

In 2014, the Supreme Court delivered the landmark judgment of NALSA v. Union of India, which affirmed the fundamental rights of transgender persons, giving a series of directives to the government to institute welfare measures for transgender persons, including affirmative action.

In 2015, the Rajya Sabha unanimously passed the Bill. However, it never made it to the Lok Sabha. Instead, the government decided to get its own Bill — The Rights of Transgender Persons Bill, 2015 — drafted, which was put up for public comments in December.

Criticism

The 2015 Bill was largely based on the 2014 Bill, but it did away with provisions on Transgender Rights Courts and the National and State Commissions. The Ministry also consulted civil society and activists.

The new bill disregards the *NALSA* judgment, the Expert Committee Report, and public comments. The 2016 Bill has now been referred to a Standing Committee.

1. The 2014 and 2015 Bills had more accurate definitions of the term transgender. In fact, the 2015 Bill was the most progressive in this regard as it granted a transgender person the right to identify as either 'man', 'woman', or 'transgender'.
2. Another problem is the absence of a provision on reservation, running contrary to the *NALSA* judgment and the 2014 and 2015 Bills which directed reservations for transgender persons.
3. While the *NALSA* judgment is couched in rights language, locating the fundamental rights of transgender persons in the golden trinity of Articles 14, 19 and 21 of the Constitution, the 2016

83 (Jan 2017)

Bill, though it uses the word “rights” in its title, deviates from a rights-based approach and leaves transgender persons at the mercy of the “benevolent” state.

4. Further, the Bill is completely silent on how its content will impact the operation of existing laws. Most laws, including of marriage, adoption and succession, continue to be based on the binary of male and female. Criminal laws, especially those dealing with sexual offences, also continue to be gendered.
5. The cisnormative (the assumption that everyone has a gender identity that matches the sex the person was assigned at birth) foundation of the law remains a significant barrier to access to legal justice for transgender persons. The *NALSA* judgment recognises the need for making civil rights accessible to transgender persons. However, the Bill fails to take this into account.
6. Finally, none of the Bills have addressed the issue of Section 377, which is frequently used to harass transgender persons, specifically transgender women. The conventional understanding of Section 377 is that it criminalises all sex that is not between people of opposite genders. But recognising trans-rights means recognising that there are more than the “opposite” genders of male and female. Embracing rights of persons with non-conforming genders while criminalising persons with non-conforming sexual orientations is thus absurd.

The case that saved Indian democracy

Forty years ago, in 1973, the Supreme Court assembled to deliver the most important judgment in its history. The case is that of *Kesavananda Bharati v State of Kerala*.

Core question

Was the power of Parliament to amend the Constitution unlimited? In other words, could Parliament alter, amend, abrogate any part of the Constitution even to the extent of taking away all fundamental rights?

Article 368, did not contain any limitation on the power of Parliament to amend any part of the Constitution. There was nothing that prevented Parliament from taking away a citizen’s right to freedom of speech or his religious freedom. But the repeated amendments made to the Constitution raised a doubt: was there any inherent or implied limitation on the amending power of Parliament?

Nature of the judgment

The judgment revealed a sharply divided court and, by a wafer-thin majority of 7:6, it was held that Parliament could amend any part of the Constitution so long as it did not alter or amend “the basic structure or essential features of the Constitution.”

This was the inherent and implied limitation on the amending power of Parliament. This basic structure doctrine, as future events showed, saved Indian democracy and *Kesavananda Bharati* will always occupy a hallowed place in our constitutional history.

A brief history: Supreme Court v Indira Gandhi

It is supremely ironical that the basic structure theory was first introduced by Justice Mudholkar eight years earlier by referring to a 1963 decision of the Supreme Court of Pakistan, which had held that the President of Pakistan could not alter the “fundamental features” of their Constitution.

The *Kesavananda Bharati* case was the culmination of a serious conflict between the judiciary and the government, then headed by Mrs Indira Gandhi.

- In 1967, the Supreme Court took an extreme view, in the *Golak Nath* case, that Parliament could not amend or alter any fundamental right.
- Two years later, Indira Gandhi nationalised 14 major banks and the paltry compensation was made payable in bonds that matured *after 10 years*! This was struck down by the Supreme Court, although it upheld the right of Parliament to nationalise banks and other industries.
- A year later, in 1970, Mrs Gandhi abolished the Privy Purses. This was a constitutional betrayal of the solemn assurance given by Sardar Patel to all the erstwhile rulers. This was also struck down by the Supreme Court.

Smarting under three successive adverse rulings, Indira Gandhi was determined to cut the Supreme Court and the High Courts to size and she introduced a series of constitutional amendments that nullified the *Golak Nath*, *Bank Nationalisation* and *Privy Purses* judgments. In a nutshell, these amendments gave Parliament uncontrolled power to alter or even abolish any fundamental right.

These drastic amendments were challenged by Kesavananda Bharati, the head of a *math* in Kerala, and several coal, sugar and running companies. On the other side, was not only the Union of India but almost all the States which had also intervened?

Post Keshavananda

The infamous Emergency was declared in 1975 and, by then, eight new judges had been appointed to the Supreme Court. A shocking attempt was made by Chief Justice Ray to review the *Kesavananda Bharati* decision by constituting another Bench of 13 judges.

In what is regarded as the finest advocacy that was heard in the Supreme Court, Palkhivala made an impassioned plea for not disturbing the earlier view. In a major embarrassment to Ray, it was revealed that no one had filed a review petition. How this Bench was then constituted? The other judges strongly opposed this impropriety and the 13-judge Bench was dissolved after two days of arguments.

Constitutional rights saved

If the majority of the Supreme Court had held (as six judges indeed did) that Parliament could alter any part of the Constitution, India would most certainly have degenerated into a totalitarian State or had one-party rule. At any rate, the Constitution would have lost its supremacy.

One has to only examine the amendments that were made during the Emergency. The 39th Amendment prohibited any challenge to the election of the President, Vice-President, Speaker and Prime Minister, irrespective of the electoral malpractice. This was a clear attempt to nullify the adverse Allahabad High Court ruling against Indira Gandhi. The 41st Amendment prohibited any case, civil or criminal, being filed against the President, Vice-President, Prime Minister or the Governors, not only during their term of office but forever. Thus, if a person was a governor for just one day, he acquired immunity from any legal proceedings for life. If Parliament were indeed supreme, these shocking amendments would have become part of the Constitution.

Topic: paper 4 technology, economic development & paper 3 international relations

90. Missing the Asian tailwind

There has been a tectonic shift in the global geopolitical economy, to which powers such as the U.S., China and Russia have responded. However, India is yet to formulate a worldview even as Asia, after a gap of 260 years, is again set to become the centre of the world.

Till 1757, India was the richest country with its wealth based on textile export. The British loot oiled the Industrial Revolution (textile production), and brought about colonisation and impoverishment. In 1950, India was richer than China; now it is a fifth the size of the Chinese economy. China will soon surpass the U.S. as the largest economy, and a young and digital India can overtake China by 2050, provided we concentrate on the following aspects:

1. Recognising global trends

The “Look East Policy” enunciated in 1992 does not have much to show for it other than the sale of coastal patrol craft to Vietnam. In the west, India’s investment of \$500 million in the Chabahar port is minuscule compared to China’s investment of \$46 billion in the China-Pakistan Economic Corridor (CPEC) ending in Gwadar. Despite investments in Afghanistan, political discussions there exclude us. In South Asia, only Bhutan can still be considered to be in our “sphere of influence”.

India now finds itself increasingly isolated in continental Asia. Russia and the Central Asian countries are linking their infrastructure to China’s One Belt, One Road (OBOR), launched in 2013, meeting their long quest for a warm-water port.

Chinese investment is also attractive to Europe, Malaysia, Thailand, Myanmar.

2. NITI Aayog has yet to develop a strategy laying out how India can become a \$10- trillion economy by 2032. Currently, there is no national perspective on the uncertainties, challenges and opportunities from global forces and technological innovation reshaping global politics, economy and society. Consequently, the stress remains on the military balance in dealing with other countries. Remaining Pakistan-centric and ignoring trade cannot constitute the foreign policy of an aspiring global power.

Topic: paper 4 economic development, infrastructure, paper 3 international relations

91. Why do Indians want to study abroad?

Post-graduate students from India are increasingly choosing to study abroad.

Reasons for departure

These factors are troubling for India’s universities and for prospects for the high-tech economy.

- When bright students look around India for a place to study for an advanced degree, they find few top-quality programmes.
- In the social sciences and humanities, there are a small number of respectable departments, but absolutely none that are considered by international experts as in the top class of academic programmes.
- In the hard sciences, biotechnology, and related fields, the situation is more favourable with a few institutions such as the Indian Institutes of Technology, the All-India Institute of Medical Sciences, the Tata Institute of Fundamental Research and some others, despite limited acknowledgement from abroad
- Further, a degree from a top foreign university tends to be valued more in the Indian job market than a local degree.
- While master’s degrees can be quite costly in the U.S., the U.K., Australia, and elsewhere, doctorates are in fact quite inexpensive because of the likelihood of securing a research or teaching fellowship or assistantship that pays for most or all of the costs.
- Overseas programmes and departments also have far better facilities, laboratories and a more favourable culture of research.

- Top faculty members are often more accessible and it is easier to become affiliated with a laboratory or institute.
- Academic politics exists everywhere, and Indians may suffer from occasional discrimination abroad, but overall academic conditions are likely to be better than at home.

Step toward emigration

Finally, studying abroad is often seen as the first step toward emigration. Of course, few students will admit this, but statistics show that a very large proportion of students from India — and also from China, South Korea and other Asian countries — choose to stay in the U.S. following the completion of doctoral degrees.

The reasons for deciding not to return to India are varied and not hard to discern.

- Better salaries and facilities abroad, easier access to research funds, working on cutting-edge topics and many others are part of the mix.
- And while some are lured back to India later in their careers, the numbers are small. Once established overseas, either in a university or in the research or corporate sectors, it is difficult to return.

Solutions

There is no short-term solution to this **problem for India**. The only remedy is to build up high-quality capacity in key disciplines at national institutions so that a greater number of Indian students can obtain excellent training at home. This means significant investment over time, and careful choices about where to invest since all universities cannot be top research universities.

It also means significant changes in India's academic culture to ensure that meritocracy operates at all levels. China's top universities are beginning to show up in the mid-levels of the global rankings, an indication that they are having some success. India, so far, is nowhere to be seen.

Topic: paper 4 security challenges and their management in border areas

92. 'Cold Start' out of the freezer

In an interview, the new Chief of Army Staff, General Bipin Rawat, appeared to acknowledge the existence of the army's Cold Start strategy. Many defence analysts presumed the army had abandoned this limited war concept altogether, or narrowly focussed on streamlining mobilisation.

Either Gen. Rawat has dispensed with 15 years of ambiguity and simply referred to these "proactive strategy options" by their more common nomenclature, Cold Start, or, the Indian Army has been quietly reorganising its limited war concept along more aggressive, and offensive, lines with little fanfare.

The government would be wise to clarify Gen. Rawat's statements. Ambiguity surrounding Cold Start, which incurred real diplomatic and security costs for India without delivering deterrence benefits, did not advance the country's interests when it was first announced, and such uncertainty is unhelpful today.

What is Cold Start?

At heart, it is part of the army's attempt to develop a useable, conventional retaliatory option that punishes Pakistan for terrorist attacks against India without triggering wider conventional or nuclear escalation.

In its more aggressive formulations, it was believed the aim was to create division-sized formations that could rapidly mobilise and carry out short-notice, retaliatory offensives of limited duration to quickly seize and hold Pakistani territory, while simultaneously pursuing narrow enough objectives to deny Islamabad a justification to escalate the conflict by opening additional conventional fronts or to employ nuclear weapons.

Why and when did we come up with this strategy?

The perceived failure to mobilise the army's Strike Corps in a timely fashion after the December 2001 attacks on Parliament was the impetus for Cold Start. The idea originated with the army and has been publicly debated in think-tank circles, but it has never been formally accepted by the Indian government, which has repeatedly denied its existence.

In 2010, the then Army Chief, Gen. V.K. Singh, declared point-blank that Cold Start did not exist. However, he did note ambiguously that the army possessed a "proactive strategy" for responding to Pakistan.

Perception battle

Some in India thought that the ambiguity surrounding the concept's status and the Indian Army's ability to implement it generated enough uncertainty in the mind of Pakistani decision-makers to deter their support for militant attacks within India. This thesis was disproved, however, by the audacious 2008 Mumbai attacks and its aftermath.

At the same time, the "threat" posed by Cold Start has been repeatedly cited by Pakistani authorities as proof of India's hostile intentions and hegemonic designs. This, in turn, has provided a justification for Pakistan to build up its nuclear forces

Does the ground situation point towards existence of such a strategy?

Although Pakistan has responded as if India has an aggressive limited war strategy, there is no public evidence that India remotely has the capability to adopt or execute such a doctrine. It is one thing to carry out a raid across the Line of Control with a handful of commandos. It is quite another to undertake a major cross-border incursion by armoured formations that seeks to capture Pakistani territory.

The army simply lacks the materiel and organisation to implement the more aggressive versions of Cold Start.

1. It is not at all clear that the Indian Army at present possesses sufficient superiority in numbers of troops and armoured vehicles in the vicinity of the International Border to be able to overcome the Pakistan Army's defensive and geographic advantages in a short conflict.
2. Indeed, the large number of obsolete tanks and artillery pieces, not to mention critical shortages of ammunition and air-defence assets raises serious questions about the army's ability to implement a Cold Start-style operation at all.
3. Furthermore, sustaining offensive operations in Pakistan requires joint operations with the air force. Not only does the Indian Air Force lack the kind of close air support capability Cold Start would require, but army-air force cooperation is also beset by inter-service dysfunction.

This has put India in the worst possible strategic position: claiming a capability that it does not have, but which provides justification for Pakistan's aggressive expansion of its conventional and nuclear forces. Such an approach has rarely served a nation's security interests.

On balance, the formally unacknowledged limited war strategy has created more problems for India than it has solved.

History is littered with tragic examples where discrepancies between perceived doctrine and actual doctrine have caused minor skirmishes to escalate into major wars. The continued loose talk of the so-called Cold Start doctrine puts South Asia in the unfortunate situation that it may be the next case, and this time with nuclear weapons in the mix.

Paper 2 Topic: Effect of policies and politics of developed and developing countries on India's interests, Indian diaspora.

9214th Edition of Pravasi Bharatiya Divas

The 14th edition of Pravasi Bharatiya Divas was held in Bengaluru.

- The 'Youth Pravasi Bharatiya Divas' was also inaugurated as part of the PBD 2017 with an aim to connect with the youth, the new generation of Pravasis growing up all over the world.

Pravasi Bharatiya Divas:

Pravasi Bharatiya Divas (PBD) is celebrated on 9 January every year to mark the contribution of Overseas Indian community in the development of India. PBD conventions are being held every year since 2003.

- The theme of this edition is "Redefining Engagement with the Indian Diaspora".

Why is it celebrated on January 9th?

January 9 was chosen as the day to celebrate this occasion since it was on this day in 1915 that Mahatma Gandhi, the greatest Pravasi, returned to India from South Africa, led India's freedom struggle and changed the lives of Indians forever.

Significance of PBD:

- These conventions provide a platform to the overseas Indian community to engage with the government and people of the land of their ancestors for mutually beneficial activities.
- These conventions are also very useful in networking among the overseas Indian community residing in various parts of the world and enable them to share their experiences in various fields.
- The event also provides a forum for discussing key issues concerning the Indian Diaspora.

Awards:

During the event, individuals of exceptional merit are honoured with the prestigious Pravasi Bharatiya Samman Award to appreciate their role in India's growth.

Paper 2 Topic: Important International institutions, agencies and fora, their structure, mandate.

93. Islamic anti-terror alliance

Former Pakistan Army chief Raheel Sharif has been made the head of a 39-nation military coalition formed by Saudi Arabia to fight terrorism- Islamic Military Alliance to Fight Terrorism (IMAFT).

Islamic Military Alliance to Fight Terrorism (IMAFT):

The Islamic Military Alliance to Fight Terrorism (IMAFT) was created by Saudi Arabia in December 2015 to combat the Islamic State and other groups.

- Currently, it has 39 members, including Turkey and Malaysia. It is based at a command centre in Riyadh.
- The coalition was envisaged to serve as a platform for security cooperation, including provision of training, equipment and troops, and involvement of religious scholars for dealing with extremism.
- The coalition includes countries like Turkey, United Arab Emirates, Bahrain, Bangladesh, Tunisia, Sudan, Malaysia, Egypt, Yemen among others.

Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

94. 'Powerful cosmic double whammy'

By combining data from several telescopes around the world including India's Giant Metrewave Radio Telescope (GMRT) in Pune, astronomers have discovered a cosmic double whammy unlike any ever seen before.

- By combining data from NASA's Chandra X-ray Observatory, the Giant Metrewave Radio Telescope (GMRT) in Pune and other telescopes, researchers found what happens when matter ejected by a giant black hole is swept up in the merger of two enormous galaxy clusters.
- The two phenomenon have combined to create a stupendous cosmic particle accelerator. This cosmic double whammy is found in a pair of colliding galaxy clusters called Abell 3411 and Abell 3412 located about two billion light years from Earth.
- Scientists determined that as the shock waves travel across the cluster for hundreds of millions of years, the doubly accelerated particles produce giant swirls of radio emission.
- This discovery solves a long-standing mystery in galaxy cluster research about the origin of beautiful swirls of radio emission stretching for millions of light years, detected in Abell 3411 and Abell 3412 with the GMRT.
- This result shows that a remarkable combination of powerful events generate these particle

GMRT:

The Giant Metrewave Radio Telescope (GMRT), located near Pune in India, is an array of thirty fully steerable parabolic radio telescopes of 45 metre diameter, observing at metre wavelengths.

- It is operated by the National Centre for Radio Astrophysics, a part of the Tata Institute of Fundamental Research, Mumbai.
- At the time it was built, it was the world's largest interferometric array offering a baseline of up to 25 kilometres (16 mi).
- One of the aims for the telescope during its development was to search for the highly redshifted 21-cm line radiation from primordial neutral hydrogen clouds in order to determine the epoch of galaxy formation in the universe.

acceleration factories, which are the largest and most powerful in the Universe.

Paper 3 Topic: Awareness in the fields of IT, Space, Computers, robotics, nano-technology, bio-technology and issues relating to intellectual property rights.

95. China setting up highest altitude telescopes close to LAC

China is setting up the world's highest altitude gravitational wave telescopes in a Tibet prefecture close to the Line of Actual Control (LAC) with India.

- The telescope aims to detect the faintest of echoes resonating from the universe, which may reveal more about the Big Bang theory.
- The telescope will detect and gather precise data on primordial gravitational waves in the Northern Hemisphere.
- It is expected to be operational by 2021.
- The telescope will be located at Ngari. Ngari, with its high altitude, clear sky and minimal human activity is said to be one of the world's best spots to detect tiny twists in cosmic light.

Gravitational waves were first proposed by Albert Einstein's theory of general relativity 100 years ago, but it wasn't until 2016 that scientists with the Laser Interferometer Gravitational-Wave Observatory announced proof of the waves' existence, spurring fresh research interest among the world's scientists.

Paper 3 Topic: Infrastructure: Energy, Ports, Roads, Airports, Railways etc.

96. Mini-grids

A study has found that mini grids can spur economic activity in rural areas and accelerate the process of expanding mobile phone network across the country due to their large capacities and the ability to

What is a mini grid?

A mini grid, as defined by the Ministry of New and Renewable Energy, is an off-grid power system with a generation capacity of between 10 KW and 500 KW. It converts direct current (DC) to alternating current (AC) and it provides safety as per REC and CEA standards.

connect to the national grid.

Significance of mini grids:

There are a number of other solutions of smaller capacities that rural areas can use such as a solar lantern, a solar home solution, or even a community solution like a micro grid. But a mini grid is the only alternative that provides the kind of electricity that can be used for business activities.

The power generated from a mini grid can be seamlessly transferred to the national grid since it is already going through a charge controller which manages the flow of energy and an inverter which converts the electricity from DC to AC. It also has a storage facility to meet night demand as well.

Suitable places for mini grids:

One of the important criteria in selecting a village to install a mini grid is to see whether there is at least one customer in the area – like a telecom tower, petrol pump, school or bank – that could make up a significant portion of the energy demand from the mini grid. The potential of existing commercial activity and future potential demand should also be considered.

Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

97. Anti-avoidance tax rule GAAR to kick in from April 2017

The tax department has clarified that tax anti-avoidance rule GAAR will kick in from April 1 in India. GAAR, which was originally to be implemented from April 1, 2014, will now come into effect from April 1, 2017 (Assessment Year 2018-19).

GAAR:

General Anti-Avoidance Rule (GAAR) was part of the 2012-13 Budget to check tax evasion and avoidance. However, its implementation was repeatedly postponed because of the apprehensions expressed by foreign investors. It contains provision allowing the government to prospectively tax overseas deals involving local assets.

GAAR was introduced to address tax avoidance and ensure that those in different tax brackets are taxed the correct amount. In many instances of tax avoidance, arrangements may take place with the sole intention of gaining a tax advantage while complying with the law. This is when the doctrine of 'substance over form' may apply. 'Substance over form' is where real intention of parties and the purpose of an arrangement is taken into account rather than just the nomenclature of the arrangement. Many countries, like Canada and South Africa, have codified the doctrine of 'substance over form' through a GAAR – type ruling.

Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

98. .Paper trail in EVMs for fair poll

The Supreme Court has reiterated the necessity to implement the Vote Verifier Paper Audit Trail (VVPAT) in electronic voting machines (EVMs) to ensure 100% transparency in elections.

VVPAT system

In the VVPAT system, when a voter presses the button for a candidate of his choice in the EVM, a paper ballot containing the serial number, name of the candidate and poll symbol would be printed for the voter.

The VVPAT is intended as an independent verification system for voting machines designed to allow voters to verify that their votes were cast correctly, to detect possible election fraud or malfunction and to provide a means to audit the stored electronic results.

Topic: paper 3 important international institutions, agencies and forums, their structure, mandate.

99. Security Council Resolution 2322

Seeking to strengthen the international response to terrorism, UN Security Council has unanimously adopted a resolution aimed at enhancing and fortifying judicial cooperation worldwide. By resolution 2322, the 15-nation body underlined the importance of strengthening international cooperation, including by investigators, prosecutors and judges, in order to prevent, investigate and prosecute terrorist acts, and expressed concern at the use by terrorists of information and communications technologies.

- Resolution 2322 aims to enhance the efficacy of international legal and judicial systems in their fight against terrorism through operational collaboration. This is the first resolution adopted by the Security Council on the subject matter of international judicial cooperation, in order to overcome the challenges posed by existing extra-territorial terrorist networks.

The Resolution emphasizes five major issues related to counter terrorist activities:

- Mutual legal assistance and extradition.
- The issue of foreign terrorist fighters and returnees.
- Financing of terrorism.
- Increasing role of information technology in gathering and sharing evidence.
- Role of multilateral agencies such as UNDOC (United Nations Office on Drugs and Crime) and INTERPOL in preventing terrorist activities.

Highlights

- The resolution calls upon States to use applicable international instruments as a basis for mutual legal assistance and extradition in terrorism cases and to review and update existing laws in view of the substantial increase in volume of requests for digital data.
- It emphasizes the necessity of revising and simplifying bilateral and multilateral treaties of extradition and suggests the need for mutual legal assistance in matters related to counter-terrorism so as to enhance their effectiveness.
- The issue of foreign fighters and returnees, one of the principal challenges related to contemporary terrorism, particularly in the context of ISIL/Da'esh fighters in Syria/Iraq, comprises the next major focal area of the resolution.
- The resolution underlines the importance of international cooperation in stemming the flow of foreign terrorist fighters to and their return from conflict zones. It urges States to share available information regarding foreign terrorist fighters including their biometric and biographic information and emphasizes the importance of providing such information to multilateral screening databases.
- The Resolution also calls for the easing of transfer of criminal proceedings from the court of one country to those countries where the main act of terrorism took place, or where most of the evidence is concentrated. It also adds that appropriate sharing and use of intelligence threat data on foreign fighters are central to counter-terrorism measures.
- As a means to curb financial assistance to terrorist networks and groups, the resolution suggests that States make financing of terrorism as a serious criminal offense in domestic law, and also enhance international cooperation to deny safe haven to terror financiers.

- It also urges States to extradite or prosecute individuals who support financing of terrorist groups directly or indirectly, and to undertake targeted financial sanctions against such groups.
- Other major proposals of the resolution include promotion of the use of electronic communication including the internet and broadening the scope of digital data in terrorism cases, and closer cooperation with UNDOC (United Nations Office on Drugs and Crime), UNESCO (United Nations Educational, Scientific and Cultural Organization) and INTERPOL (International Criminal Police Organization).

Significance of this resolution:

- Some of the proposals such as designation of national central authorities for mutual legal assistance and extradition, regional and cross-regional cooperation, appointment of liaison officers, police to police cooperation, creation of joint investigation and information sharing mechanisms are extremely significant in the present scenario.
- The resolution also emphasises the need for assisting victims of terrorism, and cautions against deprecating fundamental human rights in the name of counter-terrorism. In this regard, the resolution asks States to ensure that their counter-terrorism laws are compliant with international human rights and humanitarian laws.
- Resolution 2322 also debates one of the most significant practical challenges of countering transnational terrorism, the lack of judicial cooperation. This was one of the fundamental problems in prosecuting most terrorism cases in the past, especially in cases where foreign terrorist fighters/groups were involved.
- The proposed judicial cooperation in the resolution would help in mobilizing tangible evidence to ensure that those evidence were gathered in a form which could be used in courts.
- A systematic use of international databases, for instance, INTERPOL database on wanted persons, as proposed in the resolution, would also be helpful in preventing terrorists from entering/travel from the territory of one State to another. This is significant in the light of the imminent threat posed by the return of foreign terrorist fighters from Syria and Iraq.

Counter-terrorism efforts of the international community have been in a stalemate for the past few years due to the following reasons:

- Lack of a standard definition of the term 'terrorism,' and the consequent questions such as 'what constitute an act of terrorism' and 'who is a terrorist' were the main reasons behind this stalemate.
- With different perceptions of crime, on the one hand, and diverse interests, on the other, states also often stand as a barrier to effective and coordinated counter-terrorism measures.
- Cooperation among judges is vital to counter-terrorism efforts. But, lack of judicial cooperation has been one of the fundamental problems in prosecuting transnational terrorists.
- Also, the lack of cooperation amongst police forces and absence of international databases regarding terrorist groups and their members have hampered terrorism cases significantly.

The resolution, if implemented in letter and spirit, would help in getting evidence regarding their actions in Syria and Iraq rather than allegations which could not be proved in a court of law. Moreover, active legal cooperation at the international level, as envisaged by resolution 2322 would open ways to end the stalemate in extradition of wanted terrorists, and would put an end to the practice of providing safe havens to such persons by other States.

The Security Council resolution on international judicial cooperation is a significant development in countering the scourge of terrorism, particularly by transnational terrorist groups. It can be viewed as the

first step to overcome the practical challenges associated with the prosecution of terrorists in their country of origin or elsewhere, for their criminal activities in a foreign country. However, to make it work, it is necessary to cover the gap between adoption and implementation of the resolution, by both the UN and its member States.

Topic: paper 3 international

100. Peace in Syria

The ceasefire was reached between Syria's government and Opposition, with the mediation of Turkey, Russia and Iran.

The difference in the recent ceasefire is that unlike the two previous failed ceasefires — which were negotiated between Russia and the U.S. — the latest one is sponsored by countries directly involved in the conflict.

The positive reaction from both the Syrian regime and rebel commanders suggested that the warring parties were willing to give diplomacy a chance.

What's in it for the regime?

For the Syrian government, this is an opportunity to announce it is ready for a peaceful settlement. Though President Bashar al-Assad has repeatedly claimed that he would retake the entire territory from the rebels, a military solution appears to be illusory.

A prolonged conflict will exhaust the regime forces further and multiply the humanitarian costs. On the other side, after the victory in Aleppo, the regime could now negotiate with the rebels from a position of strength.

What about the rebels?

For the rebels, the momentum is gone. Their support is limited to certain parts. The question they face is whether they should continue fighting a never-ending war of attrition or seek to gain leverage from whatever military influence they are left with.

Other players

There is a convergence of interests for Turkey and Russia in finding a peaceful solution. Having seen the U.S. interventions in Iraq and Afghanistan, Russia doesn't want to get stuck in Syria. By promoting a negotiated deal, it could retain its core interests in Syria while at the same time projecting itself as a power broker in West Asia.

Turkey wants to limit the spillover effects of the war on its soil and stop Kurdish rebels from capitalising on the chaos in Syria.

This explains why Turkey and Russia have come together now despite their bitter relations.

Take it with a pinch of salt

But these objective conditions alone may not produce sustainable peace. Turkey supports only some of the rebel groups, while several other groups get support from Gulf monarchies. There are jihadist elements as well in the Opposition, such as Fateh al-Sham, that could play the spoiler by carrying out attacks on government positions.

Besides, the Kurdish question remains unaddressed. If Kurds are invited for talks, Turkey might withdraw its support for the peace process.

Paper 2 Topic: Bilateral, regional and global groupings and agreements involving India and/or affecting India's interests.

101. Amended DTAA with Singapore

India secured amendments to the Double Taxation Avoidance Agreement (DTAA) with Singapore, effectively closing one route of laundering domestic black money by “round-tripping” it from countries like Mauritius, Cyprus and Singapore.

Long drawn efforts

The Centre had been trying to renegotiate the DTAA with Mauritius since 1996 and finally got a deal mid-year last, and since the Singapore tax treaty was based on the same terms as Mauritius, efforts were afoot to re-negotiate the pact with Singapore. A similar treaty with Cyprus was amended in November, 2016.

Investments made before March 31, 2017, will be grandfathered, and after that, for two years, the capital gains will be shared half and half between the country of residence of investor and India. Post-2019, the entire capital gains becomes exclusive to India.

A significant apprehension about these pacts was the complete exemption of taxes on capital gains that investors could utilise in the name of double tax avoidance as these three countries had no capital gains taxes.

- The India-Singapore DTAA at present provides for residence based taxation of capital gains of shares in a company. The Third Protocol amends the DTAA with effect from 1st April, 2017 to provide for source based taxation of capital gains arising on transfer of shares in a company. This will curb revenue loss, prevent double non-taxation and streamline the flow of investments.
- In order to provide certainty to investors, investments in shares made before 1st April, 2017 have been grandfathered subject to fulfillment of conditions in Limitation of Benefits clause as per 2005 Protocol.
- Also, a two year transition period from 1st April, 2017 to 31st March, 2019 has been provided during which capital gains on shares will be taxed in source country at half of normal tax rate, subject to fulfillment of conditions in Limitation of Benefits clause.
- The Third Protocol also inserts provisions to facilitate relieving of economic double taxation in transfer pricing cases. This is a taxpayer friendly measure and is in line with India's commitments under Base Erosion and Profit Shifting (BEPS) Action Plan to meet the minimum standard of providing Mutual Agreement Procedure (MAP) access in transfer pricing cases.

The Third Protocol also enables application of domestic law and measures concerning prevention of tax avoidance or tax evasion.

Topic: paper 4 economic development

102. Financial Stability report

The Reserve Bank of India's biannual Financial Stability Report has again flagged the fact that risks to the banking sector remain worryingly “high”.

Why it says so?

1. Continuous deterioration in asset quality
2. Low profitability
3. Low liquidity

Any systemic risk to the banking industry has the potential to ripple across the entire economy. There has been no perceptible improvement in the health of domestic banks, even six months after the RBI's previous report had highlighted the sector's high vulnerability.

Some measures have been initiated and others are in the pipeline, including a draft Financial Resolution and Deposit Insurance Bill to address bankruptcy situations in banks and other financial entities.

Risks

Restoration of the sector's health is of great significance as some of the risks inherent in banks may already be getting transferred to other segments of the financial markets. Among institutional risks, credit growth and cyber risk were seen as two key "high risk factors".

Topic: paper 3 international, paper 4 security

103. A divided world on terror

China's decided to veto India's proposal to ban Jaish-e-Mohammed (JeM) chief Masood Azhar at the UN.

In fact, the relationship with China saw several lows in 2016 vowing to China's economic corridor through Pakistan, India's invitations to Uighur, Falun Gong and Tibetan activists, the expulsion of Chinese journalists from Mumbai, the Chinese block on Nuclear Suppliers Group membership for India, and the rumblings over the South China Sea all added to tensions between the two countries; the Chinese decision to put a permanent block on the Azhar proposal aggravated them further.

Not the first time, but.....

China's decision was outrageous and ill-advised. In the past, Beijing blocked India's proposals at the UN to designate Hizbul-Mujahideen chief and some members of the Lashkar-e-Taiba as terrorists, and blocked questions on how designated terrorists Hafiz Saeed and Zaki-ur-Rehman Lakhvi accessed funds in Pakistan despite UN sanctions.

But Azhar's case was different as ample evidence was in the public domain itself.

Despite all that evidence, it took two years and the 9/11 attacks for the JeM to be designated as a terror group by UNSC 1267 sanctions committee in 2001. It seems unbelievable that 15 years later, despite his complicity in everything from the Parliament attack to the Pathankot attack and everything in between, Azhar hasn't yet been added to that list, largely due to China's ignominious role.

It's not just China

It would be a mistake, however, if New Delhi sees China's move purely in bilateral terms, and ignores the larger trend it represents: of a fragmenting global consensus on terrorism. The impact of this fragmentation can be seen at several levels now: at the UN, in the tussle between the U.S. and Russia, and for India, in regional ties.

Changing narrative

After the 9/11 attacks, the global consensus to fight the Taliban, Al-Qaeda and all allied groups was formed by the UNSC resolution on terrorism in 2001. Already, in 1999, the UN had set up an al-Qaeda/Taliban sanctions committee to impose strictures on anyone dealing with the Taliban and Osama bin Laden.

That narrative has since changed. In January 2010, at an international conference hosted by the U.K., the UN and the U.S. openly backed efforts to talk peace with the Taliban. In 2011, the UNSC made it simply the al-Qaeda sanctions committee, separating the Taliban committee so as to facilitate talks by delisting Taliban leaders being engaged.

In 2015, the UNSC made a further shift by renaming it “ISIL (Da’esh) and Al-Qaida Sanctions Committee”.

Impact of U.S.-Russia ties

Apart from the UN, shifting U.S.-Russia ties have also made a great impact on the global terror consensus. In 2001, Russian President Vladimir Putin was one of the first foreign leaders to speak to President George W. Bush, expressing full support for the U.S. fight against al-Qaeda, which would in turn help Russia with its Islamist threat as well.

Not only that, Mr. Putin reversed Russian policy of decades, allowing the U.S. to set up bases across Central Asia and virtually take over Afghanistan’s security command.

That relationship no longer exists, and Russia is questioning the U.S. presence in its backyard again.

Russia’s other moves — a new closeness with China, and growing ties with Pakistan — are a third factor impacting global consensus. A trilateral meeting of the three countries in Moscow called for a “flexible approach” to remove some Taliban figures from the UN sanctions list as part of efforts to “foster a peaceful dialogue between Kabul and the Taliban movement”.

No doubt, the recent Taliban statement that it won’t target infrastructure projects in Afghanistan is significant, given China’s high-stakes ‘One Belt, One Road’ plan that runs through the region.

On the other side, the U.S. has been pushing for the removal of other groups in Afghanistan from sanctions, a move that Russia blocked at the UN.

Who’s with who?

Russia’s Pakistan engagement cannot be disconnected from India’s concerns either. It is significant that among the P5, the U.S., U.K. and France co-sponsored India’s resolution against Azhar, China vetoed it, but Russia, India’s traditional backer, did nothing at all.

At the BRICS summit in October and the Heart of Asia conference in December, it was the Russia-China combine that kept India’s desire for tough statements on “cross-border terrorism” from Pakistan at bay, and it was the Russian envoy who told India not to use “multilateral forums for bilateral issues”.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

PMUY target met

The government has met the 1.5 crore target for LPG connections to be added in 2016 financial year under the Pradhan Mantri Ujjwala Yojana (PMUY). With this, LPG coverage across the country has been increased to 70% as of December 1.

- The top five states with the highest number of connections are Uttar Pradesh (46 lakh), West Bengal (19 lakh), Bihar (19 lakh), Madhya Pradesh (17 lakh) and Rajasthan (14 lakh).
- The households belonging to SC/ST constitute large chunk of beneficiaries with 35% of the connections being released to them.
- 14 States/UTs with LPG coverage less than the national average, such as the hilly states of Jammu & Kashmir, Uttarakhand, Himachal Pradesh and all North-East states have been identified as priority states for implementing PMUY.

Pradhan Mantri Ujjwala Yojana:

Under the Pradhan Mantri Ujjwala Yojana, Rs.8,000 crore has been earmarked for providing 50 million LPG (liquefied petroleum gas) connections to poor households.

- Under the scheme, an adult woman member of a below poverty line family identified through the Socio-Economic Caste Census (SECC) is given a deposit-free LPG connection with financial assistance of Rs 1,600 per connection by the Centre.
- Eligible households will be identified in consultation with state governments and Union territories.
- The scheme will be implemented over the next three years.
- The scheme is being implemented by the Ministry of Petroleum and Natural Gas.

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

104. Financial data management body mooted

The Committee, headed by Ajay Tyagi, has submitted its report and a draft bill titled 'The financial data management centre bill 2016'.

- For managing the repository of financial regulatory data to ensure stability in the economy.
- The powers of the Financial Data Management Centre (FDMC) will include the establishment, operation and maintenance of the financial system database along with collecting financial regulatory data and providing access to it.
- The body will also provide analytical support to the Financial Stability and Development Council (FSDC) on issues relating to financial stability.

Other recommendations

- As the system matures and if it is decided to integrate data of state level financial sector regulators, the same has to be done with wide consultation with the states, which is a long drawn process.
- Centre should establish an electronic database for financial regulatory information.
- To ensure secrecy and avoid conflict of interest, member, employee or officer of the centre having access to confidential data should not be allowed to render advice or accept any employment with a financial service provider for a period specified in the act until the person has taken approval of the centre.
- The committee has also asked the government to grant the status of "public servants" to the members, officers and employees of the centre.

Paper 2 Topic: Statutory, regulatory and various quasi-judicial bodies.

105. FIPB clears FDI proposals worth Rs 1,200 crore

Inter-ministerial body, Foreign Investment Promotion Board (FIPB) has approved six investment proposals envisaging foreign investment of Rs 1,200 crore.

India allows FDI in most sectors through the automatic route, but in certain segments considered sensitive for the economy and security, the proposals have to be first cleared by FIPB.

FIPB:

The Foreign Investment Promotion Board (FIPB), housed in the Department of Economic Affairs, Ministry of Finance, is an inter-ministerial body, responsible for processing of FDI proposals and making recommendations for Government approval.

- It considers and recommends foreign direct investment (FDI) which does not come under the automatic route.
- It provides a single window clearance for proposals on FDI in India.

FIPB comprises of the following Secretaries to the Government of India:

- Secretary to Government, Department of Economic Affairs, Ministry of Finance – Chairperson
- Secretary to Government, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry
- Secretary to Government, Department of Commerce, Ministry of Commerce & Industry
- Secretary to Government, Economic Relations, Ministry of External Affairs
- Secretary to Government, Ministry of Overseas Indian Affairs.

On what basis decisions on FDI are taken by the FIPB?

The extant FDI Policy, Press Notes and other related notified guidelines formulated by Department of Industrial Policy and Promotion (DIPP) in the Ministry of Commerce and Industry are the bases of the FIPB decisions.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

106. Swachh SwasthSarvatra initiative

It was launched by the Union Health Ministry in collaboration with the Ministry of Drinking Water and Sanitation and Human Resource Development.

- The initiative is aimed at strengthening health centres in open defecation-free blocks.
- The objective is to strengthen community health centres in 708 open defecation-free blocks across the country to enable them to achieve higher levels of cleanliness and hygiene.
- Under it, 10 lakh rupees of financial assistance will be given to the community health centres so that they can be strengthened to meet the standards of sanitation, hygiene and infection control.
- The initiative is a part of the Swachh Bharat Mission, under the National Health Mission. It is focused on the twin objectives of constructing toilets and enabling behavioural change, with the goal of making India free of open defecation by October 2, 2019.

Topic: paper 4 technology and development

107. 'Mobile App and Facebook Page' of 'National Trust'

The government has launched the 'Mobile App and Facebook Page' of the National Trust to mark the 'National Trust Foundation Day' on the theme "Celebrating Inclusion".

Backgrounder:

The National Trust Act for the welfare of persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities was passed in the Parliament on 30th December 1999. Thus-**30th December- the**

Foundation Day of National Trust– is a day on which National Trust re-commits itself to the objectives set before it for the welfare of persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities.

National Trust:

The National Trust is a **Statutory Body** under Department of Empowerment of Persons with Disabilities (Divyangjan), Ministry of Social Justice & Empowerment.

- The National Trust has been set up to discharge two basic duties – legal and welfare. Legal duties are discharged through Local Level Committee (LLC) set up at district level under the chairmanship of the District Collector / District Magistrate and providing legal guardianship. Welfare duty is discharged through the schemes and activities.
- The schemes and activities of the National Trust inter-alia include training, awareness and capacity building programmes and shelter, care giving and empowerment.
- The National Trust is implementing 10 schemes for overall development of persons with disabilities which have been revised and launched last year.

Paper 2 Topic: Important aspects of governance, transparency and accountability, e-governance-applications, models, successes, limitations, and potential; citizens charters, transparency & accountability and institutional and other measures.

108. Reviewing arbitration system

The law ministry has formed a 10-member panel led by former Supreme Court judge B.N. Srikrishna to review and create an institutional framework for the arbitration mechanism in India. The committee will submit its report within 90 days.

- The committee includes judges, senior lawyers familiar with commercial laws, industry representatives and a member from a think-tank.
- The committee will make recommendations on various aspects of improving arbitration in the country, including encouraging use of arbitration for international commercial disputes, implementing the law to ensure speedier arbitrations, revision in institutional rules, role of arbitration in disputes where the central government is involved and evolving an efficient arbitration system for India.
- The committee has been asked to suggest road map for further strengthening of research and development impacting the domain and focus on the role of arbitrations in matters involving government of India including bilateral investment treaties (BIT) arbitrations.

Significance of this move:

With this, the government aims to make arbitration a preferred mode for settlement of commercial disputes. The move could also help improve India's score in the World Bank's doing business rankings. In the 2016 rankings, India stood at 130 out of 190 countries.

Topic: paper 4 economic development, financial inclusion

109. Financial inclusion in the true sense needed

The call for financial inclusion in the country has become an illusion for the disabled in the country. Despite the Reserve Bank of India (RBI) repeatedly issuing circulars to all scheduled commercial banks across the country to provide banking facilities to customers with disabilities at a par with non-disabled people, the majority of disabled people continue to be inconvenienced by the banks.

Why people with disabilities need special attention in the country?

They constitute 2.13% of the total population of the country. Despite these numbers, there is a lack of understanding of their needs, and people with disabilities face a number of obstacles when it comes to living a normal life, and availing banking facilities is a big part of the problem.

Making banking accessible for people with disabilities is both a best practice that should be followed, as well as a sound commercial decision.

Hurdles for disabled people to access banking services:

- Many disabled people, especially in rural India, find it difficult to sign bank documents, and are denied ATM cards, cheque books and Internet banking.
- The majority of commercial banks have archaic rules in their statute books which debar people with disabilities from opening independent accounts.
- Disabled customers are also perceived as dependent on their family members; they are seen as lacking independent agency to make their own decisions.
- Disabled people are also denied loan facilities. A majority of banks refrain from offering insurance to people with disabilities.
- Despite the RBI stating that banks have to take necessary steps to provide all existing ATMs/future ATMs with ramps so that wheel chair users/persons with disabilities can easily access them, most ATMs remain inaccessible.
- The problem is exacerbated by the fact that around 75% of persons with disabilities live in rural areas, and only around 49% of the disabled population is literate and only 34% is employed. Although one may find some rare cases of disabled-friendly banking options in the metros, in the rural areas, there are neither facilities nor is there any sensitisation towards meeting the needs of the disabled.

What needs to be done?

- There are specific Reserve Bank of India (RBI) notifications that mandate banks to offer banking facilities in a non-discriminatory manner to all customers. The adoption of accessibility features and technologies in Indian banks today is very low, despite there being a legislative as well as executive push for the same. Banks which do not follow these guidelines are not meeting their legal requirements. RBI should ensure that all banks follow these guidelines.
- There are several international guidelines which can be referred to while formulating policy on banking accessibility, such as guidelines on ATM construction and modification (USA) and guidelines on making websites accessible for people with disabilities.
- RBI should ensure that the bank staff is sensitised to the needs of disabled.
- Another important step that needs to be taken by different banking institutions is ensuring that their ATMs and branches are accessible through a ramp, so that it is physically possible to reach from the road or other public area.
- Within the bank, there should be special provisions for people in wheelchairs or crutches, such as a designated queue and teller, so that they do not have to wait in queue for a long period of time.
- State and national governments should encourage opening of bank accounts by the disabled so that any funds or scholarships can be directly transferred into their account as opposed to being given to organisations which may not transfer it to the beneficiaries — this would help curb malpractices.

Constitutional Provisions in this regard:

Part III of the Constitution of India, which deals with the fundamental rights of citizens, recognizes the principle of equality of all people.

- Article 14 states that the government must accord equal protection of the law to any person within the territory of India. This recognition of the importance of non-discrimination means that the state must ensure that people with disabilities do not suffer disadvantages when it comes to accessing public services.
- Article 15, which deals with prohibition of discrimination on various grounds states that no citizen is to be subject to any disability, liability or restriction with regard to access to shops, public restaurants, and other public places.
- It is evident that this important constitutional protection extends to people with disabilities, and it is their right to gain equal and accessible access to all manner of services, including banking.

Way ahead:

In this age of technology, banks have embarked on a slew of innovative strategies to woo the general public. Leveraging the same to disabled people would be a step in the right direction.

Accessibility should not be treated as a corporate social responsibility measure by the large banks and financial corporations, but as a responsibility to be fulfilled regardless of anything else. The RBI and the government need to take punitive action against those errant officials and banks that contravene the RBI's guidelines for providing banking facilities to disabled people. We must uphold the spirit of Article 41 of the Constitution (Right to public assistance for the disabled).

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

110. Safety sealing

The Bombay High Court has given the Union government six months' time to take a decision on making safety sealing mandatory for healthcare and hygiene products.

- A PIL was filed about pilferage of cosmetics, child care, healthcare and hygiene products.

The concern

While in transit from manufacturer to consumer, there is a possibility of contamination and adulteration of the products due to the absence of a seal. Also, at present, there are no mandatory provisions to put the seal.

In October 2014, the Centre said that it is awaiting recommendations from a committee constituted to look into the matter. The government had also said that all creams and lotions are mandatorily sealed under the amended Drugs and Cosmetics Act, 2013.

Paper 2 Topic: Government policies and interventions for development in various sectors and issues arising out of their design and implementation.

111. New Schemes for The Poor

For the poor: Two new schemes under PM AwaasYojna. Home loans for poor and middle class people up to Rs 9 lakh will get 4% exemption on interest and 3% for up to Rs 12 lakh loans.

For senior citizens: 8% interest up to Rs 7.5 lakh deposit by senior citizens in banks.

For small businesses: Credit guarantee for micro small and medium enterprises to be raised to Rs 2 crore from current Rs 1 crore.

For women: Pregnant women across India will be given Rs 6,000 in their bank accounts to take care of initial medical needs.

For farmers: The government will convert 3 crore Kisan Credit cards to RUPay Credit cards.

For small businesses: Banks have been asked to raise cash credit limit for small businesses to 25% from 20%.

Paper 3 Topic: Indian Economy and issues relating to planning, mobilization of resources, growth, development and employment.

112. Cheer to digital lending firms

PM's New Year eve speech has opened up opportunities for digital lending players, including startups in the space. PM has announced the inclusion of non-banking financial companies (NBFCs) in the credit guarantee scheme for small, medium and micro enterprises (SMEs) and also extended the scheme for loans up to Rs 2 crore.

Significance:

- The credit guarantee scheme for SMEs was so far open only for banks, and the inclusion of NBFCs will help new-age NBFCs reach out to more borrowers.
- Extension of credit guarantees to NBFCs will help innovative players to penetrate under-served, new-to-credit borrower segments.

Background:

So far, NBFCs had to take the entire risk only by themselves, and some were still conservative in lending to borrowers who may not have been eligible under conventional norms.

The current credit guarantee scheme includes term loans or working capital facility up to Rs 100 lakh per SME borrower, extended without any collateral security or third-party guarantee. It was so far applicable only to scheduled commercial banks and some regional rural banks. The guarantee cover available under the scheme is to the extent of a maximum 85% of the sanctioned amount.

Paper 1 Topic: Important Geophysical phenomena such as earthquakes, Tsunami, Volcanic activity, cyclone etc., geographical features and their location- changes in critical geographical features (including water-bodies and ice-caps) and in flora and fauna and the effects of such changes.

113. Fossil fuel formation linked to rise in atmosphere's oxygen

The rapid rise in the atmosphere's oxygen roughly 500 million years ago which made advanced animal life possible on Earth is linked to the process that led to the formation of fossil fuels, suggests new research.

Multicellular life is largely a creation of the "Cambrian explosion," which coincided with a spike in atmospheric oxygen roughly 500 million years ago. It was during the Cambrian explosion that most of the animals appeared and evolved.

What accounted for the sudden spike in oxygen during the Cambrian?

The study linked the rise in oxygen to a rapid increase in the burial of sediment containing large amounts of carbon-rich organic matter.

- The key is to recognise that sediment storage blocks the oxidation of carbon. Without burial, this oxidation reaction causes dead plant material on Earth's surface to burn.
- That causes the carbon it contains, which originated in the atmosphere, to bond with oxygen to form carbon dioxide. And for oxygen to build up in our atmosphere, plant organic matter must be protected from oxidation.
- And that is exactly what happens when organic matter — the raw material of coal, oil and natural gas — is buried through geologic processes.

Concern expressed by scientists:

The researchers warned that today, burning billions of tonnes of stored carbon in fossil fuels is removing large amounts of oxygen from the atmosphere, reversing the pattern that drove the rise in oxygen. And so the oxygen level in the atmosphere falls as the concentration of carbon dioxide rises.

Paper 3 Topic: Conservation, environmental pollution and degradation, environmental impact assessment.

114. Many New Projects under NamamiGange Approved

New projects under **NamamiGange** programme in Haridwar and Varanasi have been approved by National Mission for Clean Ganga.

NamamiGangeProgramme:

NamamiGange programme was launched as a mission to achieve the target of cleaning river Ganga in an effective manner with the unceasing involvement of all stakeholders, especially **five major Ganga basin States – Uttarakhand, Uttar Pradesh, Jharkhand, Bihar and West Bengal.**

- The Programme envisages River Surface Cleaning, Sewerage Treatment Infrastructure, River Front Development, Bio-Diversity, Afforestation and Public Awareness.

Implementation:

- The program would be implemented by the National Mission for Clean Ganga (NMCG), and its state counterpart organizations i.e., State Program Management Groups (SPMGs).
- In order to improve implementation, a three-tier mechanism has been proposed for project monitoring comprising of a) High level task force chaired by Cabinet Secretary assisted by NMCG at national level, b) State level committee chaired by Chief Secretary assisted by SPMG at state level and c) District level committee chaired by the District Magistrate.
- The program emphasizes on improved coordination mechanisms between various Ministries/Agencies of Central and State governments.

Paper 2 Topic: Separation of powers between various organs dispute redressal mechanisms and institutions.

115. Extension of judicial review powers

In a blow to Ordinance Raj, a Constitution Bench of the Supreme Court has widened the boundaries of judicial review to the extent that **it can now examine whether the President or the State Governor was spurred by an “oblique motive” to bypass the legislature and promulgate an ordinance.**

Important observations:

- The court has held that the **satisfaction of the President under Article 123 and of the Governor under Article 213 is not immune from judicial review.** In case the apex court concludes that the President or the Governor was influenced by ulterior motives to promulgate the ordinance, such an act by the two constitutional authorities would **amount to a fraud on their respective powers.**
- The court also observed that it was obligatory for the government to place the ordinance before the legislative body for its approval and non-placement of ordinances before the Parliament and the State legislature would itself constitute a fraud on the constitution.
- Besides, **re-promulgation defeats the constitutional scheme under which a limited power to frame ordinances has been conferred on the President and the Governors.** The danger of re-promulgation lies in the threat which it poses to the sovereignty of Parliament and the state legislatures which have been constituted as primary law givers under the Constitution

Background:

These observations were made by the court while dealing with the case related to the constitutionality of seven successive re-promulgations of the Bihar Non-Government Sanskrit Schools (Taking Over of Management and Control) Ordinance of 1989.

The State government had approached the Supreme Court after the Patna High Court declared that repeated re-promulgation of the ordinances was unconstitutional after relying on the D.C. Wadhwa judgment on the dos and don'ts of promulgation of ordinances by another Constitution Bench of the Supreme Court in 1986.

In the **Dr. D.C. Wadhwa versus State of Bihar** case, the Constitution Bench of the Supreme Court held that the Executive has no arbitrary right to promulgate ordinances. The apex court held that it is the right of every citizen to insist that he should be governed by laws made in accordance with the Constitution and not law made by the Executive in violation of the constitutional provisions.

What is Judicial review?

Judicial Review refers to the power of the judiciary to interpret the constitution and to declare any such law or order of the legislature and executive void, if it finds them in conflict the Constitution of India.

Paper 2 Topic: Salient features of the Representation of People's Act.

116. Seeking votes on religious basis a corrupt act

The Supreme Court has ruled that **an election could be annulled if candidates seek votes in the name of their religion or that of their voters.** The apex court's view has enlarged the scope of the Representation of People Act 1951.

- The Court ruled that “religion, race, caste, community or language would not be allowed to play any role in the electoral process” and that election of a candidate would be declared null and void if an appeal is made to seek votes on these considerations.
- Constitution Bench of the Supreme Court held that an election will be annulled not only if votes are sought in the name of the religion of the candidate but also when such an appeal hinges on religion of voters or candidate's election agents or by anybody else with the consent of the candidate.

The **third class will include religious and spiritual leaders, often engaged by candidates to mobilise their followers.**

- The Supreme Court also said that election is a secular exercise and thereby its way and process should be followed.
- The Supreme Court further added that relationship between man and God is individual choice. The state is forbidden to interfere in such an activity.

Backgrounder:

The landmark judgment came while the court revisited earlier judgments, including one from 1995 that equated Hindutva with Hinduism and called it a “way of life” and said a candidate was not necessarily violating the law if votes were sought on this plank.

Several petitions filed over the years have challenged the consequences of that verdict. The 1995 judgment was authored by Justice J.S. Verma had said.

Significance of this ruling:

- The court interpreted **Section 123(3) of the Representation of People Act** to mean that this provision was brought in with an intent “to clearly proscribe appeals based on sectarian, linguistic or caste considerations”. Section 123(3) defines as “corrupt practice” appeals made by a candidate or his agents to vote or refrain from voting for any person on the ground of “his” religion, race, caste, community or language.
- The latest ruling is now significant in the sense that any attempt to canvass for votes on the ground of religion or other such parochial identities – either of the candidate’s or on behalf of his agents or groups or his opponents – would invite the provisions of the Representation of People Act.
- The ruling can potentially overturn the rules of the game for electoral politics in India, where traditionally parties have not hesitated to employ religion, caste and ethnicity to woo voters. Greater clarity will emerge once the Election Commission, which is to implement the decision, spells out the ground rules.

Paper 1 Topic: Modern Indian history from about the middle of the eighteenth century until the present- significant events, personalities, issues.

117. Google Doodle: Savitribai Phule

A trailblazing figure in field of women’s education in India, Savitribai Phule was the subject of Google Doodle on the occasion of her 186th birthday.

- Born in Maharashtra on January 3, 1831, Phule is widely regarded as one of India’s first generation modern feminists for her significant contributions in ensuring equal education opportunities under the British raj.
- She became the first female teacher in India in 1848 and opened a school for girls along with her husband, social reformer Jyotirao Phule.
- The two also worked against discrimination based on caste-based identity, something vehemently opposed by the orthodox sections of society in Pune.
- She went on to establish a shelter for widows in 1854 which she further built on in 1864 to also accommodate destitute women and child brides cast aside by their families.

- Phule also played a pivotal role in directing the work of the SatyashodhakSamaj, formed by her husband with the objective to achieve equal rights for the marginalised lower castes. She took over the reins of the organisation after Jyotirao's death in 1890.
- Savitribai opened a clinic in 1897 for victims of the bubonic plague that spread across Maharashtra just before the turn of the century.
- In her honour, University of Pune was renamed SavitribaiPhule University in 2014.

Topic: paper 4 science and technological developments

118. Agni – IV

- Agni-IV, the Long Range Surface to Surface Ballistic Missile with a range of 4,000 kms was successfully flight tested recently.
- The missile is developed by the Defence Research and Development Organisation under the Integrated Guided Missile Development Program.
- Agni IV is nuclear capable, with a payload capacity of one tonne of high-explosive warhead.
- The sophisticated surface-to-surface missile is equipped with modern and compact avionics to provide high level of reliability.
- The vehicle reaches the target within two digit accuracy.
- The re-entry heat shield can withstand temperatures in the range of 4000 degrees centigrade and makes sure the avionics function normally.
- The Agni-IV had undergone one failed and five successful tests over the last five years, with the last one being conducted in November 2015.

Topic: paper 4 challenges to internal security , various security forces and their mandate.

119. AFSPA in Manipur

Due to the disturbance and insurgency in the state, the Government of India promulgated the Armed Forces Special Powers Act 1958 in Manipur State. Since 1980, the whole of Manipur has been a "disturbed area" under the Act. Vide this Act, the security forces have been given some extra powers so as to operate against the insurgents in the disturbed areas.

Why people in Manipur are not happy with this law?

- The power under the AFSPA Act has hurt the citizens of Manipur the most as they feel that the Act confers the armed forces with broadly defined powers to shoot to kill and that this is a law, which fosters a climate in which the agents of law enforcement are able to use excessive force with impunity.
- People in Manipur feel that they have been deprived of the spirit of liberty, freedom and democracy for too long a period. The exercise by the armed forces of the unchecked powers to arrest, search, seize and even shoot to kill conferred under Section 4 of the Act has resulted in large-scale violation of the fundamental rights of the citizens under Articles 14,19,21,22 and 25 of the Constitution.
- It is alleged that security forces have destroyed homes and other structures presuming them to be used by insurgents
- Due to protection under Section 6 of the Act, some security force personnel even violated the human rights of people and left the victims without any effective remedy. The failure to identify those responsible for human rights violations and to bring them to justice has meant that some members of the security force continue to believe that they are above law and can violate human rights with impunity.

But, why AFSPA should continue in Manipur?

- If discontinued here, it will cause a chain reaction in all states where the Act has been enforced.
- No armed force would like to carry out any operation in the insurgent affected areas without proper legal protection for its personnel.

- It will demoralise the armed forces and all initiative will be lost.
- Whenever any offensive action is taken by armed forces, the militant groups will instigate the people/local authorities to initiate legal cases against the armed forces. Justice may be biased under the influence of militants.
- The militants will get an upper hand and may be difficult to contain.
- Incidents of extortion from the civilian population/government organisations will go unchecked.
- Civil administration will be overrun by the militants and there will be chaos all around.

What needs to be done now?

- The general administration in Manipur is not able to give effective justice to the people, with the result that it has to depend on the security forces for its normal functioning. Therefore, the forces operating in the state have to be honest, law abiding and must respect the rights of the people of the state.
- The commanders at all levels should follow the principle of “use of minimum force” required for effective action. They should brief their men to respect all womenfolk. In case any woman is to be arrested, then it should be done with the help of a lady police/ force personnel, who should also remain present during interrogation.
- While carrying out search operations, the force personnel should associate a local respected person and also the owner of the house, and after the search, the owner should be permitted to search the search party is he so desires.
- One must challenge before opening fire and to ensure that one fires only in self-defence.
- A grievance cell should be opened at Sector Headquarters/ Battalion Headquarters so that the civilians can lodge complaints against the force personnel if they so desire and the commander should take necessary action as deemed fit.
- Police representatives must be associated with every operation conducted by the security forces.
- The training should be of high level so that the armed force may be able to handle all types of situations with professional competence.
- It is high time that the state police is trained to take over operational responsibilities from the Army and the BSF.
- The normal operations may be conducted by the state armed police and only major and pinpointed operations be left for the armed forces.
- Junior level personnel should be properly briefed to not to over react to any sensitive situation.
- It is also important to evolve a mechanism to deal/ tackle with overground support structures that are generally well-connected with local politicians and are regarded in the society.
- Everything depends on intelligence and hence we must sharpen the skills of the armed forces for collection of hard intelligence.
- Senior commanders should handle civil society sensibly so as to extract sympathy and maximum information from them. This will also help in changing the perception of the local population in the larger interest of the Government/ Nation.

Security forces should be very careful while operating in the Northeast and must not give any chance to the militants to exploit the situation. Indiscriminate arrests and harassment of people out of frustration for not being able to locate the real culprits should be avoided. All good actions of the force get nullified with one wrong action. Any person, including the supervisory staff, found guilty of violating law should be severely dealt with. The law is not defective, but it is its implementation that has to be managed properly. The local people have to be convinced with proper planning and strategy.

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13 in top 100 - 41 in top 500
93 in the final list