

UPSC MONTHLY MAGAZINE

FEBRUARY- 2018



Punjab National Bank (PNB) Scam

The Scam that could change the banking sector regulation

Cauvery Verdict

Finally a permanent solution?

Ayushman Bharat programme

Path breaking intervention in
Health Sector

Roster System for case allocation

Prioritizing the cases in Judiciary

Chabahar Port

Gateway to Central Asia and Europe

INCREDIBLE RESULTS

— IAS 2016 —

8 Ranks
in Top 50

18 Ranks
in Top 100

215 Ranks
In The Final List



Rank 2
Anmol Sher
Singh Bedi



Rank 5
Abhilash
Mishra



Rank 12
Tejaswi
Rana



Rank 30
Prabhash
Kumar



Rank 32
Avdhesh
Meena



Ganga
Singh
Rank-33



Anu S
Rank-42



Surabhi
Gautam
Rank-50



Manuj
Jindal
Rank-53



Tanai
Sultania
Rank-63



Parikh
Mirant Jatin
Rank-67



Rohit
Vyas
Rank-69



Abhishek
Chourasiya
Rank-72



Rajarshi
Shah
Rank-81



Prateek
Jain
Rank-82



Nair Prajit
Prabhakaran
Rank-87



Sushil
Kumar
Rank-96



Devendra
Kumar
Rank-97



Swarn
Prabhat
Rank-105



Hirani
Adityavikram
Rank-113



Varun
Singla
Rank-114



Shaurya
suman
Rank-119



Nitish
Agarwal
Rank-122



Ann Mary
George
Rank-123



Anand
Shankar
Rank-127



Rishav
Kumar Jha
Rank-128



Prabhat
Ranjan Pathak
Rank-137



Akanksha
Rana
Rank-163



Padmini
Solanki
Rank-170



Amogh
Gopinath
Rank-171



Bindu
Madhav
Garikapati
Rank-172



Rahul
Gupta
Rank-182



Sagar
Bagmar
Rank-186



Abhay
Soni
Rank-188



Tare Anuj
Milind
Rank-189



Anurag
Jain
Rank-198



Arpit
Vijayvargiya
Rank-201



Deepak
Shukla
Rank-202



Videh
Khare
Rank-205



Akhil
Mahajan
Rank-213



Nitika
Pant
Rank-217



Tuhin
Sinha
Rank-219



Keshav
Kumar
Rank-222



Keshav
Kumar
Rank-230



mohit
Garg
Rank-238



Pansuria
Toral Pravinbhai
Rank-239



Odke Digvijay
Govind
Rank-247



Bogati
jagadeeswar
Rank-249



Abhishek
Surana
Rank-250



Pushkin
Jain
Rank-252



Amit
Verma
Rank-253



Shrey Vats
Rank-260



Suchismita
Kanungoe
Rank-261



Sri Hari Prasad
Gopishetty
Rank-268



Aditi Mor
Rank-277



Zade Parikshit
Sanjayrao
Rank-280



Prachi
Ailawadhi
Rank-290



Guru
Prasad
Rank-299



Shashank
Shekhar Singh
Rank-306



Aaditya
Mishra
Rank-309



Amilineni
Bhargav Teja
Rank-314



Aman
Bishla
Rank-315



Arihant
Singhi
Rank-322



Mitika
Dahiya
Rank-325



Ashima
Mittal
Rank-328



Aastha
Suman
Rank-331



Ankur
Rank-341



Avneet
Punia
Rank-356



S Chitharanjan
Rank-357



Ranjan
Rajeev
Rank-358



Godhani
Aksharkumar P
Rank-365



Sumit
Balecha
Rank-368



Basuki Nath
Jha
Rank-378



Mayank
Mishra
Rank-379



Mrinal Prakash
Mishra
Rank-380



Kaustuva
Rank-381



Sambit
Mishra
Rank-385

OUR RESULTS IN THE PAST YEARS

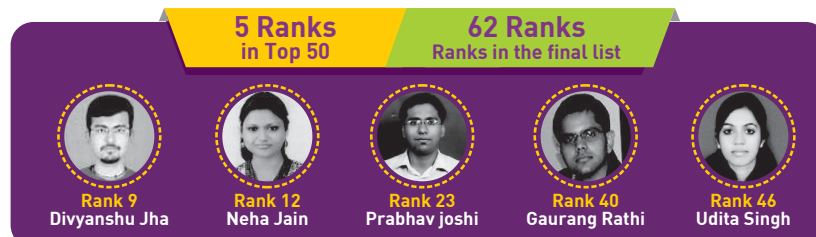
IAS Result 2015



IAS Result 2014



IAS Result 2013



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POLITY

1. Assam- Arunachal Dispute

Background

- The Union Territory of Arunachal Pradesh was formed on January 20, 1972.
- Later when Arunachal Pradesh was carved out of Assam in 1987 as a state under the North East Reorganization Act, 1971, the people of Arunachal Pradesh accepted their notified borders with Assam.
- However, subsequent to this, there has been the issue of alleged Assamese encroachment..

Dispute

- Arunachal Pradesh is facing boundary disputes along 792 square kilometer area, it shares with neighbouring Assam
- The inter-state boundary between the tri-junction of Bhutan, Assam and Arunachal Pradesh upto the right bank of Subansiri river and some portion in Papum Pare district was demarcated during 1971-73

Violence

- In the case of the Assam-Arunachal Pradesh border, clashes were first reported in 1992 when the Arunachal state government alleged that people from Assam are building houses, markets and even police stations on its territory. Since then intermittent clashes have been taking place making the border tense.
- In 2005, for example, during an eviction drive by the Assam government, some 100 houses in East Kameng district of Arunachal Pradesh were allegedly set ablaze by Assam Police and forest officials. Again in 2007, tensions flared up along the Assam-Arunachal border when villagers from across the border fired at a peace meeting in Assam injuring eight people

Implications

- They bear the brunt of underdevelopment with very little or no education and health care facilities available in the areas.
- Many places on the interstate border, villages do not even have electricity connection

SC

- Supreme Court has directed states to Stop divisive fights over boundary disputes
- Supreme Court suggested that states should refrain from creating "border inside the border" by fighting over their territorial boundaries.
- Court appointed Local Boundary Commission headed by Justice Tarun Chatterjee to inspect the disputed boundary areas between Arunachal Pradesh and Assam:

* It has reported that the same is under the administrative control of State of Arunachal Pradesh.

Bordoloi Committee

- THE Constituent Assembly of India formed an Advisory Committee on Tribal Areas under the Chairmanship of Sardar Vallabhbhai Patel to consider the problems Of Assam and the tribal areas.
- The Advisory Committee formed a sub-committee under the chairmanship of Gopi Nath Bordoloi.
- The Bordoloi Committee toured extensively throughout the tribal areas of the country; collected the opinions of the people; considered their demands and formulated the recommendations.
- The Bordoloi Committee report and the recommendations were fully' discussed in the Constituent Assembly, accepted and incorporated in the form of Fifth and Sixth Schedules in Article 244 of the Constitution.
- The Fifth Schedule incorporates provisions for the administration and control of the Scheduled Tribes and areas of the States other than Assam. The Sixth Schedule has similar provision for the Scheduled

Solution

- The first solution to the interstate border dispute is if the states could treat disputed areas as neutral zones; states could organize village development councils in all the disputed areas and members of the councils should comprises of representative from both the communities.
- Both the states should share the financial and logistical requirements for all development activities in the areas.
- No state should claim its right to the areas and development should be the joint effort of the respective departments of both governments.
- The objective of this approach is that the interests of the people in the borders should be the topmost priority and therefore maintaining peace and harmony is very important.
- To restore peace in the area, it is necessary to create the atmosphere for peace and help people regain confidence. Hence confidence building is also another important objective if we are to bring peace in the conflict areas.

2. **Cauvery Verdict: Drinking water should be first priority, says SC**

- The Supreme Court decision to allow an additional supply of 14.75 tmc ft. water for Karnataka is a leaf borrowed from the government's National Water Policy that drinking water requirements of a State should be placed at the highest pedestal.
- The Cauvery judgment authored by a three-judge Bench led by Chief Justice of India Dipak Misra based the supply of water to Bengaluru on the ground that both the National Water Policy and also courts of different countries hold that drinking water should be given first priority.
- The States shall first allocate waters to satisfy vital human needs, the Supreme Court observed, while referring to international law provisions on water.

Water equity: On Cauvery verdict

By upholding the approach of the Cauvery Water Dispute Tribunal, the Supreme Court has supported the possibilities of a practical water-sharing course of action among the riparian States.

Decision

- Court has reduced the Tribunal's allocation for Tamil Nadu and raised Karnataka's share.
- It has underscored that no single State has power in accessing water assets and that streams are national resources. This is a critical acknowledgment of the guideline of impartial dissemination of between State streams.
- The Supreme Court's message is that the Center ought to get down to making a lawful and specialized system to execute the Tribunal's honor, as adjusted by the judgment.
- Strongest affirmation ever on a State's right to its share of water on a regular basis without having to hurry to the court for ad hoc orders to open the washes of reservoirs during monsoon-deficit years.

Possible consequences at the state level

- Tamil Nadu, as a State that has seen agrarian trouble in its delta areas, should be happy with any recommended designation being met according to a schedule.
- Karnataka can take heart from the decrease in its required discharge target and the additional share for Bengaluru.
- Neither State should be aggrieved by the condition that equity is at the heart of a water-sharing arrangement.

Resolving Inter-state water dispute

- It is mainly about balancing the competing genuine demands and interests of each State and coming up with a rational sharing arrangement.

- The parties should see the judgments as the culmination of a fair and scientific adjudicative process. They should pose no further impediment to the smooth implementation of the order and be prepared, for the next 15 years, to share both the bounty and distress caused by nature.
- Centre has not covered itself in glory throughout the dispute. It should comply with the court's direction and set up the Cauvery Management Board and Water Regulation Committee as part of the scheme.
- It will be terrible if the States and the Center are hesitant to acknowledge this decision and decline to recognize its certainty.

Background Information

National Water Policy 2012

- The main emphasis of National Water Policy 2012 is to treat water as economic good which the ministry claims to promote its conservation and efficient use.
- This provision intended for the privatization of water-delivery services is being criticized from various quarters.
- The policy also does away with the priorities for water allocation mentioned in 1987 and 2002 versions of the policy.

The other major features are:-

- To ensure access to a minimum quantity of potable water for essential health and hygiene to all citizens, available within easy reach of the household.
- To curtail subsidy to agricultural electricity users.
- Setting up of Water Regulatory Authority.
- To keep aside a portion of the river flow to meet the ecological needs and to ensure that the low and high flow releases correspond in time closely to the natural flow regime.
- To give statutory powers to Water Users Associations to maintain the distribution system.
- Project benefited families to bear part of the cost of resettlement & rehabilitation of project affected families.
- To remove the large disparity between stipulations for water supply in urban areas and in rural areas.
- To support a National Water Framework Law.

3. **Electoral Reforms by SC**

- The court made it mandatory for candidates contesting elections and their associates to declare their assets and source of income at the time of nomination.
- The obligation of a candidate to disclose both his assets and the source of income is a part of the fundamental right of citizen to know, under Article 19 (1) (a) of the Constitution.

- The court said enforcement of a citizen's fundamental right needs no statutory sanction from the government or the Parliament.
- A candidate's constitutional right to contest an election to the legislature should be subservient to the voter's fundamental right to know the relevant information regarding the candidate.
- It held that undue accretion of assets is an independent ground for disqualifying an MP or an MLA. Amassing wealth is a culpable offence by itself and a law maker can be prosecuted even without charging him for offences under the Prevention of Corruption Act.
- The court said the amassment of unaccounted wealth by lawmakers is the mark of a failing democracy. If left unattended it would inevitably lead to the destruction of democracy and pave the way for the rule of mafia.

Background Information

- The Right To Freedom Of Speech And Expression as per the Indian Constitution – means the right to express one's own convictions and opinions freely.
- The word freely means the freedom of a citizen to express his views and opinion in any conceivable means including by words of mouth, writing, printing, banners, signs, and even by way of silence.
- The Supreme Court of India has held that the participation in sports in an expression of one's self and thus it is a form of freedom of speech.
- The Supreme Court has also held that hoisting the National Flag by citizens is a form of freedom of speech and expression.
- Freedom of Press is an inferred right implicit under Article 19(1)(a)
- The Right To Information (RTI) emerges as a fundamental right under article 19(1)(a) as freedom of speech and expression are meaningless without access to information.
- It includes the right to political dissent.

4. Interstate River Water Disputes (Amendment) Bill, 2017

Dispute Resolution Committee (DRC)

- Under the Act, when a complaint is received from a state government regarding a water dispute, the central government may ask the affected states to undertake negotiations to settle the dispute.
- If the dispute cannot be settled through negotiations, the central government has to set up a Water Disputes Tribunal within a year of receiving such a complaint.

Tribunal

- Single Standing Tribunal (with multiple benches) instead of existing multiple tribunals
- All existing tribunals will be dissolved and the water disputes pending adjudication before such existing tribunals will be transferred to this newly formed tribunal.

Composition

- Consists of one Chairperson, one Vice-Chairperson and not more than six other Members
 - * While the term of office of the Chairperson is five year or till he attains the age of 70 years, whichever is earlier,
 - * The term of office of Vice Chairperson and other member of tribunal shall be co-terminus with the adjudication of the water dispute
- It also provides for the appointment of Assessors to provide technical support to the tribunal. They shall be appointed from amongst experts serving in the Central Water engineering Service not below the rank of Chief Engineer.

Time allotted to Tribunal to take its decision:

- Under the Act, any water disputes tribunal has to give its decision on a dispute within a period of three years. This period is extendable by a maximum of two years.

Decision of the Tribunal:

- Under the Act, the decision of the tribunal must be published by the central government in the official gazette.
- The Bill also adds that the decision of the bench of the tribunal will be final and binding on the parties involved in the dispute. This decision will have the same force as that of an order of the Supreme Court.

Other Details

- The Bill also provides for transparent data collection system at the national level for each river basin and for this purpose, an agency to maintain data-bank and information system shall be appointed or authorized by Central Government
- The Bill gives the central government powers to make rules in which water will be distributed during stress situations arising from shortage in the availability of water.

5. Siruvani Dam

- Siruvani dam is a dam in Palakkad District, Kerala.
- This dam constructed across the Siruvani River, is for supplying drinking water to the city of Coimbatore in Tamil Nadu.
- The dam is surrounded by reserve forests. Muthikulam hill is situated on the eastern side of the dam. There is a natural waterfall in the hill.
- The location being in the state of Kerala, the project was executed by the Kerala Public Works Department using the funds made available by the Tamil Nadu Government.

Kerala accused of diverting Siruvani water

- Officials in Tamilnadu said that Kerala government has been withdrawing excess water from the Siruvani dam in violation of the 1973 agreement.

- * They further said Kerala was constructing make shift check dams using sand bags at three places to prevent water from reaching the Pilloor dam in Tamil Nadu
- * This they say could lead to severe drinking water crisis in Coimbatore city as the existing water is at the level of 40 ft as against the full reservoir level of 49.5 ft which would get drained
- As per the August 19, 1973 agreement on Paraimbikular Aliyar Project (PAP) the sharing of Siruvani waters, Tamil Nadu had to give five cusecs of water daily throughout the year (July 1 to June 30) to save the flora and fauna downstream.

6. Watan ko Jano

- “Watan Ko Jano” is a program to give exposure to the youth and children of Jammu and Kashmir about the cultural and socio-economic development taking place in other parts of the country
- Youth and children hit by militancy and from weaker sections of the society have been identified for the purpose.
- It is a Ministry of Home Affairs (MHA) Initiative

7. New Roster System for case allocation

- The publication of the judges’ roster of case allocation is for the first time in the history of the Supreme Court.
- The move follows a decision of a Constitution Bench led by Chief Justice Misra declaring the Chief Justice of India’s dominance as the master of the roster in order to protect the Supreme Court from “anarchy”.

How is the distribution done?

- Under the new system, effective 5 February, cases will be allocated based on the subject matter they entail, according to a posting on the official website of the Supreme Court.
- Under the new roster system, the CJI will hear all special leave petitions (SLPs), and matters related to public interest, social justice, elections, arbitration, and criminal matters, among others. These form a big chunk of the important matters heard by the apex court.
- Left for the other judges to hear are matters related to labour disputes, taxation matters, compensation matters, consumer protection matters, maritime law matters, mortgage matters, personal law matters, family law matters, land acquisition matters, service matters, company matters etc.

8. Titbit

- Cases on medical and engineering college admissions/transfer cases, allocation of 15% All India quota in medical admissions/transfers and establishment and recognition of educational institutions would be heard by Justice Arun Mishra’s Bench.

- Justice S.A. Bobde, the seventh senior most judge and in line to be the Chief Justice of India, gets a share of cases on medical/engineering admissions and transfer. Justice Bobde’s Bench would also be allocated academic matters and cases dealing admissions to educational institutions other than medical and engineering.
- Justice Rohinton Nariman’s Bench has also been given cases of establishment and recognition of education institutions.
- Justice Chelameswar includes labour, matters pertaining to judicial officers, simple money and mortgage cases, land acquisition, consumer protection, criminal cases, among others.
- Justice Gogoi has been allocated labour cases, company law, contempt of court, personal law, criminal matters, among others.
- Justice Kurian’s roster has cases on family law, personal law, disputes about religious and charitable endowments, land laws and agriculture.

Context

- The letter had cited the irregular manner of assigning of cases by Misra as a particular matter of concern that forced the four senior-most Supreme Court judges to publicly question his leadership.

Background

- Roster is defined as a system to allocate different tasks to all the members in order to achieve higher efficiency.
- ‘Master of the Roster’ refers to the privilege of the Chief Justice to constitute Benches to hear cases.
- This privilege was emphasized in November 2017, when a Constitution Bench, led by the Chief Justice of India Dipak Misra, declared that “the Chief Justice is the master of the roster and he alone has the prerogative to constitute the Benches of the Court and allocate cases to the Benches so constituted.”

What is the position of the four judges on the ‘master of the roster’ issue?

- They regard it as “one of the well-settled principles” and a convention that is important for an orderly transaction of business.
- According to the Supreme Court Rules, 2017[3]. Chapter V: Powers, Duties and Functions of the Registrar, Rule 29, expressly states that the Registrar shall prepare roster under the directions of the Chief Justice of India, and all such powers, duties and functions of the registrar are subjected to any further special or general orders of the Chief Justice of India.
- But, they write in the letter, it isn’t recognition of superior authority of the Chief Justice over his colleagues. Their point is that the Chief Justice is only the “first among equals,” a phrase that Chief Justice Misra himself had used in the Campaign for Judicial Accountability and Reforms vs. Union of India order.

- In their letter, the four judges have also written that there are “well-settled and time honored conventions guiding the Chief Justice” in the determination of the roster, including those about the strength of the Bench to deal with a particular case.
- There have been instances where cases having far-reaching consequences for the nation and the institution had been assigned by the Chief Justice of this Court selectively to the Benches “of their preferences” without any rational basis for such assignment.

9. Is Jallikattu and Bullock cart race a cultural Right?

Context

- The Supreme Court referred to a Constitution Bench to decide whether the people of Tamil Nadu and Maharashtra can conserve jallikattu and bullock-cart races as their cultural right and demand their protection under Article 29 (1) of the Constitution.

In 2014, in the A. Nagaraja judgment, the Supreme Court held jallikattu as cruelty to bulls.

Article 29

- Article 29 (1) is a fundamental right guaranteed under Part III of the Constitution to protect the educational and cultural rights of citizens.
- Though commonly used to protect the interests of minorities, Article 29 (1) mandates that “any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same”.

Attorney General K.K. Venugopal referred to the Supreme Court decision in the Ahmedabad St. Xavier’s College Society case, in which it was pointed out that the scope of Article 29 (1) does not necessarily confine itself to the cultural rights of minorities but may well include the majority.

What should the bench consider?

- The Constitution Bench would also look into whether the 2017 jallikattu and bullock cart races laws of Tamil Nadu and Maharashtra actually subserve the objective of “prevention” of cruelty to animals under the Prevention of Cruelty to Animals Act of 1960.
- The Bench will also have to say whether the laws are really in consonance with the basic tenets of the 1960 Act.
- Finally, the Bench would examine if the new laws are “relatable” to Article 48 of the Constitution, which says it is an endeavour of the State to organise agri- culture and animal hus- bandry on scientific lines.

Att The laws under challenge — The Prevention of Cruelty to Animals (Tamil Nadu Amendment) Act of 2017 and Prevention of Cruelty to Animals (Conduct of Jallikattu) Rules of 2017. The PETA petition contends that the 2017 Jallikattu Act and Rules violate the five internationally recognised freedoms — the freedom from hunger, malnutrition and thirst; 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.

Implications

- If Jallikattu is upheld by the Constitution Bench as a cultural right and part of the “collective culture” of the people of Tamil Nadu under Article 29 (1), provisions of other laws which undermine jallikattu may run the risk of being struck down.

10. Police Encounters

Stats

- As many as 591 custodial deaths were recorded across India between 2010 and 2015
- As many as 35,831 cases were registered against the police with the National Human Rights Commission (NHRC) in 2015-16
- Cases against the police involve illegal detentions, extortion, torture, fake encounters and others. The numbers do not include deaths in police custody, for which 153 cases were registered with the NHRC.

Reasons for Encounters and custodial deaths

- Political motivations and Personal Grudges
- Custodial deaths largely occur due to torture by third degree methods. Police personnel resort to third degree methods to draw confessions from the accused in the shortest possible time. Little thought is given to the consequences of the torture causing death.
- The lack of patience and technical skills drive them to adopt crude methods. That erring policemen go scot-free in most cases spur others to ignore the due process.
- The proclivity of superior officers and even politicians to shield them prevents action against them.
- The natural propensity of the state police to defend its own personnel when custodial deaths are investigated makes it necessary for outside agencies to be involved in probes.

SC

- The Supreme Court ruled that in all cases of encounter deaths there shall be mandatory registration of FIRs and investigation by CID or any other independent agency
- No officer shall be given out of turn promotion or a gallantry award for encounter operations till the inquiry is completed on its genuineness.

- The court said that the magisterial inquiry should be completed expeditiously and if a police officer is found guilty of involvement in a fake encounter, he should be proceeded against legally and departmentally.

Independent bodies in other countries

- Independent Police Complaints Commission as in the **United Kingdom**
- Independent Police Investigative Directorate in **South Africa**,

Allegations of human rights violations by the police in India are investigated by the police themselves.

What needs to be done?

- If stringent and timely action is not taken against delinquent policemen, custodial deaths are bound to become more frequent.
- The responsibility devolves on senior police officers, who need to devise methods to monitor the number of suspects in each police station and the reasons for their detention.
- Any detention or arrest should be promptly reported to district superintendents, who should, thereafter, ensure that SC and NHRC guidelines are strictly adhered to.

It is important that fake encounters and custodial deaths are probed impartially, and if necessary by outside agencies, so that the message goes out to the police that the rule of law can't be compromised.

11. Jail Reforms- Empowerment in Tihar jail

Context

- A product named 'Wah-O' a perfume brand was launched by Tihar jail to provide opportunities to inmates to become economically independent and "productive members" of society.

Details

- Ten per cent of the profit will go to the Prisoner's Welfare Fund while 25% of the annual profits will also be channelized into the Victims Welfare Fund.

12. Gender Imbalance in Lower Judiciary

- A report by Vidhi Centre for Legal Policy shows that the lower judiciary across India has a mere 27.6 per cent female judges

Details

- In its report titled Tilting The Scale: Gender Imbalance In Lower Judiciary, it shows how of the total 15,959 judges in the lower judiciary across India, 11,397 are male judges which make up for 714 per cent while women judges are a mere 27.6 per cent at 4,409.
- Only in three of the smallest states—Goa, Meghalaya, and Sikkim, with a collective total of a mere 103 judges—does the percentage of women judges cross 60%

- * Goa has 65.9 per cent lady judges at 29 and 34.1% male judges numbering at 15. Meghalaya has 73.80 per cent judges with 31 lady judges and 11 male judges aggregating to 26.2 per cent. Sikkim's 11 female judges in lower judiciary make up for 64.7 per cent

- * On the other hand, states like Gujarat has 811 male and 148 female judges while in case of Maharashtra there are 1484 male judges and just 574 female judges

- Barring Telangana and Puducherry, the percentage of women judges remains below 40% for all other states.
- Bihar (11.52%), Jharkhand (13-98%), Gujarat (15.11%), Jammu & Kashmir (18.62%), and Uttar Pradesh (214%) have the lowest representation of women in the lower judiciary

Stats

- Since inception in 1950, the Supreme Court of India has on seen 6 women judges, and currently has one woman judge out of 25.
- 8 Across India's 24 High Courts, slightly over 10% judges are women, with not even a single woman judge in eight High Courts.
- Further, women have occupied the post of a High Court judge only 86 times since the elevation of the first woman judge to the Kerala High Court in 1959 (as of November 2017), says the report.

Reasons for Gender Imbalance

- The gender imbalance in the judiciary include the disproportionately low number of women lawyers and the challenges they face on entering litigation.
 - * "For instance, only 10% of advocates are estimated to be women and when it comes to Senior Advocates in the Supreme Court".
- Sexual harassment and the lack of supportive infrastructure from toilets to maternity leave, also contribute to a high attrition rate amongst women lawyers, with many preferring to join the corporate sector instead.
- All these factors come together to result in disproportionately low women bar appointees to the bench.
 - * For instance, in its 68 years of existence, the Supreme Court has only seen one woman elevated from the bar to the bench, as recently as January 2018
- The report cites how several prominent lawyers and judges have also described outright bias against women in appointment and promotion processes

Positive Zone

- Despite the abysmal representation of women in the lower and higher judiciary, recent developments have suggested an encouraging if slow trend.

- In 2017, for the first time, all four High Courts of Delhi, Calcutta, Bombay and Madras were headed by women Chief Justices.
- Last month, Ms. Indu Malhotra became the first woman Senior Advocate in the Supreme Court to be recommended for elevation to the bench
- In 2016, the Parliamentary Standing Committee submitted its 87th Report recognized that the data on women representation in the higher judiciary was not encouraging and suggested that suitable measures be taken to ensure that the higher judiciary would be reflective of the composition of the society and its diversity.
- President Ram Nath Kovind acknowledged the gender imbalance in the judiciary in his National Law Day speech, prompting political leaders to call for reservations

Way forward

- **Need to regularly collect and publish statistics on the social composition** of the judiciary. The regular collection of data on diversity is a prerequisite to diagnosing exclusion of social groups in the judiciary and designing appropriate interventions. The appropriate governmental authority, whether this be the Union Law Ministry or the concerned High Court, thus must monitor and make data on diversity in the lower judiciary publicly available.
- Mainstream discourse tends to focus on judicial appointments either in the context of the tussle between the judiciary and executive, or vacancies and delay. There is an **urgent need to expand this discourse so it can also accommodate concerns over diversity and equitable social composition**

13. River water dispute between Rajasthan and Haryana Resolved

- Rajasthan will get its full share of 1.119 billion cusec metres of water from the Yamuna, with the Upper Yamuna Review Committee deciding over the weekend that 1,917 cusecs water will be released from the Tajewala headworks to Jhunjhunu, Churu and Sikar districts for drinking and irrigation.

Background

- Rajasthan was allocated 9% share in the Yamuna waters, but it was not getting it even when excess water was available in the river between July and October every year.

ECONOMY

1. Bill to ban unregulated deposit schemes could get Cabinet nod

- The Union Cabinet is likely to approve a Bill that seeks to ban all unregulated deposit schemes including Ponzi schemes and the ones accepting crypto currencies.
- Officials said the Bill — 'Banning of Unregulated Deposit Schemes' 2018 — was expected to be introduced as soon as the Budget session of Parliament resumed after recess next month.
- Earlier, the finance ministry had warned investors of investing in crypto currencies, saying those were like ponzi schemes. The legislation comes at a time when the financial world has been hit by frauds and misappropriation of funds.
- Many are reported to have bought crypto currencies during the demonetisation period. There are many deposit schemes, which are still unregulated in India, even as the market regulator, the Securities and Exchange Board of India (Sebi), regulates what is called the collective investment scheme (CIS).
- The CIS is an investment scheme or an arrangement by which individuals pool their money for investing in particular assets. Similarly, chit funds are regulated by the Chit Funds Act of the Centre and various state laws.
- Crypto-currencies are unregulated even as gains made in them are taxed in India.

2. Chardham Highway Project

- The Chardham Mahamarg Vikas Pariyojna, is an ambitious initiative to improve connectivity to the Char Dham pilgrimage centres in the Himalayas
- Char Dham (Gangotri, Yamunotri, Kedarnath and Badrinath)
- The project's main objective is to develop around 900 km of national highways to make the travel safer and more convenient.
- The project will be falling along NH-134 (old NH-94) in the State of Uttarakhand. The project will be built under Engineering, Procurement and Construction (EPC) Mode

What was the need?

- The highway network along Char Dham got severely devastated following the cloudburst in 2013.
- The roads leading to Gangotri and Badrinath are also equally important from a strategic point of view as these roads are used for supply and deployment to the defence establishments along the Indo-China border areas in Uttarakhand.

Components

- The project involves widening the existing, geometrically deficient highway that connects the four abodes.
- Apart from widening, the road transport and highways ministry plans to improve the stretches to two-lane carriageway with paved shoulders, protect landslide hazard zones, construct bypasses, long bridges, tunnels and elevated corridors to ensure safety for the users.

Significance

- Connectivity & tourism will get a strong boost through the project.
- The construction of this tunnel will provide all weather connectivity to Yamunotri
- It will reduce the travel distance from Dharasu to Yamunotri by about 20 km and travel time by about an hour.
- The proposed tunnel will save number of trees that would have been required to be removed in the road improvement of 25.600 km, had the original alignment been followed.

3. Coal Mining and Private Sector

Why has coal mining been opened up?

- The Centre opened up commercial coal mining for the private sector. About 70% of power generated in India uses coal. Domestic coal has been able to meet only 75% of our annual coal demand.

What is the significance of the move?

- The government has termed it the most ambitious coal sector reform since 1973 when the sector was nationalized.
- With an aim to boost coal production, the state-owned Coal India Limited (CIL) was set up in 1975. Ever since, it has monopolized the sector, and is now the world's largest coal-producer.
- With the latest decision, the Centre said, the sector will move from an era of monopoly to that of competition.

What led to this move?

- The coal ministry had, from 1993 to 2011, allocated 218 coal blocks to eligible Public Sector Undertakings and private firms for specified end-use projects, that is power, steel and cement, as well as for commercial mining by PSUs.
- However, these allocations were challenged before the Supreme Court, which in August 2014 cancelled the allocation of 204 blocks after finding that the allocations were arbitrary and illegal.

- To manage and reallocate the cancelled blocks, the Coal Mines (Special Provisions) Act, 2015 was enacted.
- In March 2017, the coal ministry brought out a discussion paper on auction of coal mines for commercial mining.
- Given the present demand-supply situation and the projected economic growth of the country, it will be necessary to further augment the production through commercial mining, certain mines will be offered to all eligible companies in private as well as public sector through auction mode

How will the decision be implemented?

- The approved methodology for auction of coal mines / blocks for sale will prioritize on transparency and ease of doing business.
- There will be an 'ascending forward auction' — a two-stage online auction comprising
 - * Technical bid
 - * Financial bid with initial and final price offers.
- There will be no curbs on the sale or use of coal from the mine.

What are the benefits?

- It is expected to bring in greater efficiency, technology, higher investment and more employment.
- It would also lead to more revenue that can be used for development of the area and inhabitants around the mine by the State.
 - * Jharkhand, Odisha, Chhattisgarh, West Bengal, Madhya Pradesh, Telangana and Maharashtra would benefit the most.
- The move could be the first step towards the full privatisation of the mining sector, adding that global mining giants like BHP, Rio Tinto, Anglo American and Glencore have expressed interest in prospecting for coal in India.

However, coal blocks would be commercially viable only if they are offered in minimum blocks of 40-50 million tonnes.

4. Credit Crunch

- Also known as a credit squeeze, this refers to an economic situation where banks and other financial institutions become extremely reluctant to provide loans to businesses.
- This could be the result of banks suffering huge losses on their portfolio, which makes them adopt a cautious approach to protect their equity.
- It could also happen when banks begin to doubt the repayment capability of their customers amidst a general gloom in the overall economy.
- As bank credit is a major source of money creation in most economies, a credit crunch can also cause a general fall in prices across the economy like after the global financial crisis of 2008.

5. Cryptoassets regulation

- Despite repeated cautions by the Reserve Bank of India and the Finance Ministry about the risks associated with investing in crypto currencies and their illegality when used as actual currency, the crypto-industry is still pretty enthusiastic about India and maintains that even the government's negative stance has been exaggerated.
- The RBI has issued three warnings about cryptocurrencies since 2013, and the Finance Ministry in December issued a strongly-worded notice likening cryptocurrencies to Ponzi schemes and emphasised that buyers and investors were risking their money by investing in these products.
- This culminated in Finance Minister Arun Jaitley's Budget speech on February 1, when he again reiterated the government's position that cryptocurrencies were not legal tender and the government would look to curb any illegal transactions and financing using these digital currencies.

Is it legal or not?

- While several commentators took this to mean that the government had declared cryptocurrencies illegal, industry players in contrast took a lot of heart from Mr. Jaitley's statement, saying that instead of suggesting a ban, the government looked like it was considering regulation of the industry.
- Even foreign currencies in the country are commodities and not legal tender. If they are talking about illicit use, it seems to suggest a regulatory environment rather than destroying the entire industry.
- The government was not comfortable with the words 'coin' or 'currency' because these are not legal tender, and so instead wanted to call them 'crypto-assets'.
- Likewise, the industry body representing most of the block-chain and cryptocurrency companies in India agrees with this assessment.
- Citibank banned the use of its credit and debit cards for the purchase of cryptocurrencies in India given concerns, both globally and locally, including from the Reserve Bank of India, cautioning members of the public regarding the potential economic, financial, operational, legal, customer protection, and security-related risks associated with dealing in them.
- The central bank's view, however, doesn't seem as cut-and-dry as made out to be. RBI came out with a report on the fintech sector, in which it dedicated a section to digital currencies (DCs).
- It went into the modalities of such currencies and also their future potential, an indication that the RBI was not totally closed to the applications of digital currencies.

- The implications of DCs for financial firms, markets and system will depend on the extent of their acceptability among users. If use of DCs were to become widespread, it would likely have material implications for the business models of financial institutions. DCs could potentially lead to a disintermediation of some existing payment services infrastructure.
- Some cryptocurrency players are also of the opinion that if the government wished to act decisively against crypto-currencies, it would have already done so.
- If the government had to completely ban these crypto-currencies, then they would have done so already. I think they want to understand whether calling it illegal would result in serious harm, or whether simply declaring it illegal will stop the system or force people into buying these digital currencies using cash.
- The Income Tax Department this year sent one lakh notices to people who invested in crypto-currencies and whose investments didn't match their income profile.
- This too was widely seen as an anti-cryptocurrency move, but industry players downplayed its significance saying the number of notices sent was too small and that they didn't have much weight given that the current financial year is yet to end.
- Suppose somebody has sold bitcoins after April 2017, not even one financial year has gone, so it couldn't possibly have reached their income tax returns. The maximum that could have happened is that they could have reported any gains they made in their advance tax. The returns are only going to go in July 2018.

Is KYC compliance helping?

- Another argument being made is that the reason the I-T department found it so easy to track down investors in cryptocurrencies was because the exchanges adhered to the same KYC rules as those followed by banks.

6. Blockchain tech could help prevent frauds like at PNB

- The adoption of blockchain by India's banks could help avert frauds such as the one at Punjab National Bank as the disaggregated and transparent nature of the technology, which updates information across all users simultaneously, would have ensured that various officials would have instantly been alerted to the creation of the letters of undertaking (LoUs), according to bankers and block chain specialists.
- Transaction reconciliation systems at present do not result in immediate notification. Using block chain, all parties on the chain will be immediately notified about a transaction.
- Blockchain, a distributed ledger technology originally developed as an accounting system for the cryptocurrency Bitcoin, is being researched across the banking and financial services industries for the potential benefits it may offer in an increasingly digitised business environment.

- Central banks including the U.S. Federal Reserve and the Reserve Bank of India have been examining the technology to understand the regulatory challenges it may pose.
- Blockchain potentially has far-reaching implications for the financial sector, and this is prompting more and more banks, insurers and other financial institutions to invest in research into potential applications of this technology.
- Market participants in other securities markets are exploring the usage of blockchain or distributed database technology to provide various services such as clearing and settlement, trading.
- Indian securities market may also see such developments in the near future and, therefore, there is a need to understand the benefits, risks and challenges such developments may pose.

Implementation at SBI

- SBI was convinced of blockchain's utility, especially its potential to improve internal fraud monitoring, and had already implemented it in its reconciliation systems and in several cross-country payment gateways.
- In blockchain, from the source system it will try to match the transactions, so one can immediately verify any transaction using blockchain.
- If the LoUs were on the blockchain, then they would have been there for everybody to see, and every entry into the chain leaves a clear record of who made that entry.
- Blockchains are immutable and distributed ledgers, which means that anything recorded on them cannot be changed or deleted, and is instantly uploaded to all users on that blockchain.
- If a bank wants to lend to a borrower, we need to know what all he has borrowed from other institutions as well. For that, we have the CIBIL score at present, but that data is prone to human error.
- Simply depending on technology to prevent frauds is fraught, since they take place at the human level, where an official with the correct authentication can misuse the system.
- The modus operandi of the fraud as it appears right now is that somebody used all the authentication methods and it was compromised at the user level.
- If that is the case, then any technology can be hoodwinked. Here, what was given into the system is not in doubt, the one who gave it into the system is in doubt.
- Still, blockchain's technology is such that even human error can be greatly mitigated.
- Blockchain can fix this by having everything linked to the same database.

7. CriSidEx

- CriSidEx, India's First MSE Sentiment Index, has been launched by CRISIL and SIDBI.
- CriSidEx is a composite index based on a diffusion index of 8 parameters and measures MSE business sentiment on a scale of 0 (extremely negative) to 200 (extremely positive).
- CriSidEx will have 2 indices, one for the 'survey quarter' and another for the 'next quarter' once a trend emerges after few rounds of the survey, providing independent time series data.

Benefits:

- The crucial benefit of CriSidEx is that its readings will flag potential headwinds and changes in production cycles and thus help improve market efficiencies. And by capturing the sentiment of exporters and importers, it will also offer actionable indicators on foreign trade.

8. Debt Management Office

- The government first announced its intention to form a new debt management office in 2007
- At present, while RBI manages the market borrowing programme for central and state governments, the central government manages external debt.

We should have independent debt management

- Financial Sector Legislative Reforms Commission (FSLRC), in its report, had argued that unifying the debt management functions will result in cost effective management of government debt by a "specialized, unified and independent agency" and provide a comprehensive picture of the central government's liabilities.
- The RBI would be biased towards a low interest regime to cut the costs of sovereign debt, at the risk of compromising its anti-inflation stance.

RBI- We should not have independent debt management

- Size and dynamics of govt borrowing Programme has a much wider influence on interest rate movements, systemic liquidity and even loan growth
- Only central banks have the requisite market pulse and instruments to aid in making contextual judgments, which an independent debt agency driven by narrow Objectives Will not be able to do
- Even after the separation, the central bank will be expected to manage market volatility and market expectations arising out Of government borrowing
- If debt management is moved away from the RBI to DMO. The possibility Of conflict Of interest Will be greater as Govt is the owner of the majority Of banks in India

9. e-way bill

What is it?

- E-way bill is an electronic document (available to supplier / recipient / transporter) generated on the common portal evidencing movement of goods of consignment value more than Rs. 50000/-.
- It has two Components-
 - * Part A comprising of details of GSTIN of supplier & recipient, place of delivery (indicating PIN Code also), document (Tax invoice, Bill of Supply, Delivery Challan or Bill of Entry) number and date, value of goods, HSN code, and reasons for transportation.
 - * Part B comprises of transport details - transport document number (Goods Receipt Number or Railway Receipt Number or Airway Bill Number or Bill of Lading Number) and Vehicle number for road

What were the issues?

- The Govt said "In view of difficulties faced by the trade in generating e-way bill due to initial tech glitches, it has been decided to extend the trial phase for generation of e-way bill, both for inter and intra-State movement of goods."
- It shall be made compulsory from a date to be announced.

10. Fragile Five

- It is a term coined in August of 2013 by a financial analyst at Morgan Stanley to represent emerging market economies that have become too dependent on unreliable foreign investment to finance their growth ambitions.
- The five members of the Fragile Five include: **Turkey, Brazil, India, South Africa and Indonesia**

Details

- United Nations Conference on Trade and Development (UNCTAD) showcases India to be among the top three investment destinations globally, till the year 2019.
- An upgrade for the country in the recent Moody's ratings and World Bank's EoDB (Ease of Doing Business ranking) rankings 2018 are other signs showing how India is gaining popularity as an investment destination.
 - * Of the 10 emerging market (EM) economies in the G20, India is only one of the two countries to have secured a ratings upgrade in the last five years, along with Mexico.
 - * In contrast, five of these major EM economies—Brazil, South Africa, Russia, Saudi Arabia and China—have been downgraded by at least one notch in the last five years by Moody's.
- India has improved on the twin deficit front since 2012-13

- India's external debt ratio is significantly lower than five years ago, and
- India's foreign exchange reserves now provide more than 10 months of import cover compared to around six months in 2012.
- The improvement in macro-economic fundamentals and some of the reformist steps taken by the government have led to an impressive surge in foreign investments into the country, which has helped stabilize India's external sector metrics.
- India was the second-highest recipient of foreign capital inflows (including both foreign direct investment and portfolio investments), trailing only China, in 2016.

Way forward

- Going ahead, it will be important to bring in more reforms and initiatives to ensure the growth momentum and investor interest continues and at an increasing rate. A very important step in this direction will be structural changes at state level too so the impact percolates deeper at local level.

11. Global IP Index

- It is published by U.S. Chamber of Commerce Global Innovation Policy Center's (GIPC) 'International IP Index,
- It is based on 40 unique indicators that benchmark activity critical to innovation development surrounding patent, trademark, copyright, and trade secrets protection.

Details

- India has increased "substantially" its score in the International Intellectual Property (IP) Index, ranking 44th among 50 nations, but it needs to take additional and meaningful reforms to complement its policy
- Last year, India ranked 43rd out of 45 countries in the Index.
- India's overall score has increased substantially from 25% (8.75 out of 35) in the 5th edition of the Index to 30% (12.03 out of 40) in the 6th edition
- India's ranking, the report said, reflects a relatively strong performance in the new indicators as well as positive reform efforts on patentability of computer-implemented inventions (CIIs) and registration procedures for well-known marks.

Other Countries

- The US tops the list with 37.98 points, followed by United Kingdom (37.97) and Sweden (37.03).

12. Grid stability

- Electricity is a major concern in rural India, especially for farmers. The Government of India has come up with an original plan to address this problem.

- Instead of transmitting electricity to the farmers, the government, to start with, wants farmers to use solar energy to power their irrigation pumps.
- According to the January 2018 report of the Council on Energy, Environment and Water, there are about 142,000 solar pumps in India. The government is planning to install one million solar pumps by 2021.

Solar capacity

- To achieve this, the Union Budget 2018 has allocated close to Rs. 48,000 crore to set up the Kisan Urja Suraksha evam Utthaan Mahabhiyan (KUSUM).
- This programme will help set up more than 28 GW of combined solar capacity through these solar pumps. Additionally, to ensure optimal use of this solar energy, and to incentivise farmers to shift to renewable energy, the government plans to purchase the surplus power through electricity distribution companies.
- This proposal will almost certainly increase agricultural incomes and reduce electricity losses when transmitting power to remote rural areas.
- Analysts claim that losses from distribution could fall to about 12% from the current level of at least 23%. However, the feasibility of purchasing surplus solar power seems problematic. There is a need to address the issue of grid stability that this injection of surplus power is bound to create.
- The advantage of this scheme is that transmission losses and power theft would drop significantly. Most rural retailers of power also lose money as they sell power at a subsidised rate to the poor and the farm sector.
- The state-run distribution companies were thus running a loss of Rs. 4.3 trillion as of September 2015. Local generation of power in the manner proposed would take care of the above issues.
- This is an issue that is often neglected. All power grids require balancing. This balancing entails meeting the demand with adequate supply 24x7 to ensure there is no blackout.
- The reason for striking this balance is that electrical energy cannot readily be stored, meaning that power generation ought to work round the clock.
- These electrical gridlines were created to depend on reliable and controllable generators (coal, oil and even hydroelectric).
- However, with more and more power being generated through fluctuating power generators (solar and wind), a more precise balance will have to be created, which may cause more failures.
- Take the example of solar panels that farmers use. These panels will only generate electricity during daylight hours, so to maintain a consistent round-the-clock power delivery the grid operators will need to have a back-up source of power in the form of coal or oil.

- During the day as well, they will have to be ready to quickly adjust output to compensate for the rise and fall of solar power generation due to changing weather and rain.
- Output from solar panels can also change due to clouds. Variations in weather patterns make it more difficult for the grid operator to predict the balance of electrical energy that will be required to meet the demand.
- Because wind and solar power sources constantly generate shortfalls and excesses, the grid operators send a signal to power plants every few seconds to ensure that the total amount of power demand at the grid is consistently equal to the total power supply.
- Most countries handle inputs from renewable energy sources similarly. But India is short of power.
- Thus, while other nations see solar and wind power as an energy management problem, India also sees this as a capacity management problem.
- Because of India's sheer size, the variability factor considerably increases: if some areas have low consumption, others are likely to have high consumption.
- More stability can be achieved by integrating the grids into all-India grids. Expected advances in storage technology would also significantly improve grid stability.
- The plan of the Government of India to purchase solar power from farmers has nevertheless taken off on a good note.
- In the Union Budget 2018, the Finance Minister asked governments to put in place adequate procedures to purchase the excess solar power from farmers. This sale of excess power has also discouraged overutilization of groundwater.

13. Highway Capacity Manual

- It is country's first ever Highway Capacity Manual (HCM) which will guide road engineers and policy makers about road expansion.
- The manual known as 'Indo-HCM' has been developed by CSIR-CRRI on the basis of an extensive, country-wide study of the traffic characteristics on different categories of roads like single lane, two-lane, multi-lane urban roads, inter-urban highways and expressways and the associated intersections on these roads
- The study involved seven academic institutions including IIT-Roorkee, Mumbai and Guwahati, School of Planning and Architecture, New Delhi, Indian Institute of Engineering and Science and Technology, Shibpur, Sardar Vallabhai Patel National Institute of Technology, Surat and Anna University, Chennai.
- The manual lays down guidelines for when and how to expand or manage different types of roads and their intersections and the level of services to be put in place. It has been developed based on the unique nature and diversity of traffic on Indian roads.

14. Kaleswaram Project

- The Kaleswaram project is an **off-shoot of the original Pranahitha-Chevella Lift Irrigation Scheme** taken up by the Congress government in 2007 when Andhra Pradesh was not divided.
- It is jointly implemented by Maharashtra and Telangana, aims to divert water from the Godavari river basin to Telangana.
- After the formation of Telangana in 2014, the TRS government redesigned the project on the ground that the **original plan had too many environmental obstacles and had very low water storage provision** — only about 16.5 tmc ft.
- After conducting a highly advanced **Light Detection and Ranging (LiDAR)** survey for a couple of months, the government separated the original component serving the Adilabad area as the Pranahitha project and renamed the rest as Kaleswaram by redesigning the head works, storage capacity and the canal system based on the data of availability of water at different locations along the course of the Godavari and its tributaries.
- The Kaleswaram project **has provision for the storage of about 148 tmc ft** with plans of utilising 180 tmc ft by lifting at least 2 tmc ft water every day for 90 flood days.

What's unique?

- KLIP has many unique features, including the longest tunnel to carry water in Asia, running up to 81 km, between the Yellampally barrage and the Mallannasagar reservoir.

Problem Area

- The Komarevelli Mallannasagar project, a 50 TMC reservoir for which eight villages are to be submerged and 17,511 acres of land acquired and the villagers here are unwilling to hand over the land unless the state follows the LARR Act.
- Loss of forest cover to an extent of over 7,800 acres where a total of 22 lakh forest trees will be hacked.
- The project will forever bisect the contiguous forest between Maharashtra and Telangana and between Warangal and Adilabad, leading to genetic isolation of species

15. Kisan Urja Suraksha evam Utthaan Mahaabhiyan or KUSUM scheme

- It is a 1.4 lakh-crore scheme for promoting decentralized solar power production of up to 28,250 MW to help farmers
- Scheme would provide extra income to farmers, by giving them an option to sell additional power to the grid through solar power projects set up on their barren lands
- It would help in de-dieselizing the sector as also the DISCOMS

Components

- The components of the scheme include building 10,000 MW solar plants on barren lands and providing sops to DISCOMS to purchase the electricity produced, 'solarizing' existing pumps of 7250 MW as well as government tube wells with a capacity of 8250 MW and distributing 17.5 lakh solar pumps.

Positive outcomes

- The positive outcomes that are expected when the scheme is fully implemented across the country include promotion of decentralized solar power production, reduction of transmission losses as well as providing support to the financial health of DISCOMs by reducing the subsidy burden to the agriculture sector.
- The scheme would also promote energy efficiency and water conservation and provide water security to farmers.

16. Long-Term Capital Gains

- LTCG or long-term capital gains refer to the gains made on any class of asset held for a particular period of time. In case of equity shares, it refers to the gains made on stocks held for more than one year.
- In other words, if the shares are bought and held for more than a year before selling, then the gains, if any, on the said sale are referred to as long term capital gains or LTCG.

Why is LTCG tax in the news?

- It is in the news as Finance Minister Arun Jaitley re-introduced LTCG tax on equity shares. Investors have to pay 10% LTCG tax on gains exceeding ₹one lakh on the sale of shares or equity mutual funds held for more than one year. Previously, short-term capital gains (STCG) tax of 15% was levied.

Advantages:

- One, it corrects, somewhat, the prevailing imbalance on market investments because though investment instruments are taxed gains from holding shares for long are not. Even short-term capital gains – money made by selling shares after holding for less than a year – are taxed at 15%.
- Two, investors who park wealth in the stock markets would be encouraged to deploy the capital in ways that are more economically productive, say, in manufacturing activities.
- Three, it makes the government seem a little less pro-rich, little more benevolent towards the no-so-rich as much of the capital gains are collected by corporates, not individuals.

Issues

- The introduction of LTCG tax can only increase the cost of trading stocks at a time when various market participants have been highlighting the 'export of capital' to other countries due to lower transaction costs in those nations.

17. The manufacturing muddle

- The Union Budget has hardened the correction of the inverted duty structure (IDS), which has adversely impacted manufacturing for decades.
- An IDS means higher duty on intermediate as opposed to final/finished goods, that enjoys concessional custom duty under certain schemes.
- The Budget has raised customs duties significantly; Chinese/other imports have swamped India's small- and medium-sized enterprises and large manufacturing companies, raising the import-intensity of manufacturing as well as dampening job growth by raising capital intensity.
- So the share of manufacturing in GDP and employment has not risen since 1991.
- 'Make in India' dream is to realize that India becomes 'factory of Asia and the world'.
- The goods and services tax (GST), especially the IGST or Integrated GST component, has begun to erode the advantage that the IDS was giving to foreign exporters in Indian markets.

Reasons that gave an edge to Chinese industrial success in comparison to India

- India's policy structure failed to utilise its labour advantage to grow labour intensive manufacturing exports.
- While China reduced the absolute numbers and percentage of the poor in the population by absorbing surplus labour in manufacturing,
- India's poverty reduction was much slower.
- While China's agricultural and rural income growth was much higher as it sustained consumer demand, it also generated industrial jobs much faster.
- Between 2011-12 and 2015-16, the growth of manufacturing jobs not only first slowed after 2011-12 but also became negative.

Alterations

- Customs duties have been raised on capital goods and electronics, and silica for use in manufacture of telecom grade optical fibre especially among the sectors adversely impacted by the IDS in the past decade.
- Indian manufacturers were suddenly exposed to competition. A slower reduction would have enabled them to adjust to import competition, upgrade technology, and compete.

Chasing jobs

- Meanwhile, labour force grew sharply to 12 million per annum till 2004-05; as a result of domestic manufacturing employment growth was slow, they could only be absorbed in agriculture or traditional services; and informal employment grew even more than ever before.

- However, these entrants, much better educated than the earlier cohort, are now entering the labour force.
- They want either white-collar jobs in the private or preferably public sector, or in industry or in modern services.
- Recent data such as the government's Annual Labour Bureau survey, with a sample size larger than the NSS, and the Centre for Monitoring Indian Economy indicate that job growth is lower than entrants to the labour force.
- The youthful labour force, between 15 and 29 years, saw a very sharp increase of 40 million, from 147 million to 187 million between 2011-12 and 2015-16.

Looking ahead

- The GST, has resulted in a neutralisation of the IDS.
- This has also led to a formalisation of some informal firms, and hence workers (by registration in the Employees' Provident Fund Organisation).
- The resolution of the twin balance sheet problems (of companies being over-leveraged and banks unable to lend due to mounting non-performing assets), together with the Insolvency and Bankruptcy Code, should now open the floodgates for new manufacturing investment.
- Finally, policy must attempt to close the loop between rising demand and supply through consumer demand, which the Budget attempts through its agriculture and rural infrastructure focus.

18. Mumbai and Pune Hyperloop connectivity to be world's first

- The Virgin Group signed an 'intent agreement' with the State government to build a hyperloop transportation system between Mumbai and Pune.
- The hyperloop is expected to reduce travel time between the cities to 20 minutes, from the present three hours.
- The first hyperloop route will link central Pune with Mumbai and the proposed Navi Mumbai international airport, the foundation stone for which was laid by Prime Minister Narendra Modi.

19. Operation Greens

- Operation Greens aims to promote farmer producers organizations, agri-logistics, processing facilities and professional management. The operation aims to aid farmers and help control and limit the erratic fluctuations in the prices of onions, potatoes and tomatoes.
- Jaitley proposed that it would be launched with an allocation of Rs 500 crore
- The idea behind Operation Greens is to double the income of farmers by the end of 2022. Operation is essentially a price fixation scheme that aims to ensure farmers are given the right price for their produce. The MSP regulation has a key role to play here.

* The announcement to set minimum support price of all kharif crops at 1.5 times the cost of production will increase the farmers' income and for consumers, tax incentives will be given under Operation Greens.

- Operation Greens will work to increase demand in the economy as well with its demand forecasting model.

* To help in the structural and infrastructure part of the scheme, Jaitley announced that as many as 470 agriculture market committee (APMCs) promoted markets will now be connected to the e-nam platform while the government will help in development of 22,000 agricultural markets.

20. Outward Direct Investment (ODI) policy

An outward direct investment (ODI) is a business strategy in which a domestic firm expands its operations to a foreign country. This can take the form of a green field investment, a merger/acquisition or expansion of an existing foreign facility.

- The proposed ODI policy may contain provisions to make it easy for many Indian firms, envisioning ambitious plans to transform themselves into Multi-National Companies (MNC), to go global and expand.
- The ODI policy is expected to tighten regulations to prevent round-tripping structures, where funds are routed by India-based companies into a newly formed or existing overseas subsidiary and then brought back to India to circumvent regulations here.
- Currently, the jurisdiction over ODI is mainly with the RBI, and the concerned law here is the Foreign Exchange Management Act.

How is this going to help?

- Indian firms invest in foreign shores primarily through Mergers and Acquisition (M&A) transactions.
- With rising M&A activity, companies will get direct access to newer and more extensive markets, and better technologies, which would enable them to increase their customer base and achieve a global reach.

RBI's Comments

- The Reserve Bank of India (RBI) had pointed out that some Indian companies were raising funds under the FDI route through issue of hybrid instruments such as optionally convertible/ partially convertible debentures which are intrinsically debt-like instruments.
- The RBI clarified that only instruments that are fully and mandatorily convertible into equity, within a specified time, would be reckoned as part of equity under the Foreign Direct Investment (FDI) policy and eligible to be issued to persons residing outside India under the FDI scheme in terms of Foreign Exchange Management (Transfer and Issue of shares by a Person Resident outside India) Regulations.

A hybrid security is a single financial security that combines two or more different financial instruments. Hybrid securities, often referred to as "hybrids," generally combine both debt and equity characteristics. The most common type of hybrid security is a convertible bond that has features of an ordinary bond but is heavily influenced by the price movements of the stock into which it is convertible

Reform Push

- **Scheme of Investment Promotion (SIP):** The SIP aims to make India among the top 10 most preferred FDI destinations in the world and among the top 50 in the ranking of countries by the World Bank on 'Ease of Doing Business Index.' Its objective is also to improve investor confidence to boost investment and economic growth.

ODI in different countries

- **Top ten ODI destination countries** in FY'15, FY'16 and FY'17 included Mauritius, Singapore, the U.S., the UAE, the Netherlands, the U.K, Switzerland, Russia, Jersey and British Virgin Islands. Cumulatively, these nations were the beneficiaries of 84% or more of India's ODI during each of those financial years.
- The IBEF said ODI is being channeled into Mauritius, Singapore, British Virgin Islands, and the Netherlands **mainly because these countries provide higher tax benefits.**
- Interestingly, this composition of ODI destination countries more or less **mirrored the top sources of foreign direct investment inflows into India** in the same period including, Mauritius, Singapore, Japan, the U.S., U.K., the UAE, the Netherlands, Germany, Cyprus and France.

Some irritants in present ODI

- If a holding company is used to make an investment, it may qualify as a core investment company/ non-banking financial company, and therefore, not allowed to invest in non-financial services outside India
- Also, if the overseas business goes bankrupt, approvals are required for depletion in value of more than 25%

Way forward

- Approval requirements and other norms would be simplified in a manner that would encourage 'internationalization' of Indian companies.

21. Penn effect

- This refers to the observation that the difference in living standards across countries is grossly exaggerated by the use of market exchange rates to calculate income.
- The market exchange rate between currencies is determined by the balance of payment situation between countries, thus reflecting only the cross-border demand for goods and assets.

- When such exchange rates are used to calculate incomes, the results don't accurately reflect the ability of people to afford things since a significant share of goods and services are produced and consumed within the borders of countries

22. Punjab National Bank (PNB) Scam

Context

- In what could be one of the biggest frauds in the Indian banking system, state-run lender Punjab National Bank (PNB) reported unauthorised transactions worth Rs. 11,500 crore in one of its branches in south Mumbai.
- The Enforcement Directorate has registered a money laundering case in the matter, which involves Mumbai-based billionaire diamond merchant Nirav Modi.

Impact

- The bank's stock plunged almost 10% through the day and its market capitalization eroded by nearly Rs. 3,900 crore by the end of trading on the Bombay Stock Exchange.

What was the Govt Response?

- The government also swung into action with the Finance Ministry asking all the banks to carry out a clean-up exercise.
- Financial Services Secretary said the government will not tolerate 'unclean banks' while adding that the case dates back to 2011, when a fraudulent Letter of Undertaking (LoU) was submitted to PNB.

What is a LoU, and how is it issued?

- A LoU is an assurance given by one bank to another to meet a liability on behalf of a customer.
- The LoU is akin to a letter of credit or a guarantee.
- LoUs are used in international banking transactions.
- A LoU is issued for overseas import remittances and involves four parties — an issuing bank, a receiving bank, an importer and a beneficiary entity overseas.
- According to norms, the term of an LoU is 180 days, and can be rolled over once for six months.
- Since LoUs are a form of lending, they are typically backed by security.
- LoUs are conveyed from bank to bank through Society for Worldwide Interbank Financial Telecommunication (SWIFT) instructions

23. Centre looks for paradigm shift in its farm policy under seven-point strategy

- Realising that the increased production of food grains and horticultural produce have, so far, not brought smile on the face of farmers, the Centre has now been looking for paradigm shift where its programmes and policies would now focus more on 'income' than on 'production' under seven-point strategy.

- The strategy and need to have this approach was discussed on inaugural day of the two-day national conference "Agriculture 2022 – Doubling Farmers' Income".
- It was noted by participants that though the country had seen all-time high production of food grains (275.68 million tonnes) and horticultural produce (300 million tonnes) during 2016-17, the conditions of farmers could not improve much as remunerative price continued to elude them.
- Non-realisation of better price led to unrest among farming community and its impact was felt by the government even politically when the BJP had seen decline in its vote share in rural Gujarat during the recently held election. It had sent a warning signal to the government which now wants to have a permanent solution to this tricky issue.
- The government is keen to make agriculture policies and programmes 'income centric' instead of production-oriented.
- Underlining that the Centre is committed to double farmers' income by 2022, Singh emphasised that the objective would be achieved by adopting a multi-dimensional seven-point strategy.
- It was noted during the Conference that the government was working towards increasing farmers' income and that's why the budget for agriculture had been increased from Rs 51,576 crore in 2017-18 to Rs 58,080 crore for the year 2018-19 while ensuring sufficient funds for each component of the 'seven-point' strategy devised for doubling farmers' income.

What is the seven-point strategy?

- The seven-point strategy include: Emphasis on irrigation along with end to end solution on creation of resources for 'More crop per drop'; Provision of quality seeds and nutrients according to the soil quality of each farm; Large investments in warehouses and cold chains to prevent post-harvest losses;
- Promotion of value addition through food processing; Implementation of National Agricultural Markets and e-platforms (e-NAM); Introduction of crop insurance scheme at a lower cost to mitigate risk and promotion of allied activities such as dairy-animal husbandry, poultry, bee-keeping, horticulture and fisheries.

24. Society for Worldwide Interbank Financial Telecommunication (SWIFT)

- It is a messaging network that financial institutions use to securely transmit information and instructions through a standardized system of codes.
- Meanwhile SWIFT does not hold funds nor does it manage accounts on behalf of customers or acts as a clearing agent. It's only the communication network.
- At its core, SWIFT is basically just a bank-to-bank messaging system. It supplies a standardized language that institutions use to communicate payment instructions and other info to each other.

25. Re-structured National Bamboo Mission

- It has an outlay of ₹1290 crore to promote bamboo sector in a holistic manner.
- Bamboo is 'Green Gold'.
- The National Bamboo Mission is a wholly-sponsored central scheme.

How will it advance the economy?

- Bamboo is essentially a type of grass, but its classification as a tree for 90 years prevented the northeast, which grows 67% of India's bamboo, from exploiting it
- The inclusion of bamboo in forest produce items has affected its marketability as bamboo grown by farmers could not be harvested
- The introduction of a new policy for transit of bamboo from non-forest areas will further boost the bamboo sector in the Northeast, where more than 50 per cent of India's bamboo resources are available

Issues

- The flowering of bamboo every 50-55 years leads to dramatic increase in the population of rats that destroy crops triggering famine, locally called mautam.
- There have also been instances of bamboo cartels shedding blood while competing for limited commercial opportunities

What needs to be done?

- Restructured NBM needs to be more focused on value-chain management and value-addition of bamboo at community level which will bring more income to the bamboo farmers and bamboo processors

26. SEBI gets teeth to act against exchanges

- As part of the proposed amendments in the Finance Bill 2018, the government has given more power to the Securities and Exchange Board of India (SEBI) to impose monetary penalties on important market intermediaries such as stock exchanges and clearing corporations and also act against newer categories of participants like investment advisers, research analysts, real estate investment trusts (REITs) and infrastructure investment trusts (InvITs).
- The proposed amendments to the SEBI Act and the Securities Contracts (Regulation) Act now allow the capital markets regulator to impose a **monetary penalty of at least ₹5 crore on stock exchanges**, clearing corporations and depositories for non-compliance with regulatory norms.
- The penalty can go up to ₹25 crore or three times the amount of gains made out of such failure or non-compliance.
 - * **Hitherto, SEBI only had the power to censure or warn against any form of failure.**
- The amendments also allow SEBI to act against entities that furnish false or incomplete information to the regulator.

- * **Earlier, it could act only if the entity did not furnish any information.**

How will this help Market?

- It will increase the quality of disclosure rather than just tick-the-box approach. Twin-fold penalty powers with the whole time member and adjudicating officer (AO) is welcome for efficient use of human resources
- REITs and InvITs along with research analysts and investment advisers will have to be more careful now as the Finance Bill allows SEBI to impose a penalty of up to ₹1 lakh per day for the period of non-compliance.
- The government has also allowed the regulator to pursue cases against the legal representatives of defaulters if in case a defaulter passes away during the course of regulatory proceedings.
 - * Provided that, in case of any penalty payable under this Act, a legal representative shall be liable only in case the penalty has been imposed before the death of the deceased person

27. New RBI norms to spur surge in NPAs

- Under the new rules, banks will have to file for insolvency proceedings against loan defaulters with Rs 20 billion (\$311 million) or more if a resolution plan is not implemented within 180 days of the initial occurrence of default
- It warned that any failure on the part of banks to meet the prescribed timelines, or any actions they take to conceal the actual status of accounts or evergreen stressed accounts, will expose banks to potential monetary penalties and other actions.
- It also tightened rules around resolution plans, saying any such process involving restructuring or change in ownership for large accounts with loans of 1 billion rupees or more will need independent credit evaluation by credit rating agencies that are authorized by the RBI.
- Loans of Rs 5 billion or more will need two such independent evaluators,
- The RBI said all prior schemes, including the popular Strategic Debt Restructuring Scheme, the Scheme for Sustainable Structuring of Stressed Assets, and the Corporate Debt Restructuring Scheme, will be withdrawn with immediate effect.

28. Centre reboots eNAM to draw more farmers

- In a bid to engage more farmers on the electronic National Agriculture Market (eNAM) platform, the government unveiled mobile payment facility BHIM, and other features in regional languages as well.
- The eNAM website is now available in Gujarati, Marathi, Tamil, Telugu, Bengali and Odia besides Hindi and English, while the eNAM trading facility is available in six languages.
- The eNAM has been strengthened with features like MIS dashboard, BHIM and other mobile payment facilities, enhanced features on mobile app such as gate entry and payment via mobiles

INTERNATIONAL RELATIONS

1. Aqaba Meetings

- "Aqaba meetings" aimed at consolidating the global front against terrorism.
- Its objective is to enhance consultation and coordination in counterterrorism efforts on the basis of a comprehensive approach that sees terrorism as a global threat
- Jordan fully supported India's bid for a permanent membership in UNSC.

2. Ahikuntaka Tribe (Kuravans)

- The Ahikuntaka is from the Sinhala language, whilst among other communities they are known as 'Kuravar' as well as names such as 'Kuthandi', 'Kurawan', and 'Kattuvasi'.
- They are not migrants from India but natives of Sri Lanka. They are believed to have lived there even before the Tamils
- The last king of Sri Lanka before the British took over in 1817 was of Telugu origin

Professions

- Their communities are divided into caste systems; the some are involved in cultivation, and few others into washing clothes and cutting hair.
- The talents of this community is divided by clans. The snake charmers are one community while the monkey training community – Maddili – are another.

3. ASEAN-India Research Training Fellowship (AIRTF)

- Federation of Indian Chambers of Commerce & Industry (FICCI) has entered into a partnership with the Department of Science and Technology (DST), Government of India to implement and execute the ASEAN India Research Training Fellowship (AIRTF).
- The AIRTF scheme was introduced **to promote scientific cooperation between India and ASEAN member countries.**
- The scheme provides opportunities to researchers from ASEAN member countries to undertake research and training for a period of 6 months at Academic and Research Institutions in India.
- The **objective is to support and facilitate mobility of young talented researchers** from ASEAN member countries to India to conduct short term research and training under the guidance of Indian host scientists.
- The **scheme aims at capacity building of 50 young researchers annually from ASEAN member countries in science and technology domain and provide complete financial support** for a period of six months that includes to and fro travel, sustenance allowance and research contingency.

4. Chabahar Port

Background

In the early 2012, US put sanction against Iran Oil export, i.e. if any country imports crude oil from Iran, then that country's bank (through which payments are made to Iran) will not be allowed to do transactions in USA. Because of this sanction, most of the nations stopped importing oil from Iran, except some big ones like India and China, but India too felt the heat of US diplomatic pressure and agreed to cut down oil imports from Iran. Majority of Iran's nation income comes from Oil export, so, they're also feeling the heat. They wanted money, so, Iranian Government allowed India to invest upto \$100 million in the Chabahar Port Development project.

Details

- The \$500 million deal promises to lead to the development of a deep-water port, a 500-km rail line linking it to Iran's rail network, and new aluminum and urea plants.
- The Chabahar agreement marks a new level in India's overseas ambitions, establishing a genuinely strategic presence not just in one of the world's great energy markets, but potentially giving Indian business access to some of the fastest-growing economies of the future.
- Freed of sanctions, Iran's economy is expected to grow sharply in coming years; Indian businesses will now be in a position to capitalize on the coming boom.
- Though Central Asia has faced severe economic difficulties in recent years, as a consequence of low energy prices, there's little doubt about the region's long-term potential.
- The deal will also allow India to expand its strategic presence in Afghanistan, allowing businesses in both countries to bypass a Pakistan that has proven reflexively hostile to allowing transit rights to trade between them.
- In short, the deal signals that India, like China, has big-league ambitions.

Strategic importance of the move

- India has also been able to convince USA that Indo-IRAN relations should not be looked in the context of US-IRAN relations as Afghanistan is important and IRAN hence becomes important link.
- Through IRAN, India is also having its focus on Central Asia beyond to Russia and Europe.
- So, India with Australia, USA, Japan and IRAN are also trying to have an alternative maritime route to OBOR

- USA was not able to achieve much in the region despite all security & military measure, and economic assistance, so it is looking towards India as a prospective partner to stabilize the situation in Afghanistan.
- USA is now willing to put pressure on Pakistan so that it does not destabilize Afghanistan any more than what it has been doing.
- Indian strategic goal is achieved proving Pakistan to be the roadblock in stabilizing Afghanistan and its trade with India through land route.
- There can be no stable Afghanistan without Pakistan ceasing its interference and India can't be a major player in Afghanistan which Pakistan sees as a strategic depth.
- If this route becomes successful and viable then Afghanistan's growth will take-off India's investment in a big way, but India should also keep Chinese and Pakistan's interruption in mind.

Issue Area

- The fate of the Chabahar project will depend on successive governments showing sustained resolve in the face of geopolitical hurdles.
- Relations between Tehran and the West, though vastly improved, remain fraught, with many hardliners in Iran believing the country was short-changed in the nuclear deal that paved the way for an end to sanctions. Differences over Iran's role in Syria and Afghanistan.
- Indian governments will also have to incentivize private corporations for using the Iranian route to transit goods to Central Asia, rather than the fast, cheap networks they now use through Singapore and China.
- Finally, the project can only be successful if Indian manufacturing is globally competitive

Way forward

- One is that the port itself, with a relatively modest capacity, must not become a casualty of dilatory work by the Indian agencies responsible.
- Second is that ambitions must not be moderate should indeed be expanded. Not just Afghanistan, **but all of Central Asia should be opened up to trade with India through Chabahar.**
- India has been rightly wary of the Chinese international infrastructure investment programme that goes by the name of "One Belt, One Road"; but the extent that it plans to link Iran to eastern China through Central Asia should not be ignored in the development planning for Chabahar.
- India needs to energize its diplomacy to keep engagement with Iran on an even keel, **irrespective of outside pressure.**

- On both security and economic grounds, therefore, the re-emergence of Iran has given India a big new card to play in its neighbourhood. It must use the additional strategic space wisely, and follow up on commitments swiftly.

Chabahar-Zahedan railway

In May 2016, during Indian Prime Minister Narendra Modi's trip to Iran, agreement was signed to develop two terminals and five berths at Port of Chabahar and to build a new railway line between Chabahar and Zahedan, as part of North-South Transport Corridor, by Indian Railway's public sector unit Ircon International

Janadriyah Festival

- Sushma Swaraj inaugurated Al Janadria, the national cultural festival of Saudi Arabia as the 'Guest of Honour' country, on 7 February
- It is a cultural and heritage festival held in Janadriyah near Riyadh in Saudi Arabia each year, lasting for two weeks.
- Activities include a camel race, performance of local music and dancing of the Ardah and the Mizmar. The festival draws more than one million visitors every year.

5. Grand Collar of the State of Palestine

- Prime Minister Narendra Modi was conferred the 'Grand Collar of the State of Palestine' by President Mahmoud Abbas, recognizing his key contribution to promote relations between India and Palestine.
- The Grand Collar is Highest order given to foreign dignitaries — Kings, Heads of State/Government and persons of similar rank.

It has in the past been awarded to King Salman of Saudi Arabia, King Hamad of Bahrain, President Xi Jinping of China, amongst others

6. Global Skills Strategy

This makes it easier for Canadian businesses to attract the talent they need to succeed in the global marketplace in order to scale-up and grow—creating better jobs for more Canadians.

- By recruiting professionals from around the world to train Canadian workers
- working with employers planning job-creating investments in Canada
- Increase processing speed to get workers to Canada faster
- Increase employer access to top talent by reducing barriers and administrative burden
- Help attract foreign investment through dedicated immigration service channel

7. Start-up Visa Program

Canada's Start-up Visa Program targets immigrant entrepreneurs with the skills and potential to build businesses in Canada that:

- Are innovative
- Can create jobs for Canadians
- Can compete on a global scale

8. Milan 2018

- It is a congregation of littoral navies conducted biennially by Indian Navy at the Andaman and Nicobar Islands, under the aegis of the Andaman and Nicobar Command.
- Besides fostering co-operation through naval exercises and professional interactions, MILAN also provides an excellent opportunity to the participating navies to come together in a spirit of collaboration and mutual understanding to nurture stronger ties.

Details

- MILAN made modest beginnings more than two decades ago when it was first held in 1995. The first edition saw participation of four littoral navies.
- From an event of sub- regional context, MILAN has now grown into a prestigious international event and encompasses participation by maritime forces from not just the Bay of Bengal and South East Asia but the larger Indian Ocean Region (IOR).
- MILAN 2018 is being held at Port Blair With the underlying theme of 'Friendship Across the Seas', MILAN 2018 will witness a diverse mix of professional exercises and seminars, social events and sporting fixtures.
- MILAN 2018 aims to showcase the rich heritage and pristine natural beauty of the Andaman and Nicobar Islands to the foreign visitors.

9. Myanmar dam on border worries Manipur village

- A dam being constructed by Myanmar across a river close to the boundary with India has stoked **fears of submergence and water scarcity among border villagers in Kengjoi subdivision of Manipur's Chandel district.**
- Residents of Khangtung village reported to district officials about the dam being built by Myanmar authorities barely 100 metres from the zero line separating the two countries.
- The dam, called **Tuidimjang, is on the Twigem river** flowing into Myanmar from Manipur. Khangtung, inhabited by the Thadou tribe, is 137 km south of Manipur capital Imphal.

What do the International rules say?

- International rules warrant border countries to check activities in No Man's Land – a 150-metre strip on either side of the boundary line.

What will be the impact of dam construction?

- When the dam is completed, the entire Khangtung village will be inundated and the villagers will face untold miseries and require relocation and rehabilitation.
- This project will have huge negative social, cultural and economic impact on the residents of Khangtung and other Indian villages.
- Manipur has had issues with internal dams too. In June 2015, a tribal village named Chadong in Ukhrul district was submerged by the **Mapithel dam on river Thoubal.**
- Construction of the Mapithel dam, initially known as Thoubal Multipurpose Project that aimed to produce 7.5MW of power, irrigate 21,862 hectares of land and provide 10 million gallons of drinking water, began in 1989 amid protests from people downstream.
- The Khuga dam south of Manipur's Churachandpur town has hit turbulence too. Taken up in 1980, the project lay dormant until 2002 leading to cost escalation from the initial Rs. 15 crore to Rs. 381.29 crore in 2009.
- The project sanction by the **Planning Commission was said to have inherent flaws**, as a result of which the power component of 1.5MW incorporated in the initial design was scrapped despite near-completion of a powerhouse.

10. Pancheshwar Dam

- The Pancheshwar dam site is located about 25 km downstream of the confluence of Mahakali and Sarju rivers near the famous Pancheshwar Temple in Champawat district of Uttarakhand.
- The Rs 33,108 crore Pancheshwar Multipurpose Project involves the construction of two dams on the river Mahakali (Sharada), for irrigation, flood control and generation of 5,040 MW of power for the countries.

Sharda River

- It is also called Kali Gad or Kali Ganga in Uttarakhand where the river demarcates Nepal's western border with India.
- This boundary was established by the 1816 Sugauli treaty.

Internal Issue on India's Side

- It will submerge areas in Pithoragarh, Champawat and Almora districts
- The largest and the most invisibilised cost of the project will be the loss of livelihoods and land, which will be borne by displaced communities on both sides of the Mahakali river – 31,023 families, close to 50,000 people or more

- Between 1992 and 2006, over 10 earthquakes with a magnitude exceeding 5 (on the Richter scale) have had their epicenter within a radius of 10 kilometres around the site of the proposed Pancheshwar Dam, making the Pancheshwar Dam vulnerable to damage in an earthquake

Nepal's View

- The **Mahakali Treaty was signed in 1996** in the backdrop of a controversial water-sharing arrangement (Tanakpur agreement) where India had allegedly short-changed Nepal.
- The treaty, which was finally arrived at in 1996 as a bilateral water-sharing agreement with the building of the 315 m Pancheshwar Dam as its centrepiece (under Article 3), **was also not well received in Nepal.**
- In 2014 that the charter to form the Pancheshwar Development Authority – with the water ministries of both governments was arrived at.
- On the Nepal side, the number of directly-impacted families is close to 3,000, and 13,700 hectares of agriculture, forest and other government land would be diverted to the project.

11. Refugee Convention 1951

- **India not a member**
- It is a **United Nations multilateral treaty** that defines who is a refugee, and sets out the rights of individuals who are granted asylum and the responsibilities of nations that grant asylum.
- The UN Refugee Convention (1951) grants certain rights to people fleeing persecution because of **race, religion, nationality, affiliation to a particular social group, or political opinion**
- The Convention also sets out which people **do not qualify as refugees, such as war criminals.** The Convention also provides for some visa-free travel for holders of travel documents issued under the convention.
- The Convention builds on Article 14 of the 1948 Universal Declaration of Human Rights, which recognizes the right of persons to seek asylum from persecution in other countries. A refugee may enjoy rights and benefits in a state in addition to those provided for in the Convention
- **The 1967 Protocol** included refugees from all countries appose to the **1951 Convention** that only included refugees from Europe.
- Today, the 1951 United Nations Convention and the 1967 Protocol together remain the foundation of refugee protection, and their provisions are as relevant now as when they were drafted.

12. Tipaimukh Dam

- Tipaimukh Dam is a proposed embankment dam on the river Barak in Manipur

- The purpose of the dam is flood control and hydroelectric power generation.
- It has been subject to repeated delays as the project developed, as there has been controversy between India and Bangladesh over water rights, in addition to questions of environmental effects of the huge project, as well as the need to relocate Meitei people to make way for a vast reservoir

Internal Issues

- At least three anti-dam organizations in Manipur and downstream Assam have been protesting against the Tipaimukh project to be built by the National Hydroelectric Power Corporation Ltd.
- Apart from large-scale submergence, they fear ecological degradation, if the dam is built.

What does Bangladesh Say?

- Dhaka is against the project, as Barak flows into Bangladesh from Manipur through southern Assam and feeds the Surma and Kushiara rivers in the country.
- The experts in Bangladesh say that this may affect the seasonal rhythm of the river and have an adverse effect on downstream agriculture and fisheries of Bangladesh.
- They say it could cause desertification in their country
- Another is the environmental factor. The Tipaimukh area lies in an ecologically sensitive and topographically fragile region. It is within one of the most seismically volatile regions on the planet.

India's Stand

- It will regulate excess water, and help control floods in Sylhet district of Bangladesh, western Manipur and southern Assam.
- It will open a new waterway from Haldia port in West Bengal to Northeastern India via Bangladesh
- Water used for generating electricity will be released back into the river
- This dam will lead to the development of two national highways – NH 53 and NH 150 – thus improving the connectivity among Assam, Manipur, Mizoram and Tripura.

13. Travel Rules for Tibetans

- To discourage Tibetans from applying for Indian Passports the travel rules have been eased. Travel regulations are also being simplified for relatives of Tibetans living in foreign countries to help them make visits.

Facts

- As per the latest Home Ministry data, more than one lakh Tibetan refugees are settled in India.
- Major concentrations of the Tibetan refugees are in Karnataka, Himachal Pradesh, Arunachal Pradesh, Uttarakhand, West Bengal and J&K.

Tibetan refugees began pouring into India in the wake of the flight of the Dalai Lama from Tibet in 1959.

Delhi High Court relief

- The 2010 decision of the MHA had required persons of Tibetan descent to “confirm citizenship” through application to the ministry before they could be issued a passport.
- The Delhi high court quashed the order and said Persons of Tibetan descent born in India between 1950 and 1987 will now no longer need to approach the home ministry for “confirmation” of citizenship.
- It held that all such persons of Tibetan origin born in India would be considered **citizens by birth as defined under Section 3 of the Indian Citizenship Act**.

Present Status

- Tibetans who wish to travel abroad are issued an **Identity Certificate (IC)** in place of a passport and a **Registration Certificate (RC)** to allow their stay in India.
- Currently they have to secure an “exit permit” from the Home Ministry before applying for a visa with any foreign mission. The Centre wants to do away with the “redundant” procedure
- The present rules are such that a Tibetan refugee has to apply for an exit permit every time he or she has to travel abroad.
- Earlier if a Tibetan wished to travel abroad to study or for any other purpose, the **Identity Certificate (IC)** had to be accompanied with a “return permit” issued by the Foreigners Regional Registration Office (FRRO).

What is being done?

- The refugees would be provided with a **no-objection certificate at the time of issuance of identity certificates** and that would be enough for them to travel to any foreign country.
- Since identity certificates are issued after carrying out due diligence and background check, the exit permit is an unnecessary requirement,
- The Ministry of External Affairs will then issue a notification informing all foreign missions of the exit permit clause being removed.

As per the present norms, foreigners who intend to visit Tibetan settlements and camps should seek prior permission of the Home Ministry and procure **Protected Area Permit (PAP)** as per the provision of Section 3 of the Foreigners Act, 1946 (31 of 1946).

Policy Accommodation

- In 2015, the NDA government for the first time sanctioned a scheme of providing grant-in-aid of ₹40 crore to the Dalai Lama’s **Central Tibetan Relief Committee (CTRC)** for five years.

- The Centre has released ₹16 crore in the past two years to meet the administrative and social welfare activity expenses of 36 Tibetan settlement offices in different States

14. World Government Summit

- The World Government Summit is a global platform dedicated to shaping the future of government worldwide. Each year, the Summit sets the agenda for the next generation of governments with a focus on how they can **harness innovation and technology to solve universal challenges facing humanity**.
- The World Government Summit is a **knowledge exchange center** at the intersection between government, futurism, technology, and innovation. It functions as a thought leadership platform and **networking hub for policymakers, experts, and pioneers in human development**.
- The Summit is a gateway to the future as it functions as a stage for analysis of the future trends, issues, and opportunities facing humanity. It is also an arena to **showcase innovations, best practice, and smart solutions to inspire creativity to tackle these future challenges**.
- **Mission:** Improving the lives of citizens across the world
- The World Government Summit is an annual event held in Dubai, UAE
- The first World Government Summit was held in Dubai in 2013, and has been held annually since then
- Theme 2018: ‘Technology for development’.

15. Crisis in Male

Context

- Supreme Court cancelled Nasheed’s imprisonment term and that of eight other political leaders, reinstated 12 parliamentarians who had been disqualified, and ordered Mr. Yameen to allow the Maldivian parliament, or Majlis, to convene.
- Mr. Yameen has thus far failed to comply with any of these orders, despite an official statement about his government’s “commitment to uphold and abide by the ruling of the Supreme Court”.
- The most egregious failure is the **government’s refusal to cancel the imprisonment of the nine leaders**, amongst whom is Mr. Yameen’s former vice president and his former defence minister, members of parliament and leaders of major opposition parties, apart from Mr. Nasheed himself.

Status after SC Judgement

- Government sent in the army to stop lawmakers from entering the premises, besides arresting two parliamentarians at the airport.
- Several officials, including two police chiefs and the prison chief have resigned or been sacked, reportedly for seeking to implement the Supreme Court’s orders.

- The Attorney General has now announced that only the Constitution matters, not “illegal orders” from the court. In short, the Maldives is in the midst of a constitutional crisis.

How have countries reacted?

- United Nations Secretary-General Antonio Guterres asked the Maldivian government to respect the Supreme Court's order
- India said it was imperative for “all organs” of the Maldivian government to abide by the order “in the spirit of democracy”.
- The US welcomed the decision by the Maldives' Supreme Court to order the release of political prisoners and to reinstate elected members of parliament

India losing its Sheen?

- But currently, Delhi's leverage in the Maldives is less than it has ever been.
 - * Prime Minister Narendra Modi's decision to cancel his visit to Male three years ago, has singled **Maldives out as the only country in the South Asian and Indian Ocean Region that he hasn't visited.**
 - * Maldives has pulled out of the Commonwealth, and there is little semblance of a SAARC process at present, India's influence in Male is further limited.

So it will require concerted action from the international community to persuade Mr. Yameen to steer the Maldives out of this crisis, without taking recourse to coercive means.

16. Remittances Debacle

- Increasing Globalization has led to growing movement of goods and people between countries. Consequently, they are among the largest recipients of global remittances.

Facts

- Twenty-three countries, led by India and followed by China, the Philippines, Mexico, Pakistan and Nigeria, receive over 80% of global remittances.
- However, as a **share of gross domestic product (GDP), the top five recipients are** smaller nations: Haiti, the Kyrgyz Republic, Liberia, Nepal and Tajikistan.

How has remittances Helped?

- In these low- and middle-income countries, remittances have helped lift millions out of poverty and unemployment and enhanced their standard of living and human development.
- Kerala which is called Remittance Based Economy receives remittances equalling 36.3% of its gross State domestic product, is testimony to this.
 - * The number of Keralites living in West Asia as on 2014 is nearly two million, according to Kerala Migration Survey (KMS).

- * The total remittances to Kerala in 2014 are estimated to be Rs 71,142 crores, according to KMS.

- * However, banking data showed that the NRI deposits in scheduled commercial banks had crossed Rs 1 lakh crores in 2015.

Remittances over the Years

India has witnessed sharp remittance growth since 1991.

- \$2.1 billion in 1991,
- \$70.4 billion in 2014
- \$68.9 billion in 2015
- \$62.7 billion in 2016.
- \$65.4 billion in 2017.

However, in a world that is now witnessing a fractious debate on migration, considerable uncertainties about remittances remain.

Changes in Socio Political Environment

India receives about 56% of its remittances from migrants in West Asia, with the remainder from mainly North America and Europe.

- Rapid changes in the economy and the sociopolitical climate in West Asia have had an impact on remittances.
- Additionally, developments such as Brexit and the Trump presidency in the U.S. have further complicated matters.
- The refugee crisis, the largest since World War II, has unsettled European economies, fuelling xenophobic and anti-immigration sentiments.

Simply put, the more a rich nation starts to rely on its own workforce and tightly controlled borders, the less a poorer nation can rely on remittances for its development needs and to achieve the sustainable development goals.

The case of West Asia

- The Arab Spring in 2010 and subsequent counter-revolutionary moves by states had an impact.
- The theme of nationalization took over the Arab world.
- **Oman began “Omanisation”,** a policy aimed at replacing expatriate workers with trained Omani personnel, back in 1988.
- Bahrain, Kuwait, Qatar and Saudi Arabia, have tightened their immigration policies to appease increasingly restive youth, many of whom were unemployed and participated in protests during the Arab uprisings.
- In 2011, the **Saudi government enacted “Saudisation”, officially known as Saudi Nationalisation Scheme or Nitaqat system in Arabic,** with a view to reducing unemployment among Saudi nationals, with incentives being announced for companies and enterprises performing in accordance with this system.

Why Taxing Remittances Is a Bad Idea

Recently, several high-income countries that are host to many migrants have been considering taxation of outward remittances, in part to raise revenue, and in part to discourage undocumented migrants. The list of countries where such taxes are being considered includes Bahrain, Kuwait, Oman, Saudi Arabia, the United States, and the United Arab Emirates

- In principle, the income of migrants has already been taxed in the host country. Therefore, taxing remittances amounts to double taxation for tax-paying migrants. Since remittances are usually sent to poor families of migrants, the tax would be borne ultimately by poor families and is likely to be highly regressive.
- A tax on remittances will drive these flows to unregulated, informal channels.
- A tax on remittances will raise the cost of remittances, in direct contravention of the G20 commitments and the Sustainable Development Goal of reducing remittance costs and increasing financial inclusion.

What were the gains because of such moves?

- Kuwait, for example, between 2016 and 2017, reduced unemployment from 16.5% to 1%.
- Saudi Arabia regularized five million irregular workers and cracked down on illegal migrants.

It is evident that the younger natives of West Asia, who are increasingly becoming educated, will replace migrants in the coming years, in turn leading to a reduction in remittances, especially to the South Asian and Southeast Asian regions.

Issue Area

- In 2016, for the first time in 20 years, the Malayali migrant community got smaller by 10% to 2.2 million.
- Unskilled and semi-skilled migrants from Kerala were not only replaced by migrants from other Asian countries such as the Philippines and Nepal
- This 10% decrease in migration is expected to result in a similar **decrease in remittances to the State**.
- Return emigrants account for 1.2 million of Kerala's population. So employment opportunities are very less. So the State faces the huge challenge of reintegrating and rehabilitating them into the society and the economy.

So what should the Govt do?

- If the State needs to identify alternative means of employment and revenue generation for its labour force as well as returned emigrants
- This demands innovative policies targeted at skilling, reskilling and educating both prospective and returned emigrants.

It is The last two decades were commanded by liberal ideas on migration and open borders; the near future seems to be influenced by populist, right-wing ideas. Therefore, it is imperative that developing nations that have relied on remittances formulate strategies to compensate for the restricted flow of remittances that is expected in the near future

17. Xi Presidency

- The Chinese Communist Party's proposal to abolish term limits on the presidency, and thereby allow Xi Jinping to stay on in power beyond 2023 when his second term ends, is not completely unexpected.
- In 2016, the party accorded him special stature by making him the "Core Leader".

Present Status

- Xi began his presidency in 2013 and is required to step down after two five-year terms.
- The proposed change — a spectacular shift from his recent predecessors — could make him the longest-running Chinese leader in decades.

Core Leader

- President Xi Jinping has been given the title of "core" leader by the Chinese Communist Party. This puts him on par with previous strong leaders like **Mao, Deng Xiaoping and Jiang Zemin**.
- Deng coined the phrase "core" leader. He said Mao, he himself and Jiang Zemin were core leaders, meaning they had almost **absolute authority and were not to be questioned**.
- The idea of a core leader is now enshrined as somebody around whom the party revolves, who is really going to be the decision maker and who is fully effective to control the Party in tough times.

Achievements

- Just as Deng Xiaoping oversaw China's economic rise, Mr. Xi has raised its profile in global geopolitics.
- He has pursued a more assertive foreign policy in China's neighbourhood and launched massive infrastructure programmes across the world as part of the Belt and Road Initiative.
- But despite the power amassed, long-term projects launched and his own apparent ambitions, the constitution was seen as a limit to his stint in power.

Why is this being done?

- to ensure stability
- need a strong, stable and consistent leadership

What is the Problem?

- But the centralization of so much power in one individual, **which is the antithesis of China's professed commitment to 'collective leadership'**, may well impact the power dynamics, given the succession battles of the past.

- The party introduced the term limit in the post-Deng era principally to bring in order and stability at a time when China was becoming an economic powerhouse.
- By breaking with this pattern, Mr. Xi risks taking China back to the days of personality cults, internal power struggles and possibly chaotic successions.
- This will lead to de-institutionalization of the highest offices making Chinese politics even more opaque.

18. Modi reiterates support for Palestine

- Prime Minister Narendra Modi said India supports the Palestine cause for “sovereign, independent Palestine living in a peaceful environment” as a part of its foreign Policy. This is the first time an Indian PM has visited Palestine

Details

- India’s support for Palestine is “unbroken and unwavering. That’s why I am here, in Ramallah,” Mr. Modi said at the administrative headquarters of the Palestinian Authority.

Agreements Initiated

After bilateral talks, the two sides signed six agreements worth around \$50 million, including one for

- Setting up a \$30 million super specialty hospital in Beit Sahur
- Agreements were also signed to build schools,
- A diplomatic training institute and
- A woman’s empowerment and training centre.

19. India gets access to strategic Oman port Duqm for military use

- In a strategic move to expand its footprint in the Indian Ocean region, India has secured access to the key Port of Duqm in Oman for military use and logistical support
- This is part of India’s maritime strategy to counter Chinese influence and activities in the region.

Location

- The Port of Duqm is situated on the southeastern seaboard of Oman, overlooking the Arabian Sea and the Indian Ocean.
- It is strategically located, in close proximity to the Chabahar port in Iran. With the Assumption Island being developed in Seychelles and Agalega in Mauritius, Duqm fits into India’s proactive maritime security roadmap.

Significance

- The Port of Duqm also has a special economic zone, where about \$1.8 billion investments are being made by some Indian companies.
- In the context of strategic oil reserves near Duqm, it said the Prime Minister reiterated India’s invitation to Oman to participate in building strategic oil reserves in India.

- The two sides also emphasized the need to “isolate the sponsors and supporters of terrorism” and agreed that the international community should take urgent action against all entities which support terrorism and use it as an instrument of policy.

20. Venezuela Economy

- It’s been shrinking for seven consecutive quarters going back to the start of 2014.
- Inflation in Venezuela skyrocketed 141% over the year, the central bank reported. Incredibly, some experts believe even that figure is understating the problem.
- The IMF projects inflation in Venezuela will increase 204% this year.

Why so?

• **Oil crash hurts Venezuela the most**

- * Venezuela’s economy depends mostly on oil. That was great when a barrel of oil was worth \$100 a barrel in 2013 and 2014. Now oil prices have fallen to as low as \$28.36 – the lowest point in 12 years. As long as oil prices stay historically low, Venezuela will struggle to grow.

• **Food crisis**

- * Venezuelans are bearing the brunt of the economy’s problems. The government can’t pay to import basic food items like milk, flour and eggs, leaving many supermarkets with empty shelves
- Years of excessive government spending on welfare programs, poorly managed facilities and dilapidated farms set the stage for the crisis.
- According to Transparency International, Venezuela is the **ninth most corrupt country in the world.**
 - * Members of Maduro’s family and immediate entourage have been implicated in drug smuggling and hundreds of billions of dollars are believed to have been syphoned out of the economy.

The political overturn in Venezuela has significance for India, which imports 11.4% (21.59 million tonnes) of its crude oil from the South American nation, its third largest supplier after Saudi Arabia and Iraq.

Implications on India

- An escalating crisis would most likely delay the payment of roughly \$520 million of backlog dividends that Venezuela’s state-run oil firm PDVSA still owes to ONGC Videsh (OVL) and millions of dollars for supplies of pharmaceutical products from India.
- Also, given the strong state control over the use of foreign exchange in that country, Indian generics companies like Dr Reddy’s and Glenmark could find it even harder to do business there and repatriate profits

Advantage India

- **India's exports to Venezuela** crashed from \$258 million in 2014-15 to just \$62.22 million last fiscal, with pharmaceutical products accounting for less than a third of the supplies.
- Similarly, **imports from Venezuela** (almost entirely oil) plunged from \$13.94 billion in 2014-15 to just \$5.51 last fiscal. This indicates India still has some leverage against the Latin American nation to clear the dues.

Unlike China, which loans billions to Venezuela and arranges currency swap deals to safeguard bilateral transactions, India's relationship with Venezuela is cordial but lacks the vigour to arrive at similar deals. Even if such reforms are passed by Caracas, they are unlikely to affect India or the India-Venezuela bilateral much, since our engagement is limited mostly to oil. India is a major buyer; Venezuela is a major seller. For now, that supersedes everything else.

21. Canada will not support separatists, says Trudeau**List of operatives given**

- Singh handed over a list of nine Category 'A' Canada-based operatives alleged to be involved in hate crimes in Punjab by financing and supplying weapons for terrorist activities, and also engaged in trying to radicalise youth and children in Punjab.
- At the meeting, in which Canadian Defence Minister Harjit Sajjan and Punjab Local Government Minister Navjot Singh Sidhu were also present, Capt. Singh also raised the issue of Indo-Canadians believed to be involved in targeted killings in Punjab, urging him to initiate stern action against such elements.
- Though freedom of speech is enshrined in the Indian Constitution, separatists and hardliners as well as those propagating violence have lost any such right as they have been rejected outright by the people of Punjab.

Local Politics or International values?

- India has often accused Canada of sheltering Sikh separatists.
- Sikhs in Canada form a voting bloc for Trudeau, so much so that he even attended a Khalsa Day parade organized by a radical Gurudwara, or Sikh temple, in Toronto.
- To add to the tensions, last month, 16 Canadian gurdwaras announced a "ban" on the entry of Indian elected officials, consular officials, Rashtriya Swayamsevak Sangh (RSS) and Shiv Sena members, without any action from the Trudeau government.
- Another sore was Mr. Trudeau's insistence on taking along with him the Ministers in his Cabinet accused of sympathising with the Khalistan movement like Mr. Sajjan and Navdeep Singh Bains to Amritsar.
- Sikhs, numbering less than half a million, form the largest ethnic group among Indian-origin Canadians. All four of Trudeau's Indian-origin ministers are Sikh

Background

- The violent Khalistan movement in the 1980s wreaked havoc in Punjab, resulting in India crushing the Khalistan militancy. After the Indian army cleared the Golden Temple of militants, Prime Minister Indira Gandhi was assassinated by her own Sikh bodyguards in 1984.
- Anti-Sikh riots followed in Delhi and elsewhere, killing thousands of Sikhs. The next year, Khalistan militants blew up an Air India plane flying from Canada to Mumbai.

What does New Delhi want?

- New Delhi wants Trudeau to publicly distance himself from Sikh separatists.

Canada's View

- Canada's position is that it cannot curtail the right to freedom of speech and expression of its Sikh citizens
- However, in a meeting between Canadian Prime Minister Justin Trudeau and Punjab Chief Minister Amarinder Singh, Trudeau has affirmed that Canada does not support any separatist movement in India or elsewhere.

SOCIAL ISSUES

1. High-Powered Committee Headed by Ajay Kumar

Context

- The Supreme Court has asked the Centre to implement the proposal of a high-powered committee, which was constituted to devise a plan to check circulation of child pornography and sexual violence videos on the Internet.

Background

- The committee was headed by then Additional Secretary, Ministry of Electronics and Information Technology, Ajay Kumar

Details

- Set up a cell within the CBI or the Ministry of Home Affairs to deal with such crimes.
- Search Engines other than those already implementing URL blocks for identified child porn/rape and gang rape content... initiate similar processes
- Internet companies should consider providing support to Indian NGOs to help bring awareness of these issues
- WhatsApp should make further improvement in their reporting process which would enable easier reporting of contents in the App while maintaining the integrity of the contents and metadata available on phone at the time of reporting.
- Content hosting platforms, social media platforms and search engines, it said, should provide links for reporting child porn and rape and gang rape imagery, as a specific category and the same must be more prominently displayed on their pages.
- Proactively identifying rogue sites by an independent agency which can identify sites that contains child porn and rape and gang rape content and blocking these sites.
- To prevent the circulation of subject imagery, government can block any additional sites/applications if they do not remove such contents of their own

2. National Nutrition Mission (NNM)

- Under the mission, the government is targeting a reduction of 2% a year in stunting, under nutrition and low birth weight among 100 million people.
- It aims to reduce anemia among young children, women and adolescent girls by 3% a year.
- It will create synergy, ensure better monitoring, issue alerts for timely action, and encourage States/UTs to perform, guide and supervise the line Ministries and States/UTs to achieve the targeted goals.

- Information, Education and Communication (IEC)** campaign against malnutrition: To create awareness about nutrition challenges and promote home-level feeding practices a Nationwide Information, Education and Communication campaign against malnutrition

Implementation

- Under NNM, the ministries of women and child development, health and family welfare, and water and sanitation will work together.

Funding

- An amount of Rs. 9046.17 crore will be expended for three years commencing from 2017-18.
- This will be funded by Government Budgetary Support (50%) and 50% by IBRD or other MDB.
- Government budgetary support would be 60:40 between Centre and States/UTs, 90:10 for NER and Himalayan States and 100% for UTs without legislature.

Benefits & Coverage:

- More than 10 crore people will be benefitted by this programme.
- All the States and districts will be covered in a phased manner i.e. 315 districts in 2017-18, 235 districts in 2018-19 and remaining districts in 2019-20.

3. Nyishi Tribe

- The Nyishi /Hill-Miri are the largest ethnic group in Arunachal Pradesh
- In Nishi, their traditional language, Nyi refers to "a man" and the word shi denotes "a being", which combined together refers to a civilized human being.
- They also live in the Sonitpur and North Lakhimpur districts of Assam.
- The Nyishi language belongs to the Sino-Tibetan family
- The Nyishi are agriculturalists who practice jhum, known as rag in Nishi, which is a form of shifting cultivation.

Context

- A report was released by Niti Aayog about Sex Ratio at Birth (SRB) which said there was decline in 17 out of 21 states of the country and laid emphasis on the need to check on sex selective abortion and implement the Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act, 1994 effectively.
- Gujarat recorded an alarming dip of 53 points where SRB fell to 854 females from 907 females per 1,000 males born from 2014-15 (base year) to 2015-16 (reference year) in this indicator

Details

- Gujarat is followed by Haryana, which registered a drop of 35 points, Rajasthan (32 points), Uttarakhand (27 points), Maharashtra (18 points), Himachal Pradesh (14 points), Chhattisgarh (drop of 12 points), and Karnataka (11 points), the Healthy States, Progressive India report states.
- However certain states did witness some progress and improvement. Punjab registered a rise of 19 points, followed by Uttar Pradesh (10 points) and Bihar (9 points).

4. Thadou tribe

- They are an ethnic group inhabiting in Northeast India, Chin state and Sagaing Division in Burma and eastern Bangladesh.
- Thadou is a language of the Tibeto-Burman family. Thadou is spoken in the different parts of North East India and adjacent portions of Burma and Bangladesh.
- They are the largest Tribe in Manipur according to Manipur census 2011. Thadous also live in Mizoram, Nagaland and Assam.

SCIENCE AND TECHNOLOGY

1. Augmented reality tech helps surgeons 'see through' the body

- Augmented reality headsets can help doctors 'see through' organs and tissues in the operating theatre, and improve the outcome of reconstructive surgery for patients, a study has found.
- In a series of procedures carried out by a team from the Imperial College London in the UK, researchers showed for the first time, how surgeons can use augmented reality headsets while operating on patients undergoing reconstructive lower limb surgery.
- Researchers used Microsoft HoloLens – a computer headset that immerses the wearer in 'mixed reality', enabling them to interact with holograms or computer-generated objects made visible through the visor.
- The team used the technology to overlay images of CT scans – including the position of bones and key blood vessels – onto each patient's leg, in effect, enabling the surgeon to 'see through' the limb during surgery.
- According to the team trialling the technology, the approach can help surgeons locate and reconnect key blood vessels during reconstructive surgery, which could improve outcomes for patients.
- "We are one of the first groups in the world to use the HoloLens successfully in the operating theatre," said Philip Pratt, a research fellow at Imperial College London.
- Through this initial series of patient cases we have shown that the technology is practical, and that it can provide a benefit to the surgical team.
- With the HoloLens, you look at the leg and essentially see inside of it. You see the bones, the course of the blood vessels, and can identify exactly where the targets are located.

How it can help?

- Following a car accident or severe trauma, patients may have tissue damage or open wounds that require reconstructive surgery using fasciocutaneous flaps.
- These flaps of tissue, which are taken from elsewhere on the body and include the skin and blood vessels, are used to cover the wound and enable it to close and heal properly.
- A vital step in the process is connecting the blood vessels of the 'new' tissue with those at the site of the wound, so oxygenated blood can reach the new tissue and keep it alive.

- The standard approach for this element of reconstructive surgery has been the use of a handheld scanner which uses ultrasound to identify blood vessels under the skin by detecting the movement of blood pulsing through them, enabling the surgeon to approximate where the vessels are and their course through the tissue.
- Augmented reality offers a new way to find these blood vessels under the skin accurately and quickly by overlaying scan images onto the patient during the operation.

How it was used

- In the procedures used to trial the technology, five patients requiring reconstructive surgery on their legs underwent CT scans to map the structure of the limb, including the position of bones and the location and course of blood vessels.
- Images from the scans were then segmented into bone, muscle, fatty tissue and blood vessels and loaded into intermediary software to create 3D models of the leg.
- These models were then fed into specially designed software that renders the images for the headset, which in turn overlays the model onto what the surgeon can see in the operating theatre.
- Clinical staff are able to manipulate these AR images through hand gestures to make any fine adjustments and correctly line up the model with surgical landmarks on the patient's limbs, such as the knee joint or ankle bone.

2. Biodesign programme

- It aims to develop innovative and affordable medical devices as per unmet clinical needs of India and to train the next generation of medical technology innovators in India for bringing such impactful devices to the real world.
- This Program is implemented by Department of Biotechnology jointly at AIIMS and IIT Delhi in collaboration with International partners.
- The Department has authorized Biotech Consortium India Limited for management of its Intellectual Property and other techno-legal activities.

Vision:

- To train next generation of medical technology innovators in India by Providing hands on training

3. Noxeno

- Noxeno- a nasal foreign body removal device developed by **start-up InnAccel Technologies Private Limited**, Bangalore, created by the Fellow trained under the Biodesign program.

- Noxeno is the first dedicated tool for anterior Nasal Foreign Body (NFB) removal that allows doctors in any setting to quickly and safely remove objects that people (mostly children aged 2-10) put into their noses.
- Noxeno has been **100% invented, designed, engineered and manufactured in India.**
- Noxeno has an ergonomic handle along with a built-in light source and a hinge. This allows the user to slip behind the NFB and remove it in a matter of seconds by simply squeezing the trigger and pulling the device. The modular nature of the system allows for sterilization of the hinge through autoclaving it.

4. Sohum

- The ministry of science and technology has launched a low-cost indigenous screening device to detect congenital hearing loss in newborns.
- The technology developed by the School of International Biodesign (SIB) start-up Sohum Innovation Labs India Pvt. Ltd. has until now been prohibitively expensive and inaccessible to many.

Mechanism

- The portable Sohum hearing screening device measures auditory brain waves via three electrodes placed on the baby's head. When stimulated, they detect electrical responses generated by the brain's auditory system. If there is no response, the child cannot hear.

Advantages

- The battery-operated device is non-invasive, which means babies do not need to be sedated, which is the current, and risky, testing in process at present
- Its algorithm filters out ambient noise from the test signal. This is important because health clinics can be incredibly crowded and noisy

5. Congenital hearing loss

- Congenital hearing loss is a result of both genetic and non-genetic factors.
- When it is discovered at 4-plus years, it's too late to reverse the damage and this leads to a host of problems such as impaired communication skills and even possible mental illness, all of which have a deep impact on the child, emotionally and economically, life-long. Early screening, which can facilitate timely treatment and rehabilitation.
- Globally, 800,000 hearing impaired babies are born annually, of which nearly 100,000 are in India.

6. FutureSkills – Nasscom

- It is for skill development in eight varied technologies.
- The platform offers skilling and up-skilling in Artificial Intelligence (AI), virtual reality, robotic process automation, Internet of Things, big data analytics, 3D printing, cloud computing and social and mobile.

- The Future Skills platform will enable discovery, continuous learning and a marketplace of best-in-class training providers/virtual labs and certifications for each of these job roles and skills, with customised pathways for learning.
- NASSCOM signed a Memorandum of Understanding (MoU) with the Ministry of Electronics and Information Technology (MeitY) to collaboratively foster, cultivate and strengthen reskilling initiatives.

7. Jupiter's moon Europa may host life

- Jupiter's icy moon Europa may host life in an ocean of liquid water hidden under its 10 kilometre-deep ice crust, scientists say.
- Researchers from the University of Sao Paulo (USP) in Brazil conducted a theoretical research to evaluate microbial habitability of Europa using data collected from similar environments on the Earth.
- In the Mponeng gold mine near Johannesburg, South Africa, at a depth of 2.8 km, researchers not only found traces of major changes linked to history of life on Earth, but also a terrestrial context similar to Europa.
- It was recently discovered that the bacterium *Candidatus Desulforudis audaxviator* survives inside the mine without sunlight by means of water radiolysis, the dissociation of water molecules by ionising radiation.
- Jupiter's powerful gravitational attraction causes the Europa's orbit to be extremely elliptical, meaning the latter finds itself either too close or too far from the gas giant.
- This makes the icy moon suffer geometrical deformation as it moves at the mercy of Jupiter's immense tidal force. The energy released by the alternating states of elongation and relaxation makes Europa's subsurface capable of hosting an ocean of liquid water.
- Researchers evaluated how chemical imbalance in Europa could be initiated through the emanation of water leading to chain reactions between water and chemical elements found in Europa's crust. However, a total lack of empirical data prevents scientists from unequivocally presuming any of these events.
- Celestial bodies in the solar system with rocky cores share the same radioactive materials, ejected in space by the Supernova explosion that originated the Sun and the planets.
- Uranium, thorium and potassium are the radioactive elements considered by the research, which estimated the concentrations for these materials in Europa, based on the quantities already observed and measured on Earth, in meteorites and in Mars.
- According to the study published in the journal *Scientific Reports*, pyrite is a crucial ingredient whose presence is indispensable for life in Europa.

- The ocean bed on Europa appears to offer very similar conditions to those that existed on primitive Earth during its first billion years.
- So studying Europa today is to some extent like looking back at our own planet in the past.

8. Monocrotophos

- Monocrotophos, which has been found to be in common usage in Yavatmal among other substances, has been in the news before.
- The internationally banned pesticide, which is known to make plants look green and healthy, was linked to the death of 23 school children in Bihar in 2013.
- Monocrotophos is one of the oldest pesticides still in use, and although it is known to be toxic, it is not alone.
- There are two kinds of toxic pesticides: acute ones which cause immediate effect, and chronic pesticides which have a built-up effect over a long period of time.
- Monocrotophos is a highly acutely toxic. But somehow, it is still used for non-food products.
- The World Health Organization has placed monocrotophos in Class 1b — a category reserved for highly hazardous pesticides.
- The substance was banned in 2005 in India for use on vegetables. Currently, monocrotophos is mostly used to grow cotton.
- Monocrotophos can be absorbed into the human body through multiple pathways, including inhalation, skin contact and ingestion, and is acutely toxic by all routes of exposure.
- The first two modes of exposure put Indian farmers at an unusually high risk.
- Farmers here mostly work without any protective equipment, and this puts them at risk of pesticide uptake by inhalation and absorption through the skin.

How monocrotophos affects the body?

- Monocrotophos is an organophosphate insecticide, which is a type of pesticide. These kinds of pesticides are known to be neurotoxins, which affect the work of neurons in the body. Monocrotophos is found to be lethal because of its action on the central nervous system of the human body.
- The nervous system is made up of a large and complex network of nerves. When a signal reaches the end of a nerve, it releases a substance called neurotransmitter that carries the signal to the adjacent nerves or organ.
- Many nerves in the nervous system release a neurotransmitter called acetylcholine. Once the signal passes onto the next nerve, an enzyme called acetylcholinesterase destroys the acetylcholine. And this is where monocrotophos comes in.
- Organophosphorus compounds, like the pesticide at hand, block this enzyme, thus preventing the breakdown of acetylcholine.

- And hence, acetylcholine acts for an excessively long period of time, causing symptoms like twitches and increased secretions at the junctions between nerves. After a long duration of this process, muscles get fatigued leading to paralysis.
- This also prevents communication in the nervous system, either between two nervous cells or between a nervous cell and a muscle cell. If this spreads throughout the body, death of the affected person becomes a highly likely outcome.

9. How ionosphere affects Earth and space weather

- The ionosphere gets its name from ions — tiny charged particles that blow around in this layer of the atmosphere.

How did all those ions get there?

- Everything in the universe that takes up space is made up of matter, and matter is made of tiny particles called atoms. At the ionosphere, atoms from the Earth's atmosphere meet up with energy from the Sun. This energy, called radiation, strips away parts of the atom. What's left is a positively or negatively charged atom, called an ion.
- The ionosphere is filled with ions. These particles move about in a giant wind. However, conditions in the ionosphere change all the time. Earth's seasons and weather can cause changes in the ionosphere, as well as radiation and particles from the Sun — called space weather.
- These changes in the ionosphere can cause problems for humans. For example, they can interfere with radio signals between Earth and satellites. This could make it difficult to use many of the tools we take for granted here on Earth, such as GPS.
- Radio signals also allow us to communicate with astronauts on board the International Space Station, which orbits Earth within the ionosphere. Learning more about this region of our atmosphere may help us improve forecasts about when these radio signals could be distorted and help keep humans safe.

NASA's Missions

- In 2018, NASA has plans to launch two missions that will work together to study the ionosphere. NASA's GOLD (Global-scale Observations of the Limb and Disk) mission launched in January 2018. GOLD will orbit 22,000 miles above Earth. From way up there, it will be able to create a map of the ionosphere over the Americas every half hour. It will measure the temperature and makeup of gases in the ionosphere. GOLD will also study bubbles of charged gas that are known to cause communication problems.
- A second NASA mission, called ICON, short for Ionospheric Connection Explorer, will launch later in 2018. It will be placed in an orbit just 350 miles above Earth — through the ionosphere. This means it will have a close-up view of the upper atmosphere to pair with GOLD's wider view. ICON will study the forces that shape this part of the upper atmosphere.

10. New AI system can train robots for armies

In news

Scientists have developed an artificial intelligence technique that will teach robots and computer programmes to interact with a human instructor and perform tasks for the army.

Who developed it?

- Researchers at the US Army Research Laboratory and the University of Texas at Austin considered a specific case where a human provides real-time feedback in the form of critique.

How does it work?

- First introduced by researchers as Training an Agent Manually via Evaluative Reinforcement (TAMER), the team developed a new algorithm called Deep TAMER.
- It is an extension of TAMER that uses deep learning – a class of machine learning algorithms that are loosely inspired by the brain to provide a robot the ability to learn how to perform tasks by viewing video streams in a short amount of time with a human trainer.
- The team considered situations where a human teaches an agent how to behave by observing it and providing critique, for example, “good job” or “bad job” – similar to the way a person might train a dog to do a trick.
- Many current techniques in artificial intelligence require robots to interact with their environment for extended periods of time to learn how to optimally perform a task.
- During this process, the agent might perform actions that may not only be wrong, like a robot running into a wall for example, but catastrophic like a robot running off the side of a cliff.
- Help from humans will speed things up for the agents, and help them avoid potential pitfalls.
- As a first step, the researchers demonstrated Deep TAMER’s success by using it with 15 minutes of human-provided feedback to train an agent to perform better than humans on the Atari game of bowling – a task that has proven difficult for even state-of-the-art methods in artificial intelligence.
- Deep-TAMER-trained agents exhibited superhuman performance, besting both their amateur trainers and, on average, an expert human Atari player.
- Within the next one to two years, researchers are interested in exploring the applicability of their newest technique in a wider variety of environments: for example, video games other than Atari Bowling and additional simulation environments to better represent the types of agents and environments found when fielding robots in the real world.
- The army of the future will consist of soldiers and autonomous teammates working side-by-side.

- While both humans and autonomous agents can be trained in advance, the team will inevitably be asked to perform tasks, for example, search and rescue or surveillance, in new environments they have not seen before.
- In these situations, humans are remarkably good at generalising their training, but current artificially-intelligent agents are not.

11. Project Apeiro

- Project Apeiro aims to determine cosmic radiation flux in the lower stratospheric regions of the earth’s atmosphere over the Indian subcontinent.
- This study is important to understand the biologically harmful cosmic radiation incidence on earth from outer space.
 - * It will also help to determine radiation exposure risks to aviation and space flight crews.
 - * Extended exposure to this radiation leads to an increased risk in cancer and tissue damage.
- The experiment will be performed by deploying a cosmic radiation detector at an altitude of 22 kms above sea level using High Altitude Ballooning (HAB).

Details

- It is **India’s first student-led micro-satellite launched** from TIFR Balloon Facility near ECIL
- The experiment was led by undergraduate **students from BITS Pilani K.K. Birla Goa Campus**
- This method allows studies in the near-space environment with the help of a **zero-pressure plastic** balloon, which lifts the experimental payload to desired altitudes.
- The experimental payload consisted of a cosmic radiation detector made with a combination of scintillator and photomultiplier tubes. This detector system was supported by an on-board high and low voltage power supply system along with data acquisition systems. The development of the detector system was completed at the Tata Institute of Fundamental Research

What are cosmic Rays?

- Cosmic rays are atom fragments that rain down on the Earth from outside of the solar system.
- They blaze at the speed of light and have been blamed for electronics problems in satellites and other machinery.
- First discovered in 1912, they are composed primarily of high-energy protons and atomic nuclei but many things about cosmic rays remain a mystery more than a century later.

12. Scientists grow sheep embryos containing human cells

- The hybrid embryos were created in an early step toward growing human organs in farm animals before transplanting them into patients
- In a breakthrough, scientists from the US and Japan have transferred human stem cells into sheep embryos, an advance that may pave the way for growing transplant organs inside animals.
- The hybrid embryos containing both human and sheep cells were created in an early step toward growing human organs in farm animals before transplanting them into patients, The Financial Times reported.
- The new finding paves way for genetically tailoring the organs to be compatible with the immune system of the patient receiving them, thus removing the possibility of rejection, the report said.
- Using stem cell and genomic editing technologies, human stem cells were successfully transferred into early sheep embryos, producing embryos for which about one in every 100,000 cells were human.
- These chimeras – a term adopted from Greek mythology – were only allowed to develop for 28 days, the researchers said while presenting the results at the American Association for the Advancement of Science in Texas.
- The experiment began with Hiro Nakauchi, from the University of Tokyo, who grew a mouse with a rat pancreas and a rat with a mouse pancreas.
- When cells from the rat-grown mouse pancreas were transplanted into a diabetic mouse, they made enough insulin to cure the condition without being rejected.
- Mice and rats are different types of rodents with the former having thin slightly hairy tails, while rats have thicker hairless scaly tails.
- Nakauchi's rodent work has demonstrated that you can grow organs in a different species and cure a disease without suppressing the immune system.
- The novel approach helps to produce animal embryos that are genetically incapable of growing a particular organ.
- Then the embryos are injected with human stem cells. The overall proportion of human cells in the chimeric embryo may be small but, as it develops in the womb, the human cells fill the gap and produce the missing organ that the animal's own genes cannot create.
- If the technology is able to grow human organs inside other species, organ transplants can become a possibility beyond critical conditions.
- While it may take many years to develop chimeric transplant technology to the stage where it could be used safely on patient, things are moving fast.

13. Snakeskin Robot

- Harvard scientists have developed a soft, crawling robotic snake using kirigami – an ancient Japanese paper cutting technique.
- As the robot stretches, the flat kirigami surface is transformed into a 3D-textured surface, which grips the ground just like snakeskin.
- They found that trapezoidal cuts – which most closely resemble the shape of snake scales – gave the robot a longer stride.

Uses

- These all-terrain soft robots could one day travel across difficult environments for exploration, inspection, monitoring and search and rescue missions or perform complex, laparoscopic medical procedures
- These robots could be scaled down and used to deliver drugs inside arteries, or in disaster situations where bots need to crawl inside narrow spaces.

14. Sophia

- Sophia is a social humanoid robot developed by Hong Kong-based company Hanson Robotics
- It made its first public appearance at South by Southwest Festival (SXSW) in mid-March 2016 in Austin, Texas, United States
- She is able to display more than 62 facial expressions.
- In October 2017, the robot became a Saudi Arabian citizen, the first robot to receive citizenship of any country.
- Sophia was named the United Nations Development Programme's first ever Innovation Champion, and the first non-human to be given any United Nations title
- Asked who is her favorite actor in India, Sophia answered, "Shah Rukh Khan" without batting an eyelid as the audience applauded loudly.

15. Supercritical Carbon Dioxide (CO₂)

- Supercritical carbon dioxide (sCO₂) is a fluid state of carbon dioxide where it is held at or above its critical temperature and critical pressure.
- Carbon dioxide usually behaves as a gas in air at standard temperature and pressure (STP), or as a solid called dry ice when frozen.
- If the temperature and pressure are both increased from STP to be at or above the critical point for carbon dioxide, it can adopt properties midway between a gas and a liquid.
- More specifically, it behaves as a supercritical fluid above its critical temperature

Why in news?

- Scientists have developed a supercritical Carbon Dioxide (CO₂) Brayton test facility at the Indian Institute of Science (IISc) in Bangalore to generate clean energy from power plants, including solar thermal.

What is the significance?

- The new-generation high-efficiency power plants with closed cycle CO₂ as the working fluid have the potential to replace steam-based nuclear and thermal power plants, thus reducing the carbon foot print significantly.
- While the current day's thermal power plants would use steam to carry the heat and turn a turbine to generate power, the research makes use of supercritical CO₂ (SCO₂) instead of steam to generate more power.
- Besides increasing power generation and making the process more efficient, there are other advantages of using this new technology like making the power plants cheaper with lower operating costs.

16. WFIRST

- Wide Field InfraRed Survey Telescope, is a NASA observatory designed to settle essential questions in the areas of dark energy, exoplanets, and infrared astrophysics.
- The telescope has a primary mirror that is 2.4 meters in diameter (7.9 feet), and is the same size as the Hubble Space Telescope's primary mirror. WFIRST will have two instruments, the Wide Field Instrument, and the Coronagraph Instrument.
- With the 2.4 meter telescope, single WFIRST images will uncover millions of galaxies.

17. World Information Technology and Services Alliance (WITSA)

- The World Information Technology and Services Alliance (WITSA) is hosting its international conference, World Congress on Information Technology (WCIT), along with Nasscom, in Hyderabad
- Touted to be the 'Olympics of the IT industry', the conference is coming to India for the first time.

What is it?

- WITSA is an umbrella organization representing IT industry associations in about 80 countries and 90 per cent of the information and communication technologies markets.
- The focus of WCIT India 2018 will be 'Fulfilling the Promise of Digital Age'.
- It brings together high-level officials from different countries, heads of multinational organizations, universities and scientific research centers, non-governmental organizations' representatives and many more.
- The event includes discussions of legal, political and economic trends affecting IT business processes, presentations of innovative solutions, B2B meetings and so on.
- The WCIT has been held since 1978. Previous hosting countries were Canada, the Netherlands, Malaysia, USA, Greece, Australia, China, Spain, Japan, England, France, Denmark, Mexico, and Brazil

18. Rise in research publications in earth sciencesIndia's Growth

- Between 2006 and 2015, India published 19, 938 **research papers** in the domain of earth system sciences, nearly twice what it published in the previous decade.
- However in terms of **high quality publications**, it improved its share from 4.7% in the previous decade (1996-2005) to 5.7% across the two comparative periods, says a report commissioned by the Ministry of Earth Sciences and prepared by analytics firm, Clarivate Analytics.
- India is placed 9th among the world's countries in terms of the number of research publications related to earth sciences.
- In the sub-domain of Antarctica-related research, for instance, India had only 3 top papers in 1996 and this had risen to 34 in 2015 and top papers, in Arctic research had gone from 1 to 8 during the same period.
- The Indian Institute of Tropical Meteorology and the India Meteorological Departments were the leading sources of top research publications.

Details

- The analysis included publications in six major areas of earth-science research: Geo research, atmospheric research, Ocean research, Arctic research, Antarctica research and Himalayas research.
- Of these the **majority of Indian publications were in the geo sciences**.
- Particularly, Himalayas-related research nearly tripled across the two periods but the citation impact—a proxy for the quality of the paper among peers—was the lowest among all research areas.

Other Countries Growth

- Global research output in the field increased from about 3,40,000 to 5,70,000 of which high quality publications comprised 11% in both decades.
- The United States, United Kingdom, Canada, Germany and France led the world in the number of high quality research publications.

SECURITY AND DEFENSE RELATED

1. Anti-hijack rules

The hijacking of Indian Airlines flight IC-814 in 1999 and the 9/11 attacks in the U.S., in which air-craft were used as missiles, were wake-up calls for India to tighten the 1982 vintage anti-hijacking law. The need was also felt to make hijacking punishable with death penalty. Government felt that the **Anti-Hijacking Act of 1982** had insufficient penalties and was not comprehensive enough to deal with new challenges. The Anti-Hijacking Act, 2016 repealed the 1982 Act. Its objectives are in tune with the Convention for the Suppression of Unlawful Seizure of Aircraft.

Hague Hijacking Convention

- The Hague Hijacking Convention (formally the Convention for the Suppression of Unlawful Seizure of Aircraft) is a multilateral treaty by which states agree to prohibit and punish aircraft hijacking.
- The convention does not apply to customs, law enforcement or military aircraft, thus it applies exclusively to civilian aircraft.
- The convention only addresses situations in which an aircraft takes off or lands in a place different from its country of registration.

The Act further incorporated the September 2010 Beijing Protocol Supplementary to the Convention which specifically dealt with "unlawful acts against civil aviation by new types of threats".

2. Beijing Convention

- It is a 2010 treaty by which state parties agree to criminalize certain terrorist actions against civil aviation.
- Parties that ratify the Convention agree to criminalize using civil aircraft as a weapon and using dangerous materials to attack aircraft or other targets on the ground.
- The illegal transport of biological, chemical, and nuclear weapons is also criminalized under the Convention.

Details

- The law empowers concerned security forces to immobilize an aircraft or prevent its take-off.
- The Indian Air Force can also scramble its fighters to intercept a hijacked aircraft and force it to land. It can also shoot down a hostile plane if there is evidence that it could be used as a missile to hit a vital installation.

New provisions

- The new law revamped Section 3 of the 1982 legislation to expand the definition of hijacking to seizure or takeover of an aircraft using "any technological means". This takes into consideration the possibility that a hijacker need not be physically present inside the aircraft to take control of it.
- The definition of 'hijacking' also includes an attempt to commit the crime, abetting, organizing, participating in it as an accomplice, and unlawfully and intentionally assisting a person involved in hijacking to evade investigation or prosecution or punishment. Here, a person who does not actually participate in the hijacking but "directs" someone else to do it is equally liable.
- The act goes a step forward by even defining the term 'in service'. An aircraft is considered in service from the beginning of the pre-flight preparation by ground personnel or by the crew for a specific flight until 24 hours after landing. Further, in case of a forced landing, the flight is deemed to continue in service until the competent authorities take over responsibility of the aircraft, and for the persons and property on board.

Penalties

- From a punishment perspective, the act prescribes the death penalty where the offence results in the death of a hostage or security personnel, and life imprisonment in all other cases, there is no chance of remission..
- It also provides for capital punishment against conspirators and abductors of any of the acts of hijacking
- For the first time, the act provides for the confiscation of moveable and immoveable property of a person convicted under its purview.
- Another notable inclusion relates to a designated court to provide a speedy trial for offences relating to hijacking.

Shortcomings

- The term 'aircraft' is identified as any aircraft, whether or not it is registered in India. But it excludes an aircraft that is used in customs or police service, which should have been included.
- It would have helped if there was also a provision to cover 'hoax calls' with proportionate punishment. Hoax calls create panic, resulting in serious complications for passengers. They also cause a nightmare for security agencies who end up wasting resources and time to verify the authenticity of the call.

- The act also does not protect ground staff and security personnel at the airport. In its current form, the act defines the punishment for acts of violence connected with hijacking and covers only violence against passengers or airline crew.

3. Hmar Issue

Context

- The HPC (D) leaders expressed optimism that the peace parleys would make a headway in bringing amicable solution to the vexed Hmar problem.
- The proposed political level talks, proposed to be held before Christmas in 2017 was delayed as Mizoram chief minister Lal Thanhawla constituted a three-member committee of legislators to examine the draft legislation on the formation of Sinlung Hills Council (SHC).

Details

- The talks held during August, 2016 and September, 2017 mainly revolved around giving more autonomy to the existing Sinlung Hills Development Council (SHDC) as also restructuring the Council.
- The name of the Council was proposed to be changed from Sinlung Hills Development Council to Sinlung Hills Council.

Hmars

- The Hmars belong to the Chin-Kuki-Mizo group of tribes, and are recognised as Scheduled Tribe under the 6th Schedule of the Constitution of India.
- They are a tribal people living in Assam, Mizoram and Manipur, mainly in the area where these states meet.

HPC (D)

- Hmar People's Convention- Democracy (HPC-D) is an offshoot of the Hmar People's Convention (HPC), which came into existence in 1986, as a political party spearheading a movement for self-government in the north and northeast of Mizoram.
- The purported objective of the outfit over the years has changed from an autonomous district covering the north and northeast Mizoram to an independent Hmar State (Hmar ram) consisting of the Hmar inhabited areas of Mizoram, Manipur and Assam.

4. International Sikh Youth Federation (ISYF)

- It is a proscribed organization that aims to establish an independent homeland for the Sikhs of India in Khalistan. It is banned under Japanese, Indian, Canadian and American counter-terrorism legislation
- In 1984, the All India Sikh Students Federation (AISSF) started the ISYF in the United Kingdom as an international branch
- The 1985 bombing of Air India Flight 182 off Ireland, the deadliest aircraft terror attack until the September 11, 2001 attacks, and the attempted bombing of Air India Flight 301, were allegedly carried out by Sikh extremists.

- Air India Flight 182 was an Air India flight operating on the Toronto–Montreal–London–Delhi route

5. Integrated Automatic Aviation Meteorological Systems (IAAMS)

- IAAMS is an ambitious project of the Indian Navy to modernize the Meteorological infrastructure of the nine Naval Air Stations. The IAAMS project at INS Garuda will give a major fillip to aviation safety through automation of weather monitoring process.
- Equipped with the state of the art Meteorological Sensors viz., Radar Vertical Wind Profiler, Transmissometer, Ceilometer and Automatic Weather Observation System, IAAMS undertakes automatic and continuous recording of relevant weather parameters that are vital for accurate weather forecasting.
- It has a special alarm feature that alerts the duty staff about any abnormal change of weather parameters that may affect safe flying operations.
- The system can also provide automatic dissemination of routine weather reports of the air station as per World Meteorological Organization (WMO) standards to other Air Stations and to ATC tower without human intervention.

6. INS Karanj

- It is the third of the six Scorpene-class submarines being built by MDL under the Project 75 programme of Indian navy
- The new submarine is named after the earlier Kalvari class INS Karanj, which was decommissioned in 2003.
- It is a diesel-electric attack submarine based on the Scorpène class weighing about 1600 tonnes
- The technology being used for construction of the Scorpene class submarines has ensured superior stealth features such as advanced acoustic silencing techniques, low radiated noise levels and hydrodynamically optimized shape. These stealth features give it invulnerability, unmatched by most submarine.

Background

Project 75I-class submarine

- It is follow-on of the **Project 75 Kalvari-class submarine** for the Indian navy.
- Under this project, the Indian Navy intends to acquire **6 diesel-electric submarines**, which will also feature advanced **Air Independent Propulsion (AIP) systems** to enable them to stay submerged for longer duration and substantially increase their operational range.
- **All six submarines are expected to be constructed in Indian shipyards.**

Scorpene-class submarine:

- The Scorpene class submarines are a class of **diesel-electric attack submarine jointly being developed by the French DCN and the Spanish company Navantia and now by DCNS.**
- It features diesel propulsion and an additional **Air-Independent Propulsion (AIP) system.**
- The state-of-art features of the Scorpene include superior stealth and the ability to launch an attack on the enemy using **precision-guided weapons.**
- The attack can be launched with **torpedoes, as well as tube launched anti-ship missiles, underwater or on surface.**
- Designed to operate in all theatres including the tropics, the submarines can undertake multifarious missions including anti-surface warfare, anti-submarine warfare, intelligence gathering, operations by special forces and mine laying etc.
- The Scorpene is believed to be stealthier than the average submarine because of its **advanced combat management system and low acoustic signature.**
- It also uses a noise-cancelling technique, whereby its equipment is mounted on elastic to prevent noisy vibrations from travelling outside the vessel. Its body is also **designed to be more difficult for sonar to detect.**

What is Air-independent propulsion?

- AIP is any technology which allows a **non-nuclear submarine** to operate without the need to access atmospheric oxygen (by surfacing or using a snorkel).
- It can augment or replace the diesel-electric propulsion system of non-nuclear vessels.
- It is based on the combustion of **stored oxygen and ethanol to augment battery-powered propulsion.**

Significance of AIP:

- **Significantly improves stealth** because it enables a submarine to generate electricity for services and battery charging and propulsion while completely submerged. AIP systems also generate electricity, powering a submarine's to operate and also generate oxygen, lighting and amenities for crew.
- They enable conventional diesel-electric submarines to **remain submerged for two to three weeks at a time.** This significantly increases the risk of detection. Another advantage is that the Non-nuclear submarines running on battery power or **AIP can be virtually silent.**

India's submarine fleet

- The Indian fleet consists of Russian Kilo-class and German HDW class 209 submarines. Limited serviceability is also an issue – not all these boats are battle ready at any given point of time.

- India's sub-sea warfare capability pales in front of China's. The Communist neighbour operates 53 diesel-electric attack submarines, five nuclear attack submarines and four nuclear ballistic missile submarines.s

7. Key amendments in Prevention of Money-Laundering Act

- The Central government has proposed changes to various provisions of the Prevention of Money Laundering Act (PMLA) through the Finance Bill, including a crucial amendment that empowers the Special Court to restore confiscated assets to the rightful claimants even during the trial.

What are the Intended Amendments?

- The **amendment to Section 8(8)** allows the Special Court, if it deems fit, to consider the claims for the purposes of restoration of such properties also during the trial.
 - * Earlier, the assets could be restored only after completion of the trial.
- Amendment in definition of "proceeds of crime": The definition of "proceeds of crime" in PMLA was amended in 2015 to include "property equivalent held within the country" in case proceeds of crime is taken out or held "outside the country". The present amendment shall allow to proceed against property equivalent to proceeds to crime held outside the country also.
- Provisions relating to Bail: Amendment has been proposed to Section 45 which prescribes offences to be cognizable and non-bailable. Under the proposed amendment, No person accused of an offence under this Act shall be released on bail or on his own bond unless satisfying two conditions:-
 - * The Public Prosecutor has been given an opportunity to oppose the application for such release;
 - * where the Public Prosecutor opposes the application, the court is satisfied that there are reasonable grounds for believing that he is not guilty of such offence and that he is not likely to commit any offence while on bail
- Section 45(1) has been amended to include a person who is accused on his own or along with other co-accused of money-laundering a sum of less than Rs. 1 Crore may be released on bail, if Special Court so directs.
 - * Currently there is no such monetary limit for categorizing offence as bailable or non-bailable
 - * Amendment proposed in Section 45(1) would make the applicability of bail conditions uniform to all the offences under PMLA, instead of only those offences under the schedule which are liable to imprisonment of more than 3 years.

- Corporate frauds included as Scheduled offence: Section 447 of Companies Act is being included as scheduled offence under PMLA so that Registrar of Companies in suitable cases would be able to report such cases for action by Enforcement Directorate under the PMLA provisions. This provision shall strengthen the PMLA with respect to Corporate frauds
- Section 5(1) of the Act provides that every order of provisional attachment passed by an officer of Enforcement Directorate shall cease to have effect after 180 days from the date of the provisional attachment order, unless confirmed by the Adjudicating Authority under PMLA within that period
 - * The section is proposed to be amended to include the period of stay in this time limit of 180 days and also further period of not more than 30 days to take care of delays if any in communication of judicial orders.
- Under the existing provision of Section 8(3), presently, the Directorate is required to file prosecution immediately after confirmation by Adjudicating Authority. Proposed amendment gives 90 days more for investigation to ED, before prosecution is filed.
- New sub-section (2) of section 66 is being introduced to provide for clear guidelines to share the information relating to contraventions of other laws noticed during investigation by ED, with concerned authorities under the said Acts. This shall enable exchange of information among agencies and enhance effectiveness of efforts against black money.

What is a Scheduled Offence?

- Scheduled offence means an offence specified under Part A or Part C of the Schedule of the Prevention of Money Laundering Act, 2002.
- Scheduled offences are the activities that have been deemed illegal by law. For example robbery, homicide, tax evasion etc.

The Amendments aim at further enhancing the effectiveness of the Act, widen its scope and take care of certain procedural difficulties faced by the Enforcement Directorate in prosecution of PMLA cases.

8. Paschim Lehar

- It is a tri-service maritime exercise off India's western coast
- The objective of the exercise, is to build interoperability
- This exercise includes participation of a large number of ships, submarines and aircraft from the Western Naval Command of the Indian Navy. Units from Eastern Naval Command, Indian Army, Indian Air Force and the Coast Guard are also participating to build interoperability
- The exercise includes a number of weapon firings, including missile, gun and torpedo firings during the initial phase. The second phase is structured to validate and refine the operational plans of the Western Naval Command

9. Popular Front of India (PFI)

- Predominantly operates in Kerala
- NDF's activities were limited to Kerala. However, a decision was made to create a unified organization, merging like-minded organizations from Kerala, Karnataka and Tamil Nadu. Thus in 2006, The Popular Front of India (PFI) was formed, merging NDF, Karnataka Forum for Dignity, and Manitha Neethi Pasarai in Tamil Nadu.

Why ban?

- The involvement of alleged members of the organization in political killings, religious conversions and terror activities has been projected as the reason for the ban.

Link with SIMI

- Even though on the books the PFI emerged from the NDF, there has been strong criticism of the organization for its involvement with banned terror outfit Students' Islamic Movement of India (SIMI).
- Most of the office-bearers of the PFI have had an association with SIMI, before it was banned, including members of the current leadership. Even though members of the organization have denied the connection, the organization's hierarchy give critics ammunition.

Political Killings

- According to a Kerala government report submitted to the Kerala High Court, in 2012, PFI members were actively involved in 27 murder cases, mostly of cadres of CPI-M and RSS.
- In 2014, in another report, Kerala government said 86 attempts to murder cases were registered against PFI as well.

Is PFI Connected to The Islamic State?

- According to the information provided by Kerala police, at least 10 men who were part of PFI have gone to Syria to fight for Islamic State.
- It was during the interrogation of Shahjahan, an Islamic State (IS) sympathizer from Kanjirangode in Kannur who was deported from Turkey following a failed attempt to cross the border, police learnt that members of the PFI had gone to fight in Syria.

10. Rafale jets

- Manufactured by French company Dassault Aviation, Rafale is a twin-engine medium multi-role combat aircraft (MMRCA).
- Rafale fighter jets are positioned as 'omni-role' aircrafts that are capable of performing a wide range of combat roles, such as air supremacy, interdiction, aerial reconnaissance, ground support, in-depth strike, anti-ship strike and nuclear deterrence.

Why was it required?

- The Indian Air Force (IAF), which requires a minimum of 42 fighter squadrons to achieve optimal capability

Criteria

- IAF tested all aircraft and after a thorough analysis, Eurofighter and Rafale were shortlisted.
- Dassault got the contract as they were the lowest bidders and their aircraft was low maintenance compared to others.

11. Rustom

- It is an UAV for the three services, Indian Army, Indian Navy and the Indian Air Force of the Indian Armed Forces
- Rustom will replace/supplement the Heron UAVs in service with the Indian armed forces
- It is part of the Rustom line of Unmanned Aerial Vehicles (UAVs) that includes Rustom-I, Rustom-H and Rustom-C.
- The Medium-Altitude prototype can fly at over 22,000 ft and is a Long-Endurance (MALE) UAV that has an approximate flight time of 20 hours.

Details

- The Rustom 2 is propelled by two 3-bladed NPO saturn engines.
- It stands 2.4 metres tall with a wingspan of 20.6 metres and a length of 9.5 metres.
- The UAV's tail section comes with a T-type vertical stabiliser and a high-mounted horizontal tailplane.
- It can fly at around 280 km/h and carry a variety of payloads like Medium Range Electro Optic (MREO), Long Range Electro Optic (LREO), Synthetic Aperture Radar (SAR), Electronic Intelligence (ELINT), Communication Intelligence (COMINT) and Situational Awareness Payloads (SAP) that help in performing missions even during the night. MREO and LREO sensors are placed inside a modular payload under the nose for capturing imagery and video.

Significance

- It transmits the ISR data to the armed forces' ground control station in realtime allowing prompt action.
- Rustom 2 can fly missions on manual as well as autonomous modes.
- The onboard way-point navigation system allows the drone to conduct missions autonomously.
- Several critical systems and components of the drone, like its airframe, avionics sub-systems, flight control, landing gear etc have been made indigenously and some in collaboration with private manufacturers.
- Modern warfare is heavily dependent on drones and India had deployed its imported drones effectively during the surgical strikes it carried out across the Line of Control in Pakistan in September 2016

Vinay Sheel Oberoi Committee

- Defence Minister Nirmala Sitharaman has constituted a 13-member advisory committee to monitor and expedite capital acquisition projects for the modernization of the armed forces.
- The terms of reference of the committee, it has to undertake an independent review and check the status of ongoing critical projects worth more than Rs 500 crore.
- The committee would suggest measures to improve the capital acquisition process.
- The mandate of the panel includes identifying specific bottlenecks in implementing projects and suggesting remedial measures

HEALTH ISSUES

1. Alzheimer's gets a biomarker

- Loss of dendritic spines from the surface of a nerve cell is recognized as an early feature of Alzheimer's
- Projections on the dendrites called spines grow or shrink in response to activity-dependent modification and correlates with normal memory or memory deficit

2. What is F-actin?

- Filamentous actin (F-actin) is a cytoskeletal protein which is responsible for maintaining the shape of the spines.
- While F-actin is formed by **polymerisation** of monomeric globular-actin (G-actin), **depolymerisation** leads to loss of F-actin and, in turn, the loss of spines. F-actin is crucial for memory consolidation.

Results as a result of experiments on Animals

- The change in the ratio of F-actin and G-actin led to loss of spines.
- The decrease in F-actin level and loss of spine thereof translated into memory deficit
- Loss in F-actin level leads to early behavioral changes that would eventually lead to Alzheimer's disease
- The correlation seen between mouse model and human disease indicates the potential to use F-actin levels as a biomarker.

Context

- Researchers at Bengaluru's Indian Institute of Science (IISc) have identified a potential biomarker for Alzheimer's disease.

Ayushman Bharat programme

The Government today announced two major initiatives in health sector, as part of Ayushman Bharat Programme.

Health and Wellness Centre:-

- The National Health Policy, 2017 has envisioned Health and Wellness Centres as the foundation of India's health system.
- Under this 1.5 lakh centres will bring health care system closer to the homes of people.
- These centres will provide comprehensive health care, including for non-communicable diseases and maternal and child health services.
- These centres will also provide free essential drugs and diagnostic services.
- The Budget has allocated Rs.1200 crore for this flagship programme. Contribution of private sector through CSR and philanthropic institutions in adopting these centres is also envisaged.

National Health Protection Scheme:-

- The second flagship programme under Ayushman Bharat is National Health Protection Scheme, which will cover over 10 crore poor and vulnerable families (approximately 50 crore beneficiaries) providing coverage upto 5 lakh rupees per family per year for secondary and tertiary care hospitalization.
- This will be the world's largest government funded health care programme.
- Adequate funds will be provided for smooth implementation of this programme.
- The mega health insurance scheme for the poor will give the sector a big boost but could cost over Rs 1 lakh crore

Other Details

- The Finance Minister said, that in order to further enhance accessibility of quality medical education and health care, 24 new Government Medical Colleges and Hospitals will be set up, by up-grading existing district hospitals in the country.
- This would ensure that there is at least 1 Medical College for every 3 Parliamentary Constituencies and at least 1 Government Medical College in each State of the country
- The Finance Minister further said, that these two health sector initiatives under Ayushman Bharat Programme will build a New India 2022 and ensure enhanced productivity, wellbeing and avert wage loss and impoverishment. These Schemes will also generate lakhs of jobs, particularly for women.

Economic survey

- The Economic Survey had flagged the heavy cost that treatment at private hospitals had imposed on people two years ago, underlining that the average cost of treatment in private hospitals was about four times than that of public healthcare facilities.
- Citing a national survey report, the Economic Survey had pointed that people had to spend an average Rs. 26,000 for treatment per hospitalised case in private facilities.

3. Biologics, patents and drug prices

Context:

- The global sales of the world's best-selling prescription drug, Humira, continue to grow even after the expiry of the patent over its main ingredient, adalimumab, a biologic used for the treatment of arthritis.
- By 2020, AbbVie Inc, makers of Humira, expects its sales to touch \$21 billion — a figure that will surpass India's pharmaceutical exports for that year.

But what was the problem?

- Patents offer their owners market exclusivity for a limited period of time.
- For medicines, this exclusivity should last as long as the primary patent which relates to the active pharmaceutical ingredient (API) of the medicine is in effect, typically 20 years.
- The end of patent exclusivity is referred to as a **patent cliff**, because drug prices fall steeply afterwards by as much as 80% owing to generic competition.
- The secondary patents prop up before the expiry of a primary patent thereby stretching the exclusivity beyond 20 years, a practice that is called **“evergreening”**. This strategy is most lucrative when employed in the context of so-called blockbuster medicines, which reap annual revenues exceeding \$1 billion.

Examples

- Over the years, AbbVie has increased the price of Humira in the U.S. by 100%, while steadily filing a large number of secondary patents.
- The U.S. recognises and encourages secondary patents. India, however, does not, which means that while Humira costs \$1,300 (₹85,000) in the U.S., the same treatment costs only \$200 (₹13,500) in India, thanks to the rejection of secondary patents on Humira by the Indian Patent Office (IPO) and the consequent introduction of cheaper versions.
- The rejection of a secondary patent for Novartis' Glivec, a crucial leukaemia cure, was famously upheld by the Supreme Court of India in 2013, while the same was granted in the U.S. Consequently, the cost of a monthly dose of the medicine in the U.S. was ₹1.6 lakh, while the cost of the generic was ₹11,100 in India.
- Likewise, Spiriva, a medicine for asthma, enjoys patent protection until 2021 in the U.S., largely due to secondary patents. As a result, while the monthly cost of the medicine in the U.S. is over ₹19,100, it costs a mere ₹250 in India.

Good patent law

- However Indian patent law helps thwart evergreening practices by pharmaceutical companies.
- Secondary patents for several blockbuster medicines have been rejected by the IPO dramatically expanding access to medicines for important health problems such as cancer, AIDS, asthma and cardiovascular diseases.
- As per Section 2(1)(ja) of the Patents Act, the product in question must feature a technical advance over what came before that's not obvious to a skilled person. Because secondary patents for pharmaceuticals are often sought for trivial variants, they typically fail to qualify as an invention.
- Further, when a medicine is merely a variant of a known substance, Section 3(d) necessitates a demonstration of improvement in its therapeutic efficacy.
- The provision also bars patents for new uses and new properties of known substances.
- This additional requirement is unique to Indian law, and along with Section 2(1)(ja), ensures that bad patents stay out of the system.

Conclusion

- Blockbuster medicines are crucial to the success of public health. But they have been gamed, and rendered inaccessible to the people and governments who need them.
- In order for these medicines to be accessible, there can be no surer way than to enact strong standards that put bad patents where they belong.

4. Health outcomes index: nudging India to progress

- “Healthy States, Progressive India” report has spurred a vibrant debate on the status and future of India's health sector
- Through this report, the focus has been on the performance and annual progress of states and Union territories on a countless health indicator
- This index (Health outcomes index by the NITI Aayog) will help nudge states towards improving their health sector outcomes in the spirit of cooperative and competitive federalism
- Kerala is the leader among large states, closely followed by Punjab and Tamil Nadu
- Uttar Pradesh, Rajasthan and Bihar are the least-performing states
- The goal of the index is not just to rank the states based on their historical performance, but also on their incremental performance
- The attempt is to capture the change made during the course of the year
- For example, Jharkhand, Jammu and Kashmir, and Uttar Pradesh are ranked first, second and third in their incremental performance ranking
- The “Performance On Health Outcomes” index is made up of 24 indicators in three different domains—
 - * Health outcomes,
 - * Governance and information, and
 - * Key inputs and processes
- The “health outcomes” account for 70% of the weight, and the other two domains weigh 12% and 18%, respectively
- The “health outcomes” domain has indicators such as total fertility rate (TFR), neonatal mortality rate (NMR), sex-ratio at birth (SRB), etc.
- The governance and information domain measures the quality of data (data integrity indicator) and the average occupancy in important health-related posts such as principal secretary (health), chief medical officer, etc.

- Key inputs and processes measure the current status of healthcare professional vacancies, infrastructure at district hospitals, and the speed of financial governance in the states
- NITI Aayog is creating a framework to track the performance of government hospitals based on outcome metrics
- Together with the upgrading and setting up of health and wellness centres under the Ayushman Bharat Scheme and the National Health Protection Scheme these measures will help us realize the goal of “good health and well-being” (one of the UN-SDG) for all citizens.

Results that emerge from the health index

- First, there are large gaps between states
- The gap between the best-performing states and the least-performing states is worrisome—Kerala and Uttar Pradesh are separated by 42.86 points
- Second, incremental performance reveals that there has been a decline in performance on some states
- Six states’ scores have declined—Kerala, Haryana, Gujarat, Karnataka, Himachal Pradesh, and Uttarakhand
- Third, India has made significant strides in achieving the goals set out under the UN-SDG and our own National Health Policy
- Some of our states have already met or exceeded the goals a decade ahead of 2030

Which are the best performing states?

- States with a record of investment in literacy, nutrition and primary health care have achieved high scores in NITI Aayog’s first Health Index.
- Kerala, Punjab, and Tamil Nadu are the best-performing large States, while Uttar Pradesh, Rajasthan, Bihar, Odisha and Madhya Pradesh bring up the rear.

States responsibility

- Health-care delivery is the responsibility of States; the Centre provides financial and policy support.
- Being able to meet the Sustainable Development Goals over the coming decade depends crucially on the States’ performance.

What is the purpose of the new index?

- The Index, with all its limitations given uneven data availability, hopes to make a difference here by encouraging a competitive approach for potentially better outcomes.
- For instance, it should be possible for Odisha to bring down its neonatal mortality rate, estimated to be the highest at 35 per thousand live births — worse than Uttar Pradesh.
- A dozen States with shameful under-five mortality rates of over 35 per 1,000 live births may feel the need for remedial programmes.

What needs to be done?

- What the Index shows for the better-performing States is that their continuous improvements have, overall, left little room to notch up high incremental scores, but intra-State inequalities need to be addressed.
- Coming soon after the announcement of a National Health Protection Scheme in the Union Budget, the Index uses metrics such as institutional deliveries, systematic reporting of tuberculosis, access to drugs for people with HIV/AIDS, immunisation levels and out-of-pocket expenditure.
- The twin imperatives are to improve access to facilities and treatments on these and other parameters, and raise the quality of data, including from the private sector, to enable rigorous assessments.
- At the same time, as NITI Aayog points out, data on other key aspects lack the integrity to form part of a good composite index. Both the Centre and the States have the responsibility to scale up their investment on health as a percentage of their budgets, to be more ambitious in interventions.
- While the NHPS may be able to address some of the financial risk associated with ill-health, it will take systematic improvements to preventive and primary care to achieve higher scores in the Index.
- As the experience from countries in the West and now even other developing economies shows, socialisation of medicine with a reliance on taxation to fund basic programmes is the bedrock of a good health system.s

5. Newborn mortality: India 12th worst among low-income countries

- India has been ranked 12th-worst among 52 low-middle income countries based on the number of children dying within the first month of their birth, which is 25.4 per 1,000 live births.
- Pakistan is the worst with 45.6 newborn deaths per 1,000 live births, according to the United Nations Children’s Fund (Unicef) which has, for the first time, come out with rankings based on their newborn mortality rate (the number of deaths per 1,000 live births).
- Japan, with an NMR of 0.9 deaths per 1,000 live births, has been ranked the world’s safest country in which to be born followed by Iceland (1) and Singapore (1.1).
- The US’s NMR stands at 3.7, only slightly better than lower-middle income countries like Sri Lanka and Ukraine, and is ranked 15 among high-income countries.
- Unicef says newborn survival is closely linked to a country’s income level. High-income countries have an average NMR of just 3. In comparison, low income countries have an NMR of 27. This gap is significant. If every country brought its NMR to the high-income average, or below, by 2030, 16 million newborn lives could be saved.

- It adds that more than 80% of newborn deaths are the result of premature birth, complications during labour and delivery and infections such as sepsis, meningitis and pneumonia.
- Babies born to mothers with no education face almost twice the risk of dying during the newborn period as compared to babies born to mothers with at least secondary education.

6. Blood test for Alzheimer's

- Researchers in Japan and Australia say they have made important progress in developing a blood test that could in future help doctors detect who might go on to get Alzheimer's disease.
- Scientists said the test can detect a **toxic protein known as amyloid beta, linked to Alzheimer's**

Stats

- Dementia, of which Alzheimer's is the most common form, affects close to 50 million people worldwide and is expected to affect more than 131 million by 2050

Dementia is not a specific disease. It's an overall term that describes a wide range of symptoms associated with a decline in memory or other thinking skills severe enough to reduce a person's ability to perform everyday activities. Alzheimer's disease accounts for 60 to 80 percent of cases.

How are tests performed currently?

- Currently, doctors use brain scans or invasive cerebrospinal fluid testing, also known as a spinal tap, to try and see whether patients have a build-up of amyloid beta in the brain.

But these tests are invasive, expensive and may only show results when the disease has already started to progress

Eosinophil

- They are a variety of white blood cells and one of the immune system components responsible for combating multicellular parasites and certain infections in vertebrates.
- Along with mast cells and basophils, they also control mechanisms associated with allergy and asthma.

Problems

- Immune cells called eosinophil's that normally help defend the body against parasitic worms can also play a **harmful role in causing intestinal damage after radiation treatment**, researchers report in Science Advances. They say that eosinophil depleting treatments could potentially improve therapeutic outcomes for patients undergoing radiation therapy for pelvic tumors.
- Radiation therapy causes **intestinal side effects such as diarrhoea or bleeding** in more than half of patients.

7. MeXis

- It produces a special class of molecules called long non-coding RNAs, or lncRNAs.

- It acts within key cells inside clogged arteries in the heart to help remove excess cholesterol from blood vessels

8. Maturity onset diabetes of the young (MODY)

- MODY is a rare form of diabetes which is different from both Type 1 and Type 2 diabetes, and runs strongly in families.
- **MODY is caused by a mutation (or change) in a single gene.** If a parent has this gene mutation, any child they have, has a 50 per cent chance of inheriting it from them.
- If a child does inherit the mutation they will generally go on to develop MODY before they're 25, whatever their weight, lifestyle, ethnic group etc.

Cause

Diabetes involves a disruption of how blood sugar is kept in check by the hormone insulin.

- In Type-2 diabetes, which is the most common form of the disorder, many genes and environmental factors combine to cause this disruption.
- In MODY, any one of the 14 genes, if defective, can hamper the body's insulin usage and trigger Type-2 diabetes.

Treatment

- Some forms of MODY can easily be treated with **sulphonylurea**, an inexpensive drug.

Report

- In a paper published in the BMC Medical Genetics journal, researchers outlined that variants of the **NKX6-1 gene found in MODY patients were "functionally impaired"**.

9. Neglected Tropical Diseases (NTDs)

- Neglected tropical diseases (NTDs) are a diverse group of communicable diseases that prevail in tropical and subtropical conditions common in low-income populations in developing regions of Africa, Asia, and the Americas.
- Populations living in poverty, without adequate sanitation and in close contact with infectious vectors and domestic animals and livestock are those worst affected.
- They are caused by a variety of pathogens such as viruses, bacteria, protozoa and helminthes.

Diseases that are most prevalent in India

- They include lymphatic filariasis, soil transmitted helminthiasis, trachoma, visceral leishmaniasis, dengue, rabies, cysticercosis and Japanese encephalitis. India also bears a high burden of intestinal worm infections (hookworms, whipworms and Ascaris worms).

Policy Initiatives

- National Deworming Day (February 10) children between ages 1 to 19 through schools and Anganwadi centres would have been dewormed in order to improve their nutritional status and well-being
- Lymphatic Filariasis Programme will reach out to those above two years, by using health workers across select endemic districts to administer anti-filarial drugs.

Both Programmes involve the distribution of drugs free of cost through periodic rounds of mass drug administration (MDA).

What needs to be done to make it Successful?

- Clear communication strategies need to be evolved as many a time the benefit of such programmes is not understood by many
- Water, Sanitation and Hygiene (WASH) strategies, a critical component of prevention and care for all NTDs needs to be realized
 - * Focused efforts on WASH are a must especially in NTD control where transmission is closely linked to poor WASH conditions, examples being soil-transmitted helminthiasis, schistosomiasis, trachoma and lymphatic filariasis.
- NTD-control Programme can be designed to be community-based then these can act as a gateway to universal health coverage as it reaches marginalized populations through well-trusted health workers who provide quality, free-of-cost drugs to the population.

10. Rubinstein-Taybi syndrome

- Rubinstein-Taybi syndrome is a condition characterized by short stature, moderate to severe intellectual disability, distinctive facial features, and broad thumbs and first toes
- Additional features of the disorder can include eye abnormalities, heart and kidney defects, dental problems, and obesity.
- People with this condition have an increased risk of developing noncancerous and cancerous tumors, including certain kinds of brain tumors
- Rubinstein-Taybi syndrome can involve serious complications such as a failure to gain weight and grow at the expected rate (failure to thrive) and life-threatening infections.
- Rubinstein Taybi Syndrome has a frequency of about one in one lakh people

11. TB vaccination: New study rekindles hope to prevent sustained infections

- The new research is being considered as a significant leap in controlling tuberculosis (TB), which kills around 4.8 lakh Indians every year and more than 1,400 every day.

- Repeat vaccination with the Bacille Calmette-Guerin (BCG) vaccine significantly reduces sustained TB infections in adolescents; results of a clinical trial in South Africa have shown. Introduced in 1921, BCG is the only vaccine currently licensed to prevent TB.
- The results of the phase II clinical trial will be presented at the 5th Global Forum on TB Vaccines that starts in Delhi tomorrow and will be inaugurated by science and technology minister Dr Harshvardhan in presence of WHO DDG Soumya Swaminathan and others.
- In the prevention-of-infection Phase 2 trial conducted in Western Cape Province of South Africa, the experimental vaccine candidate, H4:IC31, also reduced sustained infections, although not at statistically significant levels.
- However, the trend observed for H4:IC31 is the first time a vaccine candidate has shown efficacy in protection against TB infection or disease in humans.
- According to the World Health Organization (WHO), about one-third of the world's population has what is called a latent TB infection, which means people have been infected by TB bacteria but are not ill with the disease and cannot transmit the disease.
- People infected with TB bacteria have a lifetime risk of falling ill with TB of 10 percent. People ill with TB can infect 10–15 other people through close contact over the course of a year.
- Earlier studies have indicated that there may be possible benefits of re-vaccination with BCG but this is the first proof of concept trial.
- The study involved 990 HIV-negative, healthy adolescents (12 to 17 years of age) who had been vaccinated as infants with BCG.
- All participants were randomized evenly into three study arms: placebo, H4:IC31, or BCG revaccination.
- All participants were screened to ensure they were not infected with Mycobacterium tuberculosis (Mtb) prior to vaccination in the study.
- The data showed that both vaccines appeared to be safe and produced an immune response in the adolescents studied.
- No vaccine-related serious adverse events were reported in the study, and the most common vaccine-related adverse event was injection site swelling in BCG revaccinated participants, typical for BCG vaccination

12. Indians don't want free toilets, they want sewage systemsStats

- India has far higher levels of open defecation than other countries of the same GDP (gross domestic product) per capita.
- For example, India has a higher GDP per capita than Bangladesh, **but in Bangladesh only 8.4% households defecate in the open, compared to 55% in India.**

Basic latrines are not that expensive, and people in countries far poorer than India build inexpensive latrines to avoid defecating in the open. Typically, as **nations get wealthier, open defecation decreases**. Despite increases in GDP per capita, and increase in latrine availability through the SBA, India has witnessed little decrease in open defecation.

Why do Indians, even with accessible toilets, go in the open?

The latrines provided by governments are often used for storage, washing clothes, and as play areas—everything except the intended use.

- The key reason for this is that basic latrines that need to be emptied out manually or pumped by simple machines are unacceptable to higher caste Hindus.
- It is considered polluting to the individual and the home, and historically associated with untouchability.

Solutions

Indian policymakers need to rethink the solution to this problem. It is not just a matter of access but a problem of perceptions of pollution, ritual purity, and caste.

- India needs to change perceptions of ritual purity through education and awareness in rural areas.
- To change the SBA from a scheme providing free toilets, **to one encouraging and enabling local governments to construct sewage systems.**

So if there is a functional sewage system, it is relatively low cost for households to build a toilet in every home that is connected to the sewage system.

Why is it difficult to build Sewage System?

- It takes years to build sewage systems, and local politicians face all the costs upfront, and the benefits are far in the future.
- Disgruntled citizens and voters complain about the digging of neighbourhoods for years, causing much nuisance to their daily lives

So the government needs to rethink the solution to the problem of open defecation and focus on providing public goods like sewage systems instead of free toilets.

13. Awareness Programs

Asli Tarakki

- It is aimed at sanitising six cities of the National Capital Region (NCR). Further, it will be replicated in other States if it succeeds.
- About 450 young men and women with “communication skills and leadership qualities” have been selected as “lead motivators” to spread awareness on Swachh Bharat Mission.

Banko Bikano

- Overcoming all odds including water scarcity and the size, **Rajasthan's desert district Bikaner built the largest number of toilets in 2014-15 taking its overall sanitation coverage to 80 per cent in just two years.**

- Bikaner also has the highest number of open defecation-free (ODF) panchayats in Rajasthan. Of the 219 gram panchayats, 180 are now open defecation-free.
- All this was achieved in just two years under a special sanitation **programme 'Banko Bikano' (brave and beautiful)** supported by the Ministry of Drinking Water and Sanitation and the Water and Sanitation Programme of the World Bank.

Darwaza Band Campaign

- The **Ministry of Drinking Water and Sanitation** has launched a nationwide campaign titled 'Darwaza Band' to promote toilet use and freedom from open defecation across the villages of the country.
- The campaign has been launched in Maharashtra in the presence of actor Amitabh Bachchan, Union Minister for Drinking Water and Sanitation, Narendra Singh Tomar, and Chief Minister of Maharashtra Devendra Fadnavis.
- Darwaza Band symbolically stands for shutting the door on open defecation.
- The campaign is **supported by the World Bank.**
- The campaign envisages to bring about a behaviour change in men who have toilets but are not using them. Actress Anushka Sharma is also part of the campaign who will encourage women to stand up for this issue and assume leadership roles in their villages.

INDOSAN

- INDOSAN is envisaged as an annual national event that **brings together all stakeholders working in sanitation** government, NGOs, academicians, researchers, partner agencies, and corporates on one platform for a shared vision.
- Bringing together all such stakeholders will create an **opportunity for collective vision**, collective understanding of the key elements of the Swachh Bharat Mission programme.
- INDOSAN is the platform, where unfolding story of Swachh Bharat will actually happen, where each **state will share their approaches most suitable to them to reach ODF.**
- INDOSAN will discuss on all **these approaches, emerging innovations, learnings** are cross shared, for the benefit of all.

Swachh Bal Sena

- Kids were given whistles to blow whenever someone goes out for open defecation. It was promoted by village panchayat.
- This was promoted by Pondicherry government under Kiran Bedi.

EDUCATION

1. 'Beyond Basics' study

What is 'Beyond Basics'?

- The Annual Status of Education Report: 'Beyond Basics' is a citizen-led household survey covering rural Indian youth in the age group of 14-18 years. It looks into four main domains: activity, ability, awareness and aspirations.

Context

- Annual Status of Education Report (Rural) 2017, published by a non-governmental organization and contains data from 26 districts in 24 States

Details

- Focusing on the 14-18 years age group, the 'Beyond Basics' study has tried to assess, inter alia, whether this cohort of young people is enrolled in any educational institution, whether they are both enrolled and pursuing work, how well they have been prepared in previous schooling, their access to technology, and what occupies their time.
- A national-level finding is that as a group, 14.4% of youth aged 14 to 18 years are not enrolled in school or college.
 - * **Variations by age:** while it is 5.3% for 14-year-olds, it rises to 30.2% at age 18.
- The imperative clearly is to look at factors that prevent them from being part of formal higher secondary education, of which availability and affordability of schools would be important.

Agriculture as a provider of jobs

- Among those who are already working in the 14-18 age group, 79% are engaged in farming, and that too in their family farms.
- As agriculture was ranked very low as an aspiration among the youth, so useful education in agriculture, coupled with access to the formal economy for finance and marketing, could raise the quality of life.
- In fact, the ability of farmers to adopt technology, avail benefits offered by the government and demand stronger institutions would be enhanced, if elementary education is improved.

What should be done?

- Evidently, a large-scale vocational education system on the lines of the "dual" German model — classroom instruction plus apprentice training — would help raise the productivity of both individuals and the economy.

- ASER's statistics indicate that overall, only 5.3% of the age group is enrolled in a vocational course, while 60.2% of out-of-school youth are engaged in some form of work.
- These trends underscore the need to scale up substantive skill-building programmes, making them free or highly subsidized.
- At the moment, though, the education tests administered to them seem to show that they can read text, but feel challenged when it comes to solving a simple mathematical problem. They will do better if the teaching-learning process becomes engaging and effective.

2. Higher Education: A deepening crisis

- In 1966, the Kothari Commission aforementioned that India should target at spending 6% of its GDP on education.
- More than half a century later, we are spending less than 3% of our GDP on education.
- India is more affluent today and people's aspirations are higher.
- Despite this favourable social climate, education has failed to become a matter of national concern.
- This year's Budget offers a marginal increase on different routine expenses and reduction on some.
- Elementary education faces crunch in supply of funds for improvement in quality.
- Finance Minister referred to the importance of teacher education.
- Teacher training seldom receives high-level attention.
- A commission appointed by the Supreme Court under the chairpersonship of the late Chief Justice of India, J.S. Verma reported the dismal state of teacher education, and the corruption.
- Commission on the other hand also offered several good remedies to improve the regulatory structure. But the progress could not be sustained.

Four-year option

- The Finance Minister made a special mention of the four-year integrated B.Ed. (Bachelor of Education) programme as a way forward for achieving quality in teacher training.
- But the major hurdle being that teacher education will have to pay for its own growth.
- What the government is willing to invest in is mainly the in-service part of the sector.
- Institutions of higher education directly or indirectly affect teachers for all levels.

- A nursery teacher needs the knowledge in child psychology, and language in primary classes to make children learn read and also to impart bilingual skills.
- The teachers affected by conditions in undergraduate colleges degrade the state of education.
- On the other hand Yash Pal report on renovation and rejuvenation of higher education presented a miserable picture of undergraduate education.

Why India does not worry about its educational crisis or why it does not invest more public funds in education?

- Initially Independence, resources were limited and they were used for other, more immediate needs.
- Now, it is a stage of fascination where any suggestion is welcome provided it avoids arguing for more funds from the public exchequer.
- Its time to identify that growing inequality and difference among youth.
- These are a consequence of malnourished institutional experience.
- The United Nations discourse of sustainable development should remind us that our national aspirations might get a jolt if we fail to prioritize education.

3. Graduates from IIT, NIT to teach in rural areas

- More than 1,200 youngsters with Ph.D and M. Tech degrees from institutions like Indian Institutes of Technology, Indian Institute of Science, Bengaluru, and National Institutes of Technology will spend the next three years teaching at 53 government engineering colleges in rural areas of districts lagging behind in technical education.
- The teachers will be there on a three-year contract and get paid ₹70,000 a month.
- This initiative, entailing an expenditure of ₹370 crore, is a result of the Centre helping state governments fill up vacancies in backward districts in 11 states where engineering students were suffering because of dearth of teachers.
- The focus is on states like Uttar Pradesh, Uttarakhand, Tripura, Assam, Bihar, Jharkhand, Odisha and the Andaman and the Nicobar Islands.

4. Research Fellows Scheme

- Prime Minister's Research Fellows (PMRF) scheme, under which the top 3,000 B.Tech graduates of the country will get grants to pursue a PhD in the Indian Institutes of Technology (IITs) and Indian Institute of Science (IISc).
- Under this scheme, the best students who have completed or are in the final year of B.Tech or integrated M.Tech or M.Sc in science and technology streams in the IISc/IITs/NITs/IISERs/IITs will be offered direct admission in the PhD programme in the IITs/IISc

- The students, who would fulfil the eligibility criteria and get shortlisted through the selection process as laid down in the PMRF guidelines, would be offered a fellowship of Rs70,000 per month for the first two years, Rs75,000 per month for the third year and Rs80,000 per month in the fourth and fifth years
- Apart from this, a research grant of Rs2 lakh each will be provided to the fellows for a period of five years to cover their foreign travel expenses for presenting research papers at international conferences and seminars.
- The cabinet approved the scheme at a cost of Rs1,650 crore for a period of seven years, beginning 2018-19.
- The scheme was announced by Union finance minister Arun Jaitley during his budget speech

5. Revitalising Infrastructure and Systems in Education (RISE)

- It has total investment of Rs 1 lakh crore in the next four years.
- The government proposed to revitalize infrastructure, opening schools for Scheduled Tribe population as well as promoting programmes for teachers, in order to improve quality education for students
- Under RISE, all centrally-funded institutes (CFIs), including central universities, IITs, IIMs, NITs and IISERs, can borrow from a Rs 1,00,000 crore corpus over the next four years to expand and build new infrastructure.
- With the introduction of RISE, all financing for infrastructure development at CFIs will be done through the Higher Education Funding Agency (HEFA), which was set up by the government as a Section 8 company (a company with charitable objectives) last year to mobilize funds from the market and offer 10-year loans to centrally-run institutes.

6. War on 'Education Mafia'

- Uttar Pradesh Govt is all set to clamp down on cheating in exams by taking help from the Special Task Force and local intelligence agencies
- The objective is "copying-free examinations" and preventing the education mafia from doing mischiefs

Details

- The government has made it mandatory for examination centres to have CCTV cameras
- The government has made its stand clear — no unfair means would be tolerated and anyone found copying or promoting it would be dealt with strictly.

Measures Taken

- The measures to prevent cheating include frisking students before they enter the examination halls, dividing centres in sectors, appointing administrative officers as sector magistrates and issuing prohibitory orders within 100 metres of the centre.

ART AND CULTURE

1. International Kala Mela

- The International Kala Mela has been organized by the Lalit Kala Akademi in partnership with IGNCA of the Ministry of Culture. More than 800 artists from across the world are taking part in the Festival.
- The central objective of Kala Mela is to focus on direct interaction between the artist and the connoisseur and also educating and raising awareness about art, which has been the mandate of Lalit Kala Akademi.
- This comprehensive outreach shall include the participation of National, International level Artists/ Art Critics of repute from all over the Globe.

2. Kathakali

- Dazzling classical dance of Kerala is Kathakali. 'Katha' = Story or tale, 'Kali' = Performance and Art. Its roots are in ancient 'Kutiyattam' (Classical Sanskrit Dance Drama) and 'Krishnattam' (Dance-Drama depicting Stories of Hindu God Krishna).
- Movements in Kathakali are influenced by ancient martial arts and athletic tradition. It is basically a Dance-Drama.
- Kathakali was traditionally a male-dominated dance and now females are too welcomed in this dance form. Kathakali is also famous for its huge elaborate costumes, amazing make-up style, face masks, and ornaments.
- Unlike other Classical Dances, Kathakali art form developed in the courts and theaters of Hindu principalities. The traditional performances were used to be as long from Dusk to dawn. Modern day presentations are short as per the time limit of the program. The Kerala Kalamandalam is the main center for Kathakali Artists.
- Kathakali has similarities with other dance forms like that of the Japanese 'Noh' and 'Kabuki' dance forms have similarities with Kathakali.

The main themes used in Kathakali

- Mythological themes include Ramayan, Mahabharat, Bhagvat Purana, etc.
- Also modern day Kathakali dancers present stories and plays of Shakespeare

The makeup for Kathakali

- According to the role of the dancer, his face is colored/painted.
- The colors are made in rice paste with vegetable colors and applied on the face.
- The Green for Noble characters.

- Tati (Red) for evil like Ravana.
- Kari (black) for hunters and monsters.
- Yellow for women etc.

3. Khajuraho Dance Festival

- Khajuraho dance festival, organised by the Madhya Pradesh Kala Parishad, is a one-week festival of classical dances held annually against the spectacular backdrop of the magnificently lit Khajuraho temples
- Khajuraho Festival of Dances is celebrated at a time when the hardness of winter begins to fade and the king of all seasons, spring, takes over.
- The most colorful and brilliant classical dance forms of India with their roots in the ling and rich cultural traditions across the country will be showcased.

4. Kelyanchi Zatra

- It is a Banana festival at Calangute at the Babreshwar Temple in the state of Goa
- The roof of the temple is decorated with raw bananas which are later auctioned off.

5. Tableeghi Jamaat Ijtema

- The movement was started in 1927 by Muhammad Ilyas al-Kandhlawi in India
- Its stated primary aim is spiritual reformation of Islam by reaching out to Muslims across social and economic spectra and working at the grassroots level, to bring them in line with the group's understanding of Islam.
- Tablighi Jamaat began as an offshoot of the Deobandi movement, and a response to perceived deteriorating moral values and a supposed negligence of aspects of Islam.
- The aim of the event is universal peace, brotherhood, development of country.

6. 42 Indian languages stare at extinction

- More than 40 languages or dialects in India are considered to be endangered and are believed to be heading towards extinction as only a few thousand people speak them, officials said.
- According to a report of the Census Directorate, there are 22 scheduled languages and 100 non-scheduled languages in the country, which are spoken by a large number of people — one lakh or more.
- However, there are 42 languages which are spoken by fewer than 10,000 people. These are considered endangered and may be heading towards extinction.

- A list prepared by UNESCO has also mentioned about the 42 languages or dialects in India that are endangered and they may be heading towards extinction.

Which are the endangered languages in India?

- The languages or dialects which are considered endangered, include 11 from Andaman and Nicobar Islands (Great Andamanese, Jarawa, Lamongse, Luro, Muot, Onge, Pu, Sanenyo, Sentilese, Shompen and Takahanyilang), seven from Manipur (Aimol, Aka, Koiren, Lamgang, Langrong, Purum and Tarao) and four from Himachal Pradesh (Baghati, Handuri, Pangvali and Sirmaudi).
- The other languages in the endangered category are Manda, Parji and Pengo (Odisha), Koraga and Kuruba (Karnataka), Gadaba and Naiki (AP), Kota and Toda (Tamil Nadu), Mra and Na (Arunachal Pradesh), Tai Nora and Tai Rong (Assam), Bangani (Uttarakhand), Birhor (Jharkhand), Nihali (Maharashtra), Ruga (Meghalaya) and Toto (West Bengal).

Central Institute of Indian Languages

- The Central Institute of Indian Languages, Mysore, has been working for the protection and preservation of endangered languages in the country, under a central scheme.
- It is part of the Language Bureau of the Ministry of Human Resource Development

7. Nyokum Festival

- Nyokum Festival is the most prominent festival of Arunachal Pradesh celebrated by the Nyishi tribe.
- It is celebrated every year on 26th February with great zeal and spirit to invoke God's blessings for good harvest and communal harmony.
- Nyokum comprises of two words: Nyok meaning land and Kum meaning people.
- On this festival, a special prayer structure called yugang is made of bamboo. With the bamboo, sacrificial animals are tethered. It's the priest who decides the number and kinds of animals for sacrifice, or any other offering to be made. There is no idol in the Puja.

MISCELLANEOUS NEWS

1. Exam Warriors

- The book, titled 'Exam Warriors', aims to get through to students across the country on the threshold of examinations, and hopes to help them thread the needle with ease.
- It is a book authored by Prime Minister Narendra Modi for students facing exams
- In the book, the PM has penned down almost 25 mantras for students as well as their parents and teachers on how to tackle exams without stress and anxiety.
- The book highlights issues of importance to students such as coping with exam related stress, keeping calm during exams as well as what to do after the exams get over, a statement by the publishing house reads.

2. Galvanizing Organic Bio-Agro Resources Dhan (GOBAR-DHAN)

- In an effort to make the villages open defecation free and improving the lives of villagers, the Finance Minister in his budget speech announced the launch of GOBAR-DHAN
- This will manage and convert cattle dung and solid waste in farms to compost, bio-gas and bio-CNG.

3. Legion of Honour

- The Legion of Honour, full name, National Order of the Legion of Honour is the highest French order of merit for military and civil merits, established in 1802 by Napoléon Bonaparte and retained by all the divergent governments and regimes later holding power in France, up to the present.
- The order's motto is "Honneur et Patrie" ("Honour and Fatherland") and its seat is the Palais de la Légion d'Honneur next to the Musée d'Orsay, on the left bank of the River Seine in Paris

Context

- Veteran Bengali actor Soumitra Chatterjee receives the Legion of Honour

4. Meldonium

- Meldonium gives sufferers of heart and circulatory conditions more "physical capacity and mental function" and a similar boost to healthy people.
- Meldonium was banned because it aids oxygen uptake and endurance.

5. Trimetazidine

- Trimetazidine is used to treat heart conditions but is also classed as a metabolic modulator by the World Anti-Doping Agency because it has performance-enhancing properties

6. Mumbai airport jets into the record books

- With 980 arrivals and take offs in 24 hours, it has become the world's busiest single runway airport
- With this, the Mumbai Chhatrapati Shivaji airport bettered its own feat of 974 flights in 24 hours
- Though India's second largest airport has the record breaking numbers, Gatwick airport, UK's second largest airport, is still the most efficient single-runway airport in the world.

Details

- The Sydney based Centre for Asia Pacific Aviation (CAPA), in its 2017 annual report, said the Mumbai airport, which has reached 94% of its maximum passenger handling capacity, would reach saturation point in 2018.
- In terms of passengers again, Mumbai pips Gatwick with 45.2 million people flying in and out in fiscal 2017 as against 44 million at Gatwick.
- According the U.K's Airport Coordination Ltd, Gatwick's single runway declared an aircraft handling capacity of 870 flight movements per day for summer 2017.
 - * But, unlike the Mumbai airport, which is functional 24 hours a day, Gatwick handles most of its flights between 5 a.m. and midnight because of a night curfew in force since 1971.
 - * In terms of numbers, the peak handling capacity of Gatwick's single runway is 55 air traffic movements an hour, while Mumbai is inching closer with 52 movements.

7. One District, One Product

- The Uttar Pradesh Cabinet has approved 'one district, one product' scheme to promote products indigenous to every district
- Under this, one product indigenous to every district would be showcased at the three-day UP Diwas

8. Parivartan scheme

- The Haryana government launched Parivartan, a scheme designed to address 10 issues, including cleanliness and pollution, in 46 developmental blocks of the state.

- The 10 issues include facilitation of financing, making agriculture profitable and sustainable, improving health services, implementing Swachh Bharat, decongesting market areas, engaging the youth, checking air pollution, ensuring availability of identity-related services, effective policing, and ensuring road order and conduct.
- Under the Ek Aur Sudhar Programme, they would be rolling out one reform every month after massive public consultations
- In the same series, the state government has constituted the Ponds Management Authority and the Kisan Kalyan Pradhikaran.

9. **Red Queen hypothesis**

- This refers to an idea in evolutionary theory which states that all species are under constant pressure to evolve into better organisms in order to survive amidst competition.
 - * Rabbits, for instance, need to continuously evolve to run faster over time, or their population would be completely destroyed by foxes.
 - * Foxes, on the other hand, will have to constantly evolve to run faster over time, or they would be unable to hunt down rabbits that satisfy their dietary needs for survival.
- The hypothesis, which is named after the Red Queen's race in Lewis Carroll's 1871 novel *Through the Looking-Glass*, was first proposed by American biologist Leigh Van Valen.

10. **Saadhikara Mitras**

- 'Sadhikara mitras' are leaders of self help groups
- Andhra government has started the concept of "Sadhikara Mitra", wherein each woman will be responsible for 35 families.
- She has to explain about the benefits of govt schemes, create awareness among public, and also ensure that the benefits reach the rightful stakeholders.

11. **Shram Awards**

- The objective of the Prime Ministers Shram Awards is to recognize the outstanding contributions made by workmen as defined in the Industrial Dispute Act, 1947 in organizations both in public and private sector and who have distinguished record of performance, devotion to duty of a high order, specific contribution in the field of productivity, proven innovative abilities, presence of mind and exceptional courage and also to the workmen who have made supreme sacrifice of laying down their lives in the conscientious discharge of their duties.

They are four types of awards

- Shram Ratna: Rs. Two lakhs and recognition of their contribution to their field (a Sanad).
- Shram Bhushan: RS. 100000 and a Sanad.

- Shram Vir / Shram Veerangana: RS. 60000 and a Sanad.
- Shram Devi / Shram Shree: RS. 40000 and a Sanad.

Ministry of Labour and Employment announces Prime Minister's Shram Award every year. These awards are given to the workers in the Public Sector Undertakings, Departmental Undertakings of the Central and the State Governments and Private Sector units employing 500 or more workers in recognition of their distinguished performance, innovative ability, outstanding contribution in the field of productivity and exhibition of exceptional courage and presence of mind.

PRACTICE QUESTIONS

1. Which of the following scripts are written from right to left

1. Arabic
2. Hebrew
3. Chinese
4. Urdu
5. Sarada

The correct code is

- A. 1, 2 and 3
- B. 1, 2, and 4
- C. 1, 2, 4 and 5
- D. All of the above

2. Look at the following statements about Orphan crops

1. These are used in Research and development for producing Bio Energy products
2. They are not traded internationally
3. The help to fight climate change

Which of the statements given above is/are correct?

- A. Only 1 and 2
- B. Only 2 and 3
- C. Only 1 and 3
- D. All of the above

3. In which city the Indian Railways flagged off India's first air-conditioned suburban local train?

- A. Mumbai
- B. Jaipur
- C. Chennai
- D. Kolkata

4. The government of India Provides Muktijodha Scholarship Scheme to

- A. Children of Kashmir to prevent them in engaging in Stone Pelting
- B. To study in IIT's for economical weak students from North east region
- C. children of freedom fighters in Bangladesh
- D. Women after the withdrawal of Haj Subsidy

5. With respect to Legion of Honour, consider the following statements

1. It is an award initiated by Germany Govt.
2. This was given to Soumitra Chatterjee of India recently.

Select the correct answer using the code given below.

- A. Only 1
- B. Only 2
- C. Both are correct
- D. None of them is correct

6. With reference to Project 75I, consider the following statements

1. Indian Navy intends to acquire 6 diesel-electric submarines
2. INS Druva is the second Submarine after Kalavari
3. Kalavari is named after the Island fort of Maratha forces

Select the incorrect answer using the code given below.

- A. Only 1 and 2
- B. Only 2 and 3
- C. Only 1 and 3
- D. All of the above

7. Hill Area Development Programme was initiated for

- A. Himachal Pradesh
- B. North East
- C. Darjeeling
- D. Naxal affected Areas

8. Safe Harbour Regime was notified by

- A. Ministry of Water resources
- B. Ministry of Finance
- C. Ministry of Shipping
- D. Ministry of Commerce

9. ANUGA is related to

- A. Military exercise between India and Australia
- B. Food Exhibition
- C. Youth Festival
- D. Defense Summit

10. KUSUM Scheme recently in news is related to

- A. A scheme to provide loans to farmers as Price Stabilization Mechanism
- B. Health insurance component under Ayushman Initiative
- C. Organic farming to reduce Soil Pollution
- D. A scheme for promoting decentralized solar power production to help farmers

11. Look at the following statements about Nifty

- 1. It is based upon 50 firms in India.
- 2. It is regulated by the Reserve Bank of India.
- 3. It does not trade in mutual funds.

Select the correct answer using the code given below

- A. 1 only
- B. 2 only
- C. 3 only
- D. 1 and 3

12. J curve in the economics is related to

- A. It is a type of cost-of-living index that uses an expenditure function such as one used in assessing expected compensating variation
- B. Show the relationship between tax rates and the amount of tax revenue collected by governments
- C. The inverse relationship between unemployment rate and inflation
- D. Refers to the trend of a country's trade balance following a devaluation

13. With reference to the Baltic Dry Index, consider the following statements

- 1. It is an economic indicator issued daily by the London-based Baltic Exchange
- 2. They are restricted to Baltic Sea Countries

Select the correct answer using the code given below.

- A. Only 1
- B. Only 2
- C. All of the above
- D. None of the above

14. Great Firewall is a tool

- A. Used by Google to Prevent Penetration of Viruses in its core Network
- B. A USA Program to monitor any security breach in its defence establishment
- C. A security alert to Prevent attacks like Ransomware
- D. A Chinese censorship system to control social media

15. Sela Pass is located in which of the State?

- A. Himachal Pradesh
- B. Uttarakhand
- C. Sikkim
- D. Arunachal Pradesh

16. Consider the following about allotment of Budget to MEA

- 1. It is based upon 50 firms in India.
- 2. It is regulated by the Reserve Bank of India

Select the incorrect answer using the code given below.

- A. Only I
- B. Only II
- C. Both are correct
- D. None of them is correct

17. Amyloid beta is linked to which Disease?

- A. Diabetes
- B. Measles
- C. Alzheimer
- D. Zika

18. With reference to bamboo, consider the following statements

- 1. Bamboo is classified as a Tree
- 2. National Bamboo Mission with 50:50 contributions between center and state

Select the incorrect answer using the code given below.

- A. Only 1
- B. Only 2
- C. Both are correct
- D. None of them is correct

19. Operation Green in Budget is related to

- A. An infrastructure corridor along the Western Ghats
- B. An operation to Plant trees in the highway to reduce Air Pollution
- C. A Program for rejuvenating all rivers by stopping all development programs around them
- D. It is essentially a price fixation scheme that aims to ensure farmers are given the right price for their produce

20. Sultan Bin Zayed Heritage Festival is held in which country?

- A. Saudi Arabia
- B. Iran
- C. United Arab Emirates
- D. Qatar

21. With respect to Akashvani Maitree, consider the following statements

- 1. Akashvani Maitree is AIR's cross-border Myanmar service
- 2. To counter the presence of CRI (Chinese Radio International with its strong programming)

Select the correct answer using the code given below.

- A. Only 1
- B. Only 2
- C. All of the above
- D. None of the above

22. With reference to core of the core Schemes, consider the following statements

- 1. The funding is in the ratio 75:25
- 2. MGNREGA is included in the classification
- 3. Development of Backward Classes and other vulnerable groups are not included

Select the correct answer using the code given below.

- A. Only 1 and 2
- B. Only 2 and 3
- C. Only 1 and 3
- D. All of the above

23. Schizophrenia is related to

- A. A hereditary disorder which leads to increase in performance of Thyroid glands
- B. A breathing Problem due to increase in Pollution levels
- C. A chronic and severe mental disorder that affects how a person thinks, feels, and behaves.
- D. A chronic neurodegenerative diseases

24. Which of the following statements are correct with reference to SECURE Himalaya?

- 1. It is to ensure conservation of locally and globally significant biodiversity, land and forest resources in the high Himalayan ecosystem
- 2. It is launched by the Union environment ministry in association with WWF Protection of snow leopard and other endangered species and their habitats is one of the key components of the project

- A. All of the above
- B. Only 2
- C. Only 1 and 3
- D. Only 2 and 3

25. Refugee's communities and their Origin

- 1. Chakmas Buddhists from Bangladesh
- 2. Hajongs Hindu from Bangladesh
- 3. Rohingya Muslims from Myanmar.

Which of them are correctly matched?

- A. Only 1 and 2
- B. Only 2 and 3
- C. Only 1 and 3
- D. All of the above

26. The oldest rocks are found in

- A. South Africa
- B. Brazil
- C. Alaska
- D. Western Australia

27. With 980 arrivals and take offs in 24 hours, it has become the world's busiest single runway airport. We are talking about

- A. Gatwick airport
- B. Delhi Airport
- C. Glasgow Airport
- D. Mumbai Airport

28. Arrange these from east to west

- 1. Port Louis
- 2. Male
- 3. Victoria
- 4. Moroni
- A. 2431
- B. 2341
- C. 1234
- D. 2134

29. Which of the following air pollutants are considered for determining the Air Quality Index?

1. Ozone
 2. Carbon dioxide
 3. Sulphur dioxide
 4. Nitrogen dioxide
 5. Carbon monoxide
 6. Particulate Matter
- A. 1,2,3,4,5
B. 1,3,4,5,6
C. 2,3,4,5,6
D. 1,2,3,5,6

30. Consider the following statements in relation to Solid Waste Management Rules, 2016.

1. These rules extend to households and street vendors as well.
2. Duties of waste generators and authorities have been mentioned in the rules.
3. There is a provision for reviewing the implementation of these rules on various stages.

Which of the above statement/s is/are correct?

- A. Only 1
B. Only 1 and 2
C. Only 1 and 3
D. All of the above

31. In which of the following fields do we find applications of Augmented Reality?

1. Education
2. Healthcare
3. Robotics
4. Navigation
5. Urban Planning
6. Tourism

Choose the incorrect statements from the options given below

- A. 1, 2 and 4 only
B. 1, 2, 4 and 6 only
C. 1, 2 and 6 only
D. All of the above

32. Consider the following statements.

1. National Bank for Agriculture and Rural Development (NABARD) was formed to promote sustainable and equitable agriculture and rural development.
2. It has financial, developmental and supervisory roles.
3. Rural Infrastructure Development Fund (RIDF) created under NABARD can be utilized for agriculture and social sector.

Which of the above statement/s is/are incorrect?

- A. Only 1
B. Only 2
C. Only 2 and 3
D. None of the above

33. Consider the following statements:

1. Pradhan Mantri Ujjwala Yojana is meant to provide cooking-gas connections to rural women.
2. The deadline for achieving the target is 2020.

Which of the above statement/s is/are correct?

- A. Only 1
B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

34. Justice K.S. Radhakrishnan Committee has been appointed in relation to:

- A. Road Safety
B. Issue of PIL
C. Ban of Crackers
D. Issue of MSP

35. Prithvi II is a missile:

1. Developed by ISRO.
2. Range of the missile is 350 km.

Which of the above statement/s is/are correct?

- A. Only 1
B. Only 2
C. Both 1 and 2
D. Neither 1 nor 2

36. Corbett National Park is:

1. It is the country's first National Park and is located in the state of Uttarakhand.
2. It has also been declared as an Important Bird Area.

Which of the above statement/s is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

37. Kelyanchi Zatra is related to:

- A. Festival in Goa
- B. Tribal event in Nagaland
- C. Animal race in Maharashtra
- D. Annual Village fair in Telangana

38. Consider the following statements about Rafale Jets:

1. Rafale jets are manufactured by the German company Dassault Aviation.
2. They are medium multi role combat aircraft.

Which of the above statement/s is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

39. Consider the following statements about Research Fellow Scheme:

1. Under the scheme, the top 3000 B. Tech graduates will get grants to pursue a PhD.
2. The scheme was announced by Union finance minister Arun Jaitley during his budget speech.

Which of the above statement/s is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

40. Consider the following statements about Down Syndrome:

1. Down syndrome (DS or DNS), also known as trisomy 21, is a genetic disorder.
2. There is no cure for Down syndrome.

Which of the above statement/s is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

41. Consider the following statements about Nathu La Pass:

1. It is a mountain pass in the Himalayas in East Sikkim district.
2. Nathu means "listening ears" and La means "pass" in Tibetan.

Which of the above statement/s is/are correct?

- A. Only 1
- B. Only 2
- C. Both 1 and 2
- D. Neither 1 nor 2

42. Consider the following statements:

1. Polavaram Project is a multi-purpose irrigation project which has been accorded national project status by the union government.
2. This dam is across the Godavari River.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

43. Which of the following are the parameters of Special Category Status?

1. Low resource base, hilly & difficult terrain
2. Non-viable nature of state finances

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

44. J-20 stealth fighter is a fighter aircraft developed by :

- A. China
- B. Japan
- C. India
- D. Russia

45. Zinc Fingers and TALENs are related to

- A. Cyber Security
- B. A product by Google to Prevent Plagiarism
- C. An environmental tool to fight water Pollution
- D. Gene editing Technique

46. The Priyadarshini Scheme in news is related to

- A. Promotion of online market for women entrepreneurs
- B. Providing nutritional updates to Pregnant women in Rural and tribal areas
- C. Livelihood enhancement Project in mid gangetic plains
- D. Targeted conditional cash transfer scheme aimed at retaining girls in schools and other educational institutions

47. Consider the following statements regarding Nai Manzil

1. The scheme will address educational and livelihood needs of minority communities in general and Muslims in particular
2. The scheme aims at providing educational intervention by giving the bridge courses to the trainees and getting them Certificates for Class XII only from distance medium educational system and at the same time also provide them trade basis skill training in 6 courses

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

48. With reference to National Investment Fund (NIF), consider the following statements

1. Purpose of the fund was to receive disinvestment proceeds of central public sector enterprises and to invest the same to generate earnings
 2. Earnings of the Fund were to be used for selected Central social welfare Schemes
 3. Fund is part of consolidated fund of India
- A. 1 and 2 only
 - B. 2 and 3 only
 - C. 1 and 3 only
 - D. All of the above

49. 'Susu' lives in which of these regions?

- A. Ganga River System
- B. Western Ghats
- C. Silent Valley
- D. Chilka Lake

50. Consider the following statements:

1. The World Government Summit is an annual event held in Dubai, UAE
2. The first World Government Summit was held in Dubai in 2013, and has been held annually since then

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

51. Consider the following statements:

1. A sovereign wealth fund (SWF) consists of pools of money derived from a country's reserves
2. National Infrastructure and Investment Fund (NIIF) is a fund created by the Government of India for enhancing infrastructure financing in the country.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

52. Consider the following statements:

1. Snow and Avalanche Study Establishment (SASE) is one of the laboratories of the ISRO located at Chandigarh.
2. The SASE is the nodal agency for issuing advisories and warnings about the avalanche in the country.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

53. Consider the following statements:

1. Kaziranga National Park is located in the State of Assam
2. Kaziranga is home to the highest density of tigers among protected areas in the world.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

54. Consider the following statements:

1. The Wildlife Protection Act, 1972 is an Act of the Parliament of India enacted for protection of plants and animal species.
2. Schedule I and part II of Schedule II provide absolute protection – offences under these are prescribed the highest penalties.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

55. Consider the following statements about Lucky latitudes in Geography:

1. This refers to the geographical regions where the practice of domestication of wild plants and animals began to happen for the first time in human history.
2. People located in these geographic regions gained a headstart over the rest of the world.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

56. Global Relay of Observatories Watching Transients Happen (GROWTH) project is related to:

- A. An international network specifically designed to watch dynamic events in the universe
- B. NASA project on Solar Flares
- C. ISRO communication satellite
- D. China's Space observatory

57. Consider the following statements about Transients in Astronomy:

1. They are objects and events occur in the universe which needs to be caught very young and soon after they happen.
2. Gravitational wave events too fall in this category of transients.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

58. Consider the following statements about Magnesium diboride:

1. Indian scientists have developed world's thinnest material with this material.
2. Such a material can find a range of applications – from next-generation batteries to ultraviolet absorbing films.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

59. Consider the following statements about Magnesium diboride:

1. Graphene – a single layer of carbon arranged in a honeycomb – isolated from pencil graphite.
2. The graphene discovery had won the Nobel physics prize in 2010.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

60. Consider the following statements:

1. Boron has attracted nanotechnology researchers because of its rich properties.
2. The rich chemistry of boron is expected to make these nanosheets useful for not only storing energy but also for generating energy in a green way.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

61. Consider the following statements about FATF:

1. FATF is an initiative of the G7 countries to combat money laundering.
2. The FATF Secretariat is housed at the headquarters of the OECD in Paris.

Which of the following statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

62. Consider the following statements about UN Global Counter-Terrorism Strategy:

1. Addressing the conditions conducive to the spread of terrorism is one of the pillars of the strategy.
2. The General Assembly reviews the Strategy every two years.

Which of the following statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

63. Consider the following statements about New Insolvency rules announced by RBI:

1. Banks will have to file for insolvency proceedings against loan defaulters with Rs 20 billion (\$311 million) or more if a resolution plan is not implemented within 180 days of the initial occurrence of default.
2. Any process involving restructuring or change in ownership for large accounts with loans of 5 billion rupees or more will need independent credit evaluation by credit rating agencies that are authorized by the RBI.

Which of the following statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

64. Consider the following statements about Special Mention Account:

1. Before a loan account turns into a NPA, banks are required to identify incipient stress in the account.
2. SMA-0 is an account in which principal or interest payment not overdue for more than 30 days but account showing signs of incipient stress.

Which of the following statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

65. Consider the following statements about Nirbhaya Fund:

1. The Ministry of Finance had set up a dedicated fund called Nirbhaya Fund in 2013.
2. Ministry of Women and Child Development is the nodal Ministry to appraise schemes under Nirbhaya Fund and also to review and monitor the progress of sanctioned Schemes.
3. It is a lapsable corpus fund.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

66. Consider the following statements about Emergency Response support System:

1. It aims to integrate all emergency numbers to 112 with state of art technology.
2. ERSS envisages an integrated computer aided emergency response platform to respond to distress calls and ensure speedy assistance to the distressed persons.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

67. Consider the following statements about Minimum Support Prices (MSP):

1. MSP is price at which government purchases crops from the farmers, whatever may be the price for the crops.
2. The minimum support prices are announced by the Government of India at the beginning of the sowing season for certain crops on the basis of the recommendations of the Ministry of Agriculture.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

68. Consider the following statements about Fair Average Quality (FAQ):

1. FAQ is used to describe food products that are of good enough quality to be sold.
2. Samples from different parts of the available stock of produce offered for sale are collected and they are submitted under seal to independent assessors for appraisal.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

69. Consider the following statements about McMahon Line:

1. The McMahon Line is a line agreed to by Britain and Tibet as part of the Simla Accord, a treaty signed in 1914.
2. The McMahon Line is regarded by India as the legal national border. It is disputed by China.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

70. Consider the following statements about Helsinki Rules 1996:

1. It recognizes equitable use of water by each Basin State.
2. It takes into consideration only the geography and hydrology of the basin..

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

71. Consider the following statements about Chandrayaan-2:

1. It will be a totally indigenous mission.
2. Chandrayaan-2 is planned to be launched by GSLV Mk II in 2018.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

72. Consider the following statements about International Solar Alliance (ISA):

1. The alliance's primary objective is work for efficient exploitation of solar energy to reduce dependence on fossil fuels.
2. Countries that do not fall within the Tropics cannot join the ISA.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

73. Consider the following statements about Coffee crop:

1. The two well known species of coffee grown are the Arabica and Robusta.
2. Indian coffee is grown mostly in southern states under monsoon rainfall conditions.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

74. Consider the following statements about India Energy Security Scenarios:

1. The tool aims to explore a range of potential future energy scenarios for India, for diverse energy demand and supply sectors leading up to 2047.
2. BEEE launched the second version of the India Energy Security Scenarios 2047 calculator (IESS 2047).

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

75. Consider the following statements with respect to IRCON

1. It is a private Company working in collaboration with Govt in PPP Projects
2. It is a natural Gas organization which explores new regions for deposits

Which of the above statements are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

76. Which of the security groups is not correctly matched?

1. Border Security Force (BSF)- Pakistan and Myanmar
2. Central Reserve Police Force (CRPF)- Riots and Naxals
3. Indo-Tibetan Border Police (ITBP)- China
4. Sashastra Seema Bal (SSB).- Nepal only

Which of the above statements are incorrect?

- A. 1 only
- B. 3 and 4 only
- C. 1 and 4 only
- D. 2 and 3 only

77. Consider the following statements

1. Dawn is the only mission ever to orbit two extra-terrestrial targets.
2. The Dawn mission orbited giant asteroid Vesta and now continues to orbit Ceres.

Which of the above statements are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

78. INS Chakra

1. Is an indigenously constructed ballistic missile submarine.
2. Is a nuclear propelled, hunter-killer submarine.
3. is an Akula class Submarine and is to provide escort to INS Arihant.
4. Is a Russian made ballistic missile submarine

Which of the above statements are incorrect?

- A. 1 only
- B. 4 only
- C. 1 and 3 only
- D. 3 and 4 only

79. Consider the following statements about Chandrayaan-2:

1. Chandrayaan-2 will be ISRO's first inter-planetary mission to land a rover on any celestial body.
2. A rover is a space exploration vehicle designed to move across the surface of a planet or other celestial body.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

80. Consider the following statements about Light pollution:

1. Light pollution, also known as photo-pollution, is the presence of anthropogenic light in the night environment.
2. Its negative impacts include increasing energy consumption and disrupting the ecosystem and wildlife.
3. Frequent use of LED technology increases light pollution.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

81. Consider the following statements:

1. Jawaharlal Nehru Port is also known as Nhava Sheva.
2. JNP accounts for more than half of total container volumes..

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

82. Consider the following statements:

1. Assam is home to more than 50% of Indian rhinos.
2. Wildlife fast-track courts exclusively deal with poaching and other related crimes against wild animals.
3. Such courts have been set up for the first time in the country in the state of Madhya Pradesh.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

83. Consider the following statements with respect to Intermediary Trade:

1. Merchant is a Person who transfers good from one place to another without any value addition.
2. Merchanting transaction is one which involves shipment of goods from one foreign country to another foreign country involving an Indian Intermediary.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

84. Consider the following statements with respect to Letter of Credit:

1. Letter of Credit is an instrument for assured payments.
2. It is an undertaking of the issuing bank to make payment to the beneficiary.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

85. Consider the following statements with respect to Future Skills:

1. The platform offers skilling and up-skilling in Artificial Intelligence (AI), virtual reality, robotic process automation, Internet of Things.
2. It is an initiative of CII.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

86. Consider the following statements with respect to National Nutrition Mission:

1. It aims to reduce anemia among young children, women and adolescent girls by 3% a year.
2. Under NNM, the Ministries of Women and Child development, Health and Family welfare, and Water and Sanitation will work together.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

87. Consider the following statements:

1. Thadous are the largest Tribe in Assam according to Census 2011.
2. The Thoubal River originates in the hill ranges of Ukhrul and is an important tributary of the Imphal River in the state of Manipur.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

88. Consider the following statements about Olive Ridley Turtles:

1. The Olive ridley turtles are recognized as Vulnerable by the IUCN Red list.
2. International Trade in these turtles and their products is banned under CITES Appendix I.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

89. Consider the following statements about Mahanadi River:

1. Mahanadi River is divided almost equally between Chhattisgarh, where it is born, and downstream Odisha.
2. It deposits more silt than any other river in the Indian subcontinent.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

90. Consider the following statements about the Chardham Highway Project:

1. The Chardham Mahamarg Vikas Pariyojna is an initiative to improve connectivity to the Char Dham pilgrimage centres in the Himalayas.
2. The project will be built under Engineering, Procurement and Construction (EPC) Mode.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

91. Consider the following statements about Sophia:

1. Sophia is a social humanoid robot.
2. It is the first non-human to be given any United Nations title.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

92. Consider the following statements:

1. Brabo is touted as India's first indigenously made industrial articulated robot for micro, small and medium enterprises.
2. Indore has become the India's first city where robot is being used on an experimental basis to control its ever growing and unruly traffic.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

93. Consider the following statements:

1. A majority disinvestment is one such that, at the end of it, the government retains a majority stake in the company, typically greater than 51%, thus ensuring management control.
2. A minority disinvestment is one in which the government, post disinvestment, retains a minority stake in the company i.e. it sells off a majority stake.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

94. Consider the following statements about Privatisation:

1. Complete privatisation is a form of majority disinvestment wherein 100% control of the company is passed on to a buyer.
2. Improving public finances is one of the objectives of privatization.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

95. Consider the following statements:

1. The Haryana government launched Parivartan, a scheme designed to address 10 issues, including cleanliness and pollution
2. 'Sadhikara mitras' are leaders of self help groups in Andhra Pradesh

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

96. Consider the following statements about NAM scheme:

1. Under the NAM scheme, the Small Farmers' Agribusiness Consortium will be the lead agency responsible for the development of the national agricultural market under the ministry of agriculture
2. Under the scheme, private markets will not be allowed access to the e-platform thereby enhancing its outreach

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

97. Aarambh is an initiative of:

- A. Ministry of Home Affairs
- B. Ministry of Women
- C. CII
- D. A network of organizations and individuals

98. Consider the following statements about Kandariya Mahadeva Temple:

1. The Kandariya Mahadeva Temple is located in Odisha.
2. It is dedicated to Lord Vishnu only.
3. It was built by Vidyadhara of Chalukyan dynasty.

Which of the above statements are incorrect? W

- A. 1 and 2 only
- B. 2 and 3 only
- C. 2 only
- D. All of the above

99. Which of the above statements are incorrect?

1. Khajuraho Temple is located in MP.
2. Khajuraho Festival of Dances is organised by the Ministry of Tourism.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

100. Consider the following statements about Credit Crunch:

1. An economic situation where banks and other financial institutions become extremely reluctant to provide loans to businesses.
2. An economic crisis where countries are not able to get funding from World Bank.
3. It also known as credit squeeze.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. All of the above

101. Which will be the first city to introduce Heli Taxi service in India?

- A. Bangalore
- B. Hyderabad
- C. Chennai
- D. Mumbai

102. Consider the following statements:

1. H1B is a work visa in U.S
2. H4 Visa is an inter-transfer work visa.
3. L1B is a visa for dependent of H1B visa holder.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 1 and 3 only
- C. 2 and 3 only
- D. 1 only

103. Consider the following statements:

1. FATF is an inter-governmental body to combat money laundering and terror financing
2. It maintains grey and black lists to identify countries with weak measures

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

104. Consider the following statements:

1. Trans-Afghanistan Pipeline is a natural gas pipeline being developed by the Asian Development Bank.
2. India has to pay a transit fee to Pakistan and Iran as the pipeline passes through these nations.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

105. The Industry with highest weight amongst the eight core Industries of India is Which of the above statements are correct?

- A. Refinery Products
- B. Coal
- C. Cement
- D. Electricity

106. India's first ever Mega Textiles Trade Fair was held in

- A. Delhi
- B. Varanasi
- C. Mysore
- D. Gandhinagar

107. Consider the following statements about Saolas

1. It is endemic to Western Ghats
2. It is a endangered animal

Which of the above statements are incorrect?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

108. Consider the following statements with respect to Jira river

1. It is a tributary of Mahanadi
2. It flows through the region of Chhattisgarh

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. Neither 1 nor 2

109. Consider the following statements:

1. Rustom-2 is a type of UAV.
2. It can fly up to an altitude of 22,000 feet.
3. It is capable of carrying payloads for electronic and signal intelligence missions.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

110. Look at the following statements about Soft power Index:

1. It is topped by Canada because of its Diversity and Immigration laws.
2. USA lost to Canada because of its Anti-Immigration Stance.
3. India Jumped from 33rd to 16th position with spread of its cultural diaspora.
4. China makes the cut at 25th, and Brazil and Turkey round it off at 29 and 30.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 1 only
- C. 1, 2 and 3 only
- D. 4 only

111. Consider the following statements:

1. Coal India Limited (CIL) was set up in 1975.
2. CIL is the world's largest coal-producer.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

112. Consider the following statements:

1. Carbon footprint is the total amount of greenhouse gases produced to only those activities which directly support human beings.
2. It is usually expressed in equivalent tons of carbon dioxide (CO₂).
3. Other greenhouse gases like methane and ozone are normally also taken into account for the carbon footprint.

Which of the above statements are correct?

- A. 1 and 2 only
- B. 2 and 3 only
- C. 1 and 3 only
- D. All of the above

113. Consider the following statements:

1. Earth's seasons and weather cannot influence the ionosphere.
2. NASA's GOLD (Global-scale Observations of the Limb and Disk) mission will measure the temperature and makeup of gases in the stratosphere.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

114. Consider the following statements:

1. Uranium, thorium and potassium are the radioactive elements.
2. Jupiter's powerful gravitational attraction causes the Europa's orbit to be extremely elliptical.
3. Europa is the natural satellite of Jupiter.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

115. Consider the following statements about Deferred Action for Childhood Arrivals (DACA):

1. A measure that protected residents who entered the country illegally as children from deportation.
2. It is an initiative of Donald Trump.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

116. Nyokum Festival is celebrated in:

- A. Arunachal Pradesh
- B. Sikkim
- C. Assam
- D. Manipur

117. Consider the following statements:

- 1. Nyishi tribes are the largest ethnic group in Arunachal Pradesh.
- 2. The Nyishi are agriculturalists who practice jhum.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

118. Consider the following statements:

- 1. Pre-paid Payment Instruments (PPIs) are defined in the RBI Guidelines.
- 2. They are payment instruments that facilitate purchase of goods and services, including funds transfer, against the value stored on such instruments.
- 3. There is no interest earned on the money saved in it.

Which of the above statements are correct?

- A. 1 and 3 only
- B. 2 and 3 only
- C. 1 and 2 only
- D. All of the above

119. Consider the following statements:

- 1. MILAN is a congregation of littoral navies.
- 2. It is conducted annually by the Navy under the aegis of the Andaman and Nicobar Command..

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

120. Consider the following statements:

- 1. Dragonfly Project of NASA will explore the satellite of Jupiter.
- 2. Titan is the only satellite of Saturn.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

121. Consider the following statements about Fragile Five:

- 1. It is a term coined to represent emerging market economies that have become too dependent on unreliable foreign investment.
- 2. The members of the Fragile Five include: China, Brazil, India.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

122. Consider the following statements:

- 1. The Madhya Pradesh Assembly unanimously passed a Bill awarding death to those found guilty of raping girls aged 12 and below.
- 2. Madhya Pradesh becomes the first State where those convicted of such rapes will face the gallows.

Which of the above statements are correct?

- A. 1 only
- B. 2 only
- C. Both 1 and 2
- D. None of the above

ANSWER KEYS

Question No	Answer Keys
1.	B
2.	B
3.	A
4.	C
5.	B
6.	B
7.	B
8.	B
9.	B
10.	D
11.	A
12.	D
13.	A
14.	D
15.	D
16.	B
17.	C
18.	D
19.	D
20.	C
21.	B
22.	A
23.	C
24.	C
25.	D

Question No	Answer Keys
26.	D
27.	D
28.	D
29.	B
30.	D
31.	D
32.	D
33.	C
34.	A
35.	B
36.	C
37.	A
38.	B
39.	C
40.	C
41.	C
42.	C
43.	C
44.	A
45.	C
46.	C
47.	A
48.	D
49.	A
50.	C

Question No	Answer Keys
51.	C
52.	B
53.	C
54.	C
55.	C
56.	A
57.	C
58.	C
59.	C
60.	C
61.	C
62.	C
63.	A
64.	C
65.	C
66.	C
67.	C
68.	C
69.	C
70.	A
71.	C
72.	A
73.	C
74.	A
75.	C

Question No	Answer Keys
76.	C
77.	D
78.	A
79.	C
80.	D
81.	C
82.	C
83.	C
84.	
85.	A
86.	C
87.	C
88.	C
89.	C
90.	C
91.	C
92.	C
93.	D
94.	C
95.	C
96.	A
97.	D
98.	D
99.	A
100.	B

Question No	Answer Keys
101.	A
102.	D
103.	C
104.	A
105.	A
106.	D
107.	C
108.	D
109.	D
110.	D
111.	C
112.	B
113.	D
114.	D
115.	A
116.	A
117.	C
118.	D
119.	A
120.	C
121.	A
122.	C

MAINS PRACTICE QUESTIONS

Paper- 1

1. Is death Penalty an answer to Child rape? Critically Analyze. Also discuss Justice Verma committee recommendation and its recommendations on Rape
2. Empowering people with disability requires providing them employment and self-respect. In the light of this statement enumerate the steps taken by Govt to advance this goal.

Paper- 2

1. Arun Jaitley in the budget has said that MP's salary will be worked on a rational basis. In the light of this Statement what are criticism the present scheme faces, compare this with other countries and also suggest ways to overcome this issue.
2. The Political Culture in Maldives has moved from Colonialism to Autocracy, Democracy to Stamping of Opposition. Analyze.
3. Should Rape laws be Gender Neutral? Critically Comment
4. With the Human Papilloma Virus (HPV) vaccine into trouble once again, Discuss about the effectiveness of Clinical Trials and its implications on India and the world.
5. India and Maldives share a historic relationship. Discuss the need for India to resolve the present conflict in Maldives.
6. China is now mastering the arts of intervention that were once the monopoly of the European great powers. Explain.
7. Explain the political set up in Bangladesh and also throw light on their relationship with India and its implications on India.
8. Video conferencing in courts will advance the rule of law and bring accessibility and transparency in the administration of justice. Critically comment.
9. The President of India in Indian democracy is more symbolic than substantive. Justify your view
10. In the light of recent incident of HIV infections, Discuss the steps to be taken to deal with quackery in medicine in India.
11. Trace and analyze the India-Iran relationship and discuss how priorities of engagement with Iran has changed.
12. The supreme court has addressed all the important issues in its Cauvery judgment. Analyze. Also, comment on the responsibility of the state and center Govt in this regard.
13. There is a gender imbalance in lower Judiciary. What are the reasons for imbalance and what can the Govt do to overcome this issue?
14. There is need for Prison Reforms in India. What are the different problems faced by people in Jails? Illustrate with examples the reforms initiated and also suggest some measures
15. Supreme Court has imposed an additional disclosure norm for candidates contesting elections. Discuss the need for such a move in India.
16. Although India's salience in global matters grows, India's principal focus will need to be on its neighbourhood. Critically examine.
17. Will Venezuela debt crisis impact India? Critically Comment.
18. Justin Trudeau's indulgence towards Sikh separatists threatens the bilateral relationship with India. Critically Analyze
19. Post Truth Politics and Nationalization has led to drop in remittances. Discuss its impact on India and how can India overcome the issue?
20. Newborn mortality continues to haunt India. What are the various causes for this continued Problem and what can the Govt do to address the issue?
21. Is the Supreme Court verdict on Cauvery fair? Critically comment
22. What is soft power? How is it different from hard power? Illustrate with examples.
23. Minimum Government Maximum Governance is a mere slogan as that lacks maximum governance. Critically comment.
24. Discuss the border disputes in the Northeast region. What should the govt and civil society do to overcome this issue?

Paper- 3

1. With the US Govt planning to cut tax rates what would be the possible implications to India and the world? How should India react to such decisions?
2. With the Govt planning to fund Infrastructure projects in Border Areas, what are the various challenges that the security forces face in the borders and what has the Govt done to overcome this?
3. The budget is more than the economic horoscope of the nation. Comment.
4. Budget has ensured 'ease of doing business' and 'ease of living'. Explain
5. Human control over the use of force is a moral imperative and essential for promoting compliance with International law and ensure accountability. Explain the statement in the light of AI in defence.
6. Is it time for India to Consider a Special Track for Space Startup Incubation. Justify your View.
7. The Centre has decided to bring back the long-term capital gains tax (LTCG) on equities, which was scrapped in 2004-05. What are its possible implications? Discuss.
8. India has an unsatisfactory record of enforcing contracts. How can India overcome this challenge to improve ease of doing business?
9. What is augmented reality? Discuss the potential benefits of this technology.
10. What are the key differences between NeGP and e Kranti? Also, explain the challenges in its implementation.
11. What are the various Policy Initiatives taken up by the govt to support Electric vehicles? Also, discuss the challenges encountered and steps to overcome them.
12. The recently released Economic Survey has focussed and stressed that there should be an Increase in the budget for research in Science. Comment.
13. Missing the fiscal responsibility targets year after year and changing the statutory framework time and again bring the credibility of the government's commitment to fiscal discipline in the spotlight.
14. Can traditional and scientific medical systems be integrated? Examine.
15. What are Pressure Mines? Why are the Maoists deploying them? How can the Govt overcome this Problem?
16. Increased consumption of ultra-processed food linked to rising cases of cancer. Explain.
16. What are the reasons for continued increase of Acid Attacks? Also explain the Guidelines of Home ministry to curb this Menace.
17. A community well prepared is the key to effective management of disaster. In the light of this statement examine the role of community and local Govt as first responders with suitable examples
18. Fiscal Deficit is not just a financial issue but it has elements of politics involved in it as well. Comment
19. With CM of UP saying encounters won't stop, examine the issues with encounter killings. Also, provide details about supreme court ruling and recommendations from National Police Commission. How can this problem be addressed?
20. The new Anti Hijacking rules overcome the problems of the 1982 Act. Discuss.
21. Full benefit from linking agricultural markets in the country and putting them on electronic platform will come when a single trading license is valid across the country and when a farmer gets the option to sell her/his produce in any market throughout the country. Critically Examine in reference to NAM
22. Is the recent PNB scam a failure of banks or a failure of banking regulation? Discuss the role played by all the government agencies involved.
23. India and Canada need to engage openly and discuss the core concerns of each other. Explain the significance of the India-Canada bilateral relationship.

Paper- 4

1. If civil servants have empathy nothing else matter, if they don't have empathy again nothing else matters. Discuss.
2. With the number of cases increasing where the students are stabbing teachers, where do you think have the lessons gone wrong? In the light of this statement, comment on the importance of educational institutions in inculcating values.
3. It is vain to talk of the interest of the community, without understanding what is the interest of the individual. Explain from the ethical Perspective with suitable examples.
4. Cultural Ethos and values are different from Religious Commandments, it helps in building Unity. Explain with suitable examples

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A K Rastogi

(IAS Retd, Former
Secretary to Govt Of India)

Vineet Ohri

(IRS Retd, Former Chief
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ABOUT BYJU'S

We are the largest Education Technology (Learning) company in India that is re-inventing the learning system for students with its cutting-edge “Learning App”.

BYJU'S Learning App was launched last year and has witnessed extraordinary and impressive feat in revolutionizing the way we learn and today we have over 8 million students on its platform across the world. The Learning App is one of a kind that is designed using interactive simulations, watch-and-learn videos, rich animations, and enriched with content that gives conceptual clarity making learning contextual and visual, not just theoretical.



TAB



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Education Company Of
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Reimagine Education Award 2016
Overall Ed Tech winner Gold Award for Best
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Winner of
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