

IAS PARLIAMENT

A SHANKAR IAS ACADEMY INITIATIVE



2017

CURRENT AFFAIRS
FEB - 2017

IAS PARLIAMENT

A Shankar IAS Academy Initiative



CURRENT AFFAIRS - FEBRUARY - 2017



SHANKAR IAS ACADEMY™

Plot No.1742, 1st Floor, 18th Main Road, Anna Nagar, Chennai – 600 040.

Phone : 044-26216435, 64597222, 4353 3445, Mobile : 94441 66435

www.shankariasacademy.com

Published by

SHANKAR IAS ACADEMY

Plot No.1742, 1st Floor, 18th Main Road,

Anna Nagar, Chennai – 600 040.

Phone : 044-26216435, 4353 3445,

Mobile : 94441 66435 / 76677 66266

www.shankariasacademy.com

Email : enquiry@shankarias.in

We are Expanding

Now Shankar IAS Academy in

*Classroom Programs for UPSC 2018 Coaching in
Bengaluru & Thiruvananthapuram*

And

*India's only **Two Way** interactive Online Classes
for Civil Services Coaching*

Admission for UPSC 2017 Starts on

15.04.2017

For more Details Contact:

Thiruvananthapuram - 75919 02600 / 0471-6502600

Bengaluru - 81972 92121

www.shankariasacademy.com | www.iasparliament.com

IAS Parliament Contents

Sl.No.	Titles	Page No.
--------	--------	----------

PAPER - II

1. POLITY.....	8
1.1 Right to be forgotten	8
1.2 Aadhaar - Money Bill	9
1.3 Nagaland Violence.....	10
1.4 Neyyar River Water Dispute	11
1.5 Contempt of Court	12
1.6 NOTA.....	13
1.7 Jat quota protests	14
1.8 Competitive Backwardness.....	14
2. GOVERNMENT POLICIES AND INTERVENTIONS.....	16
2.1 The Enemy Property Ordinance	16
2.2 Women Reservation Bill	17
2.3 Real Estate Act, 2016	18
2.4 The Marriages Bill.....	19
2.5 Seed Bill	20
2.6 National Steel Policy, 2017.....	20
2.7 Implementation of e-NAM	21

Sl.No.	Titles	Page No.
3.	HEALTH	22
3.1	Measles-rubella vaccine	22
3.2	Treating MDR-TB	23
3.3	Open camps for Sterilisation	24
3.4	Health Care System for the Elderly	25
3.5	Over-Medicalization.....	26
4.	SOCIAL JUSTICE	27
4.1	Implementation of RTE Act.....	27
4.2	Assessing Students on International Standard	28
4.3	Solutions to Open Defecation Problem	29
4.4	Reluctance to become a Good Samaritan.....	30
4.5	Gated Communities	31
5.	INDIA AND ITS NEIGHBOURHOOD	32
5.1	Mastering in Evacuation	32
5.2	CPEC and the Baloch Insurgency	33
5.3	Sehwan Attack	34
5.4	India - Bangladesh	35
5.5	India China – Masood Azhar Issue.....	36
5.6	India China - Strategic Dialogue.....	37
5.7	Securing India’s Strategic Autonomy	38
6.	INTERNATIONAL RELATIONS	39
6.1	India - CLMV.....	39
6.2	Trump’s foreign policy.....	40

Sl.No.	Titles	Page No.
	6.3 What 'America First' means for India?	41
	6.4 India - Uganda & Rwanda.....	42
	6.5 Israel's Expanding Settlement.....	43
	6.6 One China Policy.....	44
	6.7 Greece struggling to meet Bailout conditions	45

PAPER III

7. BUDGET 2017	46
7.1 Key Features of Budget 2017-2018	46
7.2 Budget 2017 - Income Tax	50
7.3 Budget – Electoral Funding.....	51
7.4 Budget 2017 – Health.....	52
7.5 Defence Budget - Ignoring Modernisation	53
7.6 No Green Consciousness.....	54
7.7 Oil Major	55
8. ECONOMY	55
8.1 Public Sector Asset Rehabilitation Agency (PARA)	55
8.2 Universal Basic Income	57
8.3 RBI'S Monetary Policy	58
8.4 SBI Merger	58
8.5 State of the Economy	60
8.6 Holes in the Social Security Net.....	60
8.7 UDAY Scheme - Report Card	61
8.8 Spectrum Cap	63

Sl.No.	Titles	Page No.
	8.9 Cost Regulation on Cardiac stents	63
	8.10 Junking the TPP.....	64
	8.11 Steps to curb Thin Capitalisation	65
9.	SCIENCE AND TECHNOLOGY	66
	9.1 Non-fumigated wheat.....	66
	9.2 Why earth's inner core doesn't melt?	67
	9.3 ISRO – 104 Satellites	68
	9.4 Exoplanets.....	70
10.	ENVIRONMENT	71
	10.1 Role of Ponds in Global Warming.....	71
	10.2 Unprepared for Paris	72
	10.3 Bharat Stage IV Deadline	73
	10.4 Issue of Carbon Tax.....	74
	10.5 Ways to improve the Solar Sector.....	75
	10.6 Human Animal Conflict - Nagarhole Tigers	75
	10.7 Ennore Oil Spill.....	77
11.	INTERNAL SECURITY.....	78
	11.1 Misusing AADHAR data	78
	11.2 Border management along the Indo- Myanmar border	79
	11.3 Handling Dissents in Security Forces	81
	11.4 ISIS in India.....	81

Sl.No.	Titles	Page No.
--------	--------	----------

PRELIM BITS

12. ART AND CULTURE	83
13. HISTORY	83
14. GEOGRAPHY	83
15. POLITY	85
16. SOCIAL ISSUES	87
17. GOVERNANCE	87
18. GOVERNMENT SCHEMES	88
19. GOVERNMENT INITIATIVES	90
20. INTERNATIONAL EVENTS AND INSTITUTES	91
21. NATIONAL INSTITUTE IN NEWS	92
22. ECONOMY	93
23. ENVIRONMENT	94
24. SCIENCE AND TECHNOLOGY	97
25. SCIENCE	101
26. INDEX	102



PAPER - II

1. POLITY**1.1 Right to be forgotten****Why in news?**

- The Karnataka High Court recently upheld the concept of the right to be forgotten.

What is right to be forgotten?

- The 'right to be forgotten' has been in practice in Argentina and the European Union since 2006.
- It allows for the lawful removal of personal information of an individual if such request is made.
- The right is seen as significant in these jurisdictions as it can "determine the development of their life in an autonomous way, without being perpetually or periodically stigmatised as a consequence of a specific action performed in the past".
- The right to be forgotten is distinct from the right to privacy because the right to privacy constitutes information that is not publicly known, whereas the right to be forgotten involves removing information that was publicly known at a certain time and not allowing third parties to access the information.

What is the experience in EU?

- The European Union created a system that allows people to seek the removal of search results from Google that are "inadequate, irrelevant or no longer relevant."
- The system does not result in the removal of the actual content, but rather makes it more difficult to find in light of the near-universal reliance on search engines to locate information online.

- Since the European decision, Google has received nearly 700,000 requests for the removal of links.
- Problems such as revenge porn sites appearing in a person's name, or references to petty crimes committed many years ago remaining unduly as prominent part of a person's Internet footprint can be addressed by it.
- But there are concerns about its impact on the right to freedom of expression as it might decrease the quality of the Internet through censorship and a rewriting of history.

What are the directives of Karnataka HC?

- The father of the woman had moved the court seeking orders to block her name in an earlier order passed by the court, as his daughter feared the consequences of her name associated with this earlier matter and was afraid that this would affect her relationship with her husband and her reputation and good-will in society.
- The Karnataka High Court upheld a woman's 'right to be forgotten'.
- The judgment stated that this is in line with the trend in western countries of the 'right to be forgotten' in sensitive cases involving women in general and highly sensitive cases involving rape or affecting the modesty and reputation of the person concerned.
- The high court directed to its registry that it should be the endeavour of the registry to ensure that any internet search made in the public domain ought not to reflect the petitioner's daughter's name in the case-title of the order or in the body of the order in the criminal petition.

- In the Indian context, the right to be forgotten poses a legal dilemma.
- While the significance of such a right exists, India has no legal provision, neither in the Information Technology (IT) Act 2000 (amended in 2008) or the IT Rules, 2011.
- And while the judicial construction of such a right should ideally be the balance between the right to privacy and the right to information and free speech, there is no privacy law at present either.
- The Delhi High Court in another case, had asked recently whether the right to privacy included the right to delink from the Internet the irrelevant information – from the Centre and Google.
- Google Inc had stated to the Delhi High Court that there is no reason or creation of a separate legal framework under ‘right to be forgotten’ to delink ‘irrelevant information’ from the internet.
- These comprise a set of seven features, broadly including items such as the imposition or regulation of a tax; the regulation of the borrowing of money by the Government of India; the withdrawal of money from the Consolidated Fund of India; and so forth.
- Article 110 further clarifies that in cases where a dispute arises over whether a bill is a money bill or not, the Lok Sabha Speaker’s decision on the issue shall be considered final.
- The provision requires that a bill conform to the criteria prescribed in it for it to be classified as a money bill.
- Where a bill intends to legislate on matters beyond the features delineated in Article 110, it must be treated as an ordinary draft statute.

What is the way ahead?

- For now, there is no way to predict how the right to be forgotten would be moulded by the Indian courts.
- Currently, it is a budding judicial concept that will take some amount of debate and deconstruction to make sense.
- However, the Karnataka High Court judgment must be applauded for what it is, prudent and inventive.

1.2 Aadhaar - Money Bill

Why in news?

- The Supreme Court is about to begin hearing final arguments on a writ petition questioning the legality behind the Union government’s move in introducing the Aadhaar Act as a money bill.

What is money bill?

- A money bill is defined by Article 110 of the Constitution, as a draft law that contains

What is AADHAAR?

- Originally, Aadhaar was conceived as a scheme to provide to every Indian a unique identity number for enabling a fair and equitable distribution of benefits and subsidies.
- A draft of a statute was introduced in the Rajya Sabha, in December 2010 as an ordinary bill.
- This meant that both Houses of Parliament had to provide their vote to the bill for it to become law.
- However it was not passed due to concerns over privacy and protection of data security.
- In March 2016, the Union government withdrew the earlier bill, and introduced the Aadhaar (Targeted Delivery of Financial & Other Subsidies, Benefits & Services) Bill, 2016 as a money bill.

- Hence now it required only the Lok Sabha's affirmation for it to turn into law.
- The legislation endangers the core liberties, in manners both explicit and implicit ways.
- Therefore this move was designed to bypass opposition in Rajya Sabha bill.

What is the government's stand?

- In the Supreme Court's judgment in **Mohd. Saeed Siddiqui v. State of UP (2014)**, the court ruled that a Speaker's decision to classify a draft statute as a money bill was not judicially reviewable, even if the classification was incorrect.
- The court justified that this is because the error in question constituted nothing more than a mere procedural irregularity.
- The government sites this case to justify its stand.

What should be done?

- But it brushes aside the verdict of a Constitution Bench in **Raja Ram Pal V. Hon'ble Speaker, Lok Sabha (2007)**.
- In this case, the court had ruled that clauses that attach finality to a determination of an issue is not altogether outside the court's jurisdiction.
- The bench held that there are numerous circumstances where the court can review parliamentary pronouncements like instances
 - Where a Speaker's choice is grossly illegal, or
 - disregards basic constitutional mandates, or
 - where the Speaker's decision is arrived at through dishonest intentions.
- Therefore it should be understood that the Speaker's decision to confirm the government's classification is not merely a

procedural error but one that constitutes an unmitigated violation of Article 110.

1.3 Nagaland Violence

Why in news?

- The tribal traditional bodies exclusively run by men, are opposed to 33% reservation for women in elections to civic bodies.

What is their justification?

- The Nagaland government announced civic bodies' elections in December 2016 and a 33% reservation of seats for women.
- The 74th Constitutional Amendments added **Article 234(T)**, which provides for 33% reservation for women in Urban Local bodies.
- The tribal traditional bodies in Nagaland argue that it is an infringement upon Naga tradition and customs as protected under Article 371(A) of the Constitution.
- One group of tribal leaders has also claimed that women anyway enjoyed equal rights in Naga society and hence, providing reservation was meaningless.
- The ruling NPF government maintains that towns and municipalities are new concepts and have nothing to do with tradition and customary practices of the Nagas.
- Tribal bodies have always taken resort to **Article 317(A)**, the civic elections in the state have not been held since Article 243(T) of the Constitution came into force in 1993.

What is the situation of women in Nagaland?

- Women do not find political space in Nagaland is evident from the fact that no woman has ever made it to the State Legislative Assembly.
- Barely a dozen women have contested Assembly elections in these five decades.

- Only one woman, Rano M Shaiza, managed to win from the lone Lok Sabha constituency of the state in 1971.
- In the 2013 Assembly polls, the female voter turn-out in the state stood at 91.22% as against 89.82% for men.
- Its sex ratio is 931, which is below the national average of 940.
- Naga culture and customs debar women from land ownership hence their Customary Laws preclude women from inheriting land.

What is the current development?

- Various tribal bodies including Naga Hoho, the apex organisation of all major tribes, have been opposing the civic elections.
- Eventually the opposition reached a violent stage in Kohima.
- But a local newspaper says that the reservation is not the reason why these protests were happening.
- It says the protests were against the government for not fulfilling its promise of deferring the elections to give two months' time to the government, the women, and the tribal organisations to reach an agreement.
- The core of the issue is also considered to be ownership of land and related resources.
- The elections have now been put off.
- For now, the Naga Mothers' Association (NMA), which has been spearheading the women's movement in the state, has adopted a wait-and-watch policy.
- It had filed a special leave petition (SLP) in the Supreme Court a few years ago seeking reservation under 243(T).

1.4 Neyyar River Water Dispute

Why in news?

- The Supreme Court has asked Tamil Nadu and Kerala to place their lists of witnesses on record in the Neyyar river water dispute case.

What is Neyyar River Dispute?

- Neyyar originates from the Agastya hill in Kerala, and has two tributaries - Karuppayar and a jungle stream.
- The water will help irrigate an area of 9,200 acres in Villavancode taluk in Kanyakumari district. The taluk was transferred to Tamil Nadu during the reorganization of states in 1956.
- In 2012, the TN government had filed a petition against Kerala govt seeking uninterrupted water supply from Neyyar River.
- Tamil Nadu contends that the Neyyar is an inter-state river recognized as such under the 1956 States' Reorganisation Act.
- In its petition, TN argued that a portion of the river's catchment area lay in territory of TN and hence, was entitled to receive 150 cusecs from the Neyyar Irrigation Project.
- The petition also said, TN has not received the said quantum of water since 2004 which has caused serious hardship to the farming community.
- Previously, Kerala, in 1999 took the stand that Neyyar was not an interstate river and that it would not be necessary to conclude an inter-state agreement regarding sharing of its water.
- In its own draft agreement, Kerala informed Tamil Nadu in 2010 that the water shall be supplied subject to realization of water charges and payment of distribution charges and making the agreement valid for five years to be renewed by mutual consent.

What happened now?

- The Supreme Court, in November 2016, had framed the issues to be heard in the Neyyar dispute, including whether the river can be classified as an inter-State river.

- A SC Bench had also agreed to hear on several disputed issues, including whether the supply of water to Tamil Nadu by Kerala since 1965 was only a gesture of good will or a legal obligation imposed by Section 108 (2) of the State Re-organisation Act, 1956.
- The SC, on 23rd Feb 2017, has asked both the States to file the lists of witnesses within two weeks in the original lawsuit.

1.5 Contempt of Court

Why in news?

- Justice CS Karnan did not appear before the Supreme Court (SC) in a contempt case against him.

What is the issue?

- Judge CS Karnan has on multiple occasions stated that he was a victim of caste bias as he was a Dalit and had accused the Madras HC chief justice of harassing him.
- Subsequently when he was transferred, Karnan himself “stayed” the order of the SC, advising the CJI not to interfere in his “jurisdiction.”
- He later accepted his transfer.
- He also wrote to the PM, the law minister and the CJI, accusing several sitting and retired judges of corruption.
- This action had prompted the court to issue a contempt notice for alleged judicial indiscipline.
- This is the first time that a constitutional court has initiated contempt of court proceedings against a judge of the SC or HC.
- The SC asked Justice CS Karnan to appear before it in person for explanation. But the Judge chose not to appear before the SC.

What are the constitutional provisions?

- Contempt of court - **Article 129 and Article 215** empowers the Supreme Court and the

High Courts respectively, to punish people for their contempt.

- Article 129, states that “The Supreme Court shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself”.
- The power of contempt is often invoked to ensure compliance with the orders given by the courts and in their execution, and for punishing those who are responsible for the lapses in the manner of compliance.
- Contempt jurisdiction is exercised to uphold the dignity of the judicial system which includes within itself the dignity of courts and tribunals as well and to ensure the majesty of judicial institutions so that it may not be lowered.
- **Removal of Judge** - A judge of a high court can be removed in the same manner and on the same grounds as a judge of the Supreme Court as mentioned in Article 124 i.e by an order of the President. The President can issue the removal order only after an address by the Parliament has been presented to him in the same session for such removal.
- The address must be supported by a special majority of each House of Parliament i.e., a majority of the total membership of that House and majority of not less than two-thirds of the members of that House present and voting.
- The grounds of removal are proved misbehaviour or incapacity.
- **Transfer of Judges** – According to Article 222, The President can transfer a judge from one high court to another after consulting the CJI.
- The CJI should consult, in addition to the collegium of four senior-most judges of the Supreme Court, the chief justice of the two high courts (one from which the judge is being transferred and the other receiving him).

- The Supreme Court also ruled that the transfer of high court judges could be resorted to only as an exceptional measure and only in public interest and not by way of punishment.
- The transfer of judges is subjected to judicial review but only the judge who is transferred can challenge it.
- Therefore in these constituencies the NOTA votes did make a difference to the election results.

1.6 NOTA

What is NOTA?

- None Of The Above (NOTA) is a ballot option designed to allow the voter to indicate disapproval of all of the candidates in a voting system.
- It was introduced in India following the 2013 Supreme Court directive in the People's **Union for Civil Liberties v. Union of India** judgment.
- However, NOTA in India does not provide for a 'right to reject'.
- The candidate with the maximum votes wins the election irrespective of the number of NOTA votes polled.
- **Reserved constituencies** - Reserved constituencies have seen a relatively larger number of NOTA votes. This points to the continued social prejudice against political reservation for SC/STs.
- **Left-Wing Areas** - Constituencies affected by left-wing extremism have also recorded higher NOTA performance and here probably it served as an instrument of protest against the State itself.
- **Mainstream Parties** - It is comparatively higher in the constituencies which have seen a direct contest between the Congress and the BJP. This might be some indication of the people's disenchantment with two mainstream political parties.
- NOTA is also used to express their protest against many things they perceive wrong in the political system.

What is the current pattern of NOTA?

- NOTA polling figures are still small.
- In the 2013 Assembly elections held in four States NOTA constituted 1.85% of the total votes polled.
- Then it dropped to 0.95% in the 2014 Assembly elections held in eight States.
- It increased to 2.02% in the 2015 Assembly elections held in Delhi and Bihar. While Delhi polled a mere 0.40%, Bihar saw 2.49% of NOTA votes, which remains the highest NOTA votes polled so far in any State in Assembly elections.
- The number of NOTA votes polled was larger than the winning margin in 261 Assembly constituencies and in 24 constituencies in the Lok Sabha elections since 2013.
- **What is the way ahead?**
- So far, a small number of Indian voters have come to see NOTA as an instrument of protest.
- The perceived cynicism of Indian voters against the political class thus seems exaggerated.
- Nevertheless, it is important to note that these voters have used the democratic means of NOTA to express their resentment rather than boycotting the polls outright.
- This electoral option will become a meaningful means of negative voting only if it becomes a 'right to reject' rather than being a symbolic instrument to express resentment as it is now.

1.7 Jat quota protests

Why in news?

- The Jat quota agitation, which had been limited to Haryana so far is being extended to Delhi.

Who are Jats?

- Jats originally belonged to farming communities and now mostly live in Haryana, Punjab, Delhi, Rajasthan and UP.
- In Haryana, Jats are a politically influential community and constitute nearly 29% of the population i.e about 82.5 million.

What are their demands?

- Jats, Jat Sikhs, Rors, Tyagis and Bishnois, are seeking reservation under the OBC category.
- They had been promised that the Economically Backward Category (EBC) quota will be increased from 10% to 20% by the state government.
- In addition to this they were also promised the annual income ceiling from Rs 2.5 lakh to Rs 6 lakh to accommodate more people under the category.

What happened last year?

- Jat quota agitation that started Feb 2016, turned violent resulting in deaths of 10 people and dozens, including security personnel, injured.
- The Army was called in to eight districts and over 5,000 security personnel have been deployed in affected districts.

Timeline of Events

- March 2008: All India Jat Mahasabha raises demand for quota at a convention in Jind.
- December 2012: Haryana government gives special backward status to Jats with 10% quota to five castes.

- March 2014: UPA government grants OBC status to Jats.
- March 17, 2015: Supreme Court sets aside the notification that granted OBC status to Jats.

What are the other reasons behind current protests?

- The demonstrators want to express solidarity with Jats in Haryana, who have been protesting for the last one week.
- The Jat community has been demanding immediate implementation of promises made to them by the Chief Minister after the agitations last year.
- They are also demanding that all cases registered against protesters from the community during last year's agitation in Haryana be taken back.
- Additionally a compensation for families of those who lost their lives in the agitation last year, as well as government jobs for at least one member of such families are also demanded.
- In addition, protesters are demanding investigations against those who they believe are defaming their community.

1.8 Competitive Backwardness

Why in news?

- A study analysed large-scale data from the India Human Development Survey (IHDS) and compared Patels, Marathas and Jats to other major groups.

What is the issue?

- The Jat agitation for quotas is back with additional demands for withdrawal of charges against those booked for the protests last year.
- The Patidar agitation is on the verge of revival.

- Maratha community reiterated the demand to be designated as one of the Other Backward Classes (OBC) during the second half of 2016.
- Thus the demand by powerful groups to be considered “backward”, based on the narrative of deprivation and marginalisation continues to be a major issue.

What is Competitive backwardness?

- It refers not only to more and more people wanting to claim backwardness, but also to more and more people claiming even greater backwardness.

What are the findings of the study?

- The study found that these three castes are closer to the socio-economically dominant caste groups like Brahmins and Other Forward Castes in their respective states on a variety of indicators.
- These indicators include per capita consumption expenditure (PCCE), poverty status, educational attainment and occupational status compared to the existing disadvantaged groups i.e OBCs, SC/STs.
- e.g the PCCE of the Jats is 33 and 43 per cent more than that of the OBCs and SC-STs and not different from that of the Brahmins and Forward Castes, Patels are 5 & 15% less likely to be poor as compared to the OBCs and SC-STs.
- It found that Jats, Patels and Marathas have increased their relative advantage between 2004-05 and 2011-12.
- Thus, the analysis shows that not only do Jats, Patels and Marathas possess an advantage over the lower-ranked marginalised groups they also have consolidated their relative position.
- It also found that though the relative advantage of the Jats, Patels and Marathas in the agricultural sector is greater than

in the non-agricultural sector, they still do better in absolute terms than the socially disadvantaged groups in the non-agricultural sector.

- This indicates that the narrative of being backward is largely based on perceptions, and has little empirical support in the data.

What is the reason for agitation?

- This raises a question about the factors that underlie in creating and sustaining powerful movements, which have been sufficiently large and disruptive, in spite of lack of any support of data.
- Land ownership and cultivation have been their economic backbone.
- They are well connected to local political networks, both within and outside their communities, and that this might be an important factor underlying their massive mobilisation.
- These communities feel their power slipping away or eroding, in addition to feeling ill prepared to shift towards urban, formal sector livelihood opportunities.
- They feel that the real economic power lies in the hands of the big corporations, and the state, overtly or covertly, acts in their interest.
- Individuals or communities that feel strongly that the odds of economic success are stacked against them, are more likely to feel deprived.

What should be done?

- It should be noted that given increasing privatisation, the total jobs eligible for reservations is already shrinking.
- Data also shows that existing OBCs and SC-STs are increasingly lagging behind upper castes in a range of material indicators.

- In this context, extending quotas to relatively richer and powerful groups would amount to diluting the already small and shrinking entitlement for communities that are truly disadvantaged and discriminated against.

2. GOVERNMENT POLICIES AND INTERVENTIONS

2.1 The Enemy Property Ordinance

Why in news?

- The Enemy Property (Amendment and Validation) Ordinance has been promulgated for the fifth time.
- President Pranab Mukherjee approved it although he had reservations about its repeated re-promulgation.

What is an enemy property?

- After the wars against China in 1962 and Pakistan in 1965 and 1971, the government took over the properties and companies of such persons who had taken Pakistani and Chinese nationality.
- The Centre designated these properties as “enemy properties”.
- Later the Enemy Property Act, 1968 was passed to vest all such immovable and movable property in a ‘Custodian’.
- The maximum numbers of such properties are in Uttar Pradesh.

What is the value of the enemy property?

- Pakistan had sold or disposed of property belonging to Indians nationals and firms in 1971, while in India such property is in the hands of a Custodian.
- The immovable properties belonging to Pakistani nationals in India number 9,280.
- The total value is estimated to be around Rs. 1.04 lakh crore, with shares in companies valued around Rs. 2,600 crore.

- Investments in gold, jewellery, bank accounts, deposits and government securities are also with the Custodian.
- There are 149 properties belonging to Chinese nationals in India.

What is the need for the ordinance?

- The son of a person whose property in India had been taken over after he emigrated to Pakistan wanted it to be returned to him on the ground that he was a citizen of India.
- He also stated that the property concerned was no more enemy property after his father’s death.
- The Supreme Court ruled in 2005 that the Custodian did not have any title to the property and was only a trustee managing it.
- This ruling meant that legal heirs of erstwhile owners of enemy property, if they were Indian citizens, could get it back.
- Therefore the Centre promulgated an ordinance in 2010 so that these properties would continue to be with the Custodian.
- The ordinance lapsed then, and was issued afresh in January 2016. Since then, it has been issued again repeatedly.

What are the provisions of the ordinance?

- The Ordinance amends several provisions of the Enemy properties Act, 1968 retrospectively.
- Definition of enemy - The 1968 Act defined an ‘enemy’ as a
 1. Country and its citizens that committed external aggression against India (i.e., Pakistan and China).
 2. Legal heirs of enemies even if they are citizens of India or of another country which is not an enemy

3. Nationals of an enemy country who subsequently changed their nationality to that of another country, etc.
- Vesting of enemy property - The properties of these enemies will continue to vest with the Custodian even after
 1. The enemy's death,
 2. If the legal heir is an Indian or citizen of a country that is not an enemy,
 3. Enemy changes his nationality to that of another country, etc.
 - Power of sale - It allows the Custodian to sell or dispose of enemy property.
 - Transfers by enemies - It prohibits all transfers by enemies and renders transfers that had taken place before or after the commencement of the 1968 Act as void.
 - Bar of jurisdiction - It bars civil courts and other authorities from entertaining cases against enemy properties.
 - Powers of the Custodian - It removes the duty of the Custodian to maintain the enemy and his family.
 - The Custodian is allowed to carry out selling, mortgaging or leasing fixing and collecting rent, license fee, etc. from enemy property, and evicting unauthorised occupants from such properties.

Why it could not take the form of normal legislation?

- The Bill was passed in the Lok Sabha in March 2016, but the Rajya Sabha sent it to a Select Committee.
- Six members of the Select Committee have opposed
 1. The declaration of Indian legal heirs of enemies as enemies too,
 2. The bar on their inheriting the property,
 3. The vesting of the title in the Custodian.

2.2 Women Reservation Bill

Why in news?

- The Women Reservation Bill occupied centre stage as Union Minister Urban Development Minister and Chief Minister of AP supported reservation of one-third seats in Lok Sabha and State Assemblies for women in The National Women's Parliament (NWP)

What is the NWP?

- It is a three-day event being organised by Andhra Pradesh Legislative Assembly with the theme "Empowering women — strengthening democracy".
- Over 10,000 women delegates, including women MPs, MLAs and those who have excelled in different walks of life from across the country and abroad, are attending the conclave.

What is the status of the bill?

- Commonly known as the Women's Reservation Bill.
- It was introduced by the UPA-I government in May 2008.
- The Bill was passed in the Rajya Sabha in 2010 but it lapsed following the dissolution of the 15th Lok Sabha.

What are the features of the then bill?

- The Constitution (One Hundred and Eighth Amendment) Bill, 2008 seeks to **reserve one-third of all seats for women in the Lok Sabha and the state legislative assemblies.**
- The allocation of reserved seats shall be determined by such authority as prescribed by Parliament.
- One third of the total number of seats reserved for Scheduled Castes and Scheduled Tribes shall be reserved for women of those groups in the Lok Sabha and the legislative assemblies.

- Reserved seats may be allotted by rotation to different constituencies in the state or union territory.
- Reservation of seats for women shall cease to exist 15 years after the commencement of this Amendment Act.

What were the issues?

- There are divergent views on the reservation policy. Proponents stress the necessity of affirmative action to improve the condition of women.
- Some recent studies on panchayats have shown the positive effect of reservation on empowerment of women and on allocation of resources.
- Opponents argue that it would perpetuate the unequal status of women since they would not be perceived to be competing on merit.
- They also contend that this policy diverts attention from the larger issues of electoral reform such as criminalisation of politics and inner party democracy.
- Reservation of seats in Parliament restricts choice of voters to women candidates. Therefore, some experts have suggested alternate methods such as reservation in political parties and dual member constituencies.
- Rotation of reserved constituencies in every election may reduce the incentive for an MP to work for his constituency as he may be ineligible to seek re-election from that constituency.
- The report examining the 1996 women's reservation Bill recommended that reservation be provided for women of Other Backward Classes (OBCs) once the Constitution was amended to allow for reservation for OBCs.
- It also recommended that reservation be extended to the Rajya Sabha and the

Legislative Councils. Neither of these recommendations has been incorporated in the Bill.

2.3 Real Estate Act, 2016

Why in news?

- Central government has cautioned the States of a vacuum arising if necessary institutional mechanisms, as required by the Real Estate Act were not put in place before April 30, 2017.

What is Real Estate Act, 2016?

- The Act which is envisaged to regulate both commercial and residential real estate projects, seeks to set up a state level regulatory authority called Real Estate Regulatory Authority (RERAs) for regulation and promotion of the real estate sector.
- The Act makes it mandatory for uploading the details of a Real Estate project on the website of the RERAs. Real estate agents also need to register with the RERAs.
- The Act also makes it mandatory for the builders to put 70% of the amount collected from buyers in a separate bank account. This must only be used for construction of the project. However, the state government can alter this amount to less than 70%.
- The Act also seeks to establish fast track dispute resolution mechanisms for settlement of disputes through adjudicating officers and Appellate Tribunal.

What are some of the key issues?

- Major issue is Parliament's jurisdiction to make laws related to real estate as "land" is in the State List of the Constitution. However, the primary aim of the act is to regulate contracts and transfer of property, both of which are in the Concurrent List.
- Some states already have laws to regulate real estate projects. And the act differs from these state laws on several grounds.

- The Bill mandates that 70% of the amount collected from buyers of a project be used only for construction. In certain cases, the cost of land more than 30%.
- The real estate sector has some other issues such as a lengthy process for project approvals, lack of clear land titles, and prevalence of black money. Some of these also fall under the State List.

Why establishing RERA is important?

- Only 4 States and 6 Union Territories so far notified the final Real Estate Rules. So, the Minister of Housing & Urban Poverty Alleviation has urged the Chief Ministers of states to implement the Act before April 30, 2017.
- From May 1, 2017, under the provisions of the Act, both buyers and developers of real estate property can approach RERA seeking relief against violation of the contractual obligations and other provisions of the Act.
- For this to happen, Real Estate Authorities and Appellate Tribunals were required to be in place and in a position to start functioning.

2.4 The Marriages Bill

Why in news?

- The Marriages (Compulsory Registration and Prevention of Wasteful Expenditure) Bill was introduced by private members in the Lok Sabha.

What is a private member's bill?

- Members of parliament other than ministers are called private members and bills presented by them are known as private member's bills.
- Till date, only 15 private members' bills have ever been passed by the Indian Parliament. Six of these were in 1956 alone.
- The Rights of Transgender Persons Bill passed in 2015 was the first private member's bill to get the upper house's approval in the past 45 years.

- In the current Lok Sabha, 588 private bills have already been introduced. Only 11 of them have actually come up for discussion.

What does the bill say?

- The aim of the bill is to "prevent extravagant and wasteful expenditure" in weddings.
- The bill states that, if a family spends above Rs 5 lakh on a wedding, it should contribute 10% of that amount to a welfare fund that is to be used to facilitate marriages of girls from poor families.
- It seeks to limit the number of guests one can invite and dishes that can be served in weddings.

What are the advantages?

- The intention behind is undoubtedly a noble one if the government welfare fund stays free of corruption and mishandling.
- It could provide the much needed relief to low income families in doing social justice to their key life events.
- It will encourage simplicity because weddings in India perpetuates a negative social pressure of spending more to show value.
- It would ease some pressure of the paying parties i.e usually the bride's family, who could possibly be under pressure to spend beyond their comfort levels.
- Much of the food and other perishables used in weddings rendered waste. This undermines the food security of the country.

What are the disadvantages?

- An enforcement on how to celebrate a wedding is not democratic in nature.
- A legal solution for a social issue is often seen as an aggressive policy.
- It will be seen as unnecessary and unwarranted government interference in private affairs.

- The mandatory 10% contribution would be perceived as yet another tax levied on the citizens.
- The cap of 5 lakhs is a very low amount even to an average urban middle class standards.
- The enforcement of the law would also be extremely difficult as it is likely to result in complications of tracking expenses and thus evading the 10% payment.
- Regulations will be hard to manage and it will call for a significant state apparatus.
- The scope for loopholes is huge. e.g It would be difficult to distinguish weddings from engagements and receptions which are held at an earlier or later date.
- Some families see weddings as a perfect occasions for reunions and don't mind investing heavily for once in providing for their guests.
- The bill does not account for the fact that weddings are an economic activity for many who work in the supply chain towards organizing them.
- A compensation committee shall hear and decide these cases.
- The bill also provides for an appellate mechanism to be set up by notification.
- It also exempts farmers from the requirement of compulsory registration while prescribing huge penalty for contravening any provision of the Act for those selling misbranded or substandard seeds.

What will be the effect?

- The proposed Bill is expected to give a major boost to agricultural growth.
- It seeks to regulate seeds and plant material to ensure quality, increase private participation in production and distribution, liberalise imports while incorporating measures to protect rights of farmers.
- Its early passage with the proposed amendments is quintessential for doubling farmers' income.
- It will bring in competition among players and promote healthy crops.

2.5 Seed Bill

Why in news?

- The government is planning to revive the Seeds Bill

What are the features of the bill?

- The Bill requires every seller of seeds (including farmers) to meet certain minimum standards.
- It replaces the Seeds Act, 1966.
- Under the new Bill, all varieties of seeds for sale have to be registered.
- If a registered variety of seed fails to perform up to expected standards, the farmer can claim compensation from the producer or dealer.

2.6 National Steel Policy, 2017

Why in news?

- The Ministry of Steel released the draft National Steel Policy 2017.

What is the need for the policy?

- The steel sector presently employs about 25 lakh people and has a capacity of little over 120 million tonnes.
- Steel production in the country has witnessed an annual average growth of 8.3% between 2000-01 and 2015-16.
- However, the industry has been facing challenges due to slow economic growth and idle steel capacity globally.
- India has been a net importer of finished steel every year since 2007-08 except 2013-14.

- Growth of the Indian steel industry has been affected due to delays in land acquisition.
- The draft Policy seeks to create a self-sufficient steel industry that is technologically advanced and globally competitive.

What are the objectives?

- Increasing crude steel capacity to 300 metric tonne (MT) by 2030-31.
- Increasing per capita steel consumption to 160 kg by 2030-31 (currently 61 kg)
- Increasing domestic availability of washed coking coal and reducing import of coking coal to 50% by 2030-31
- Becoming a net exporter of steel by 2025-26.

What are the guidelines?

- Steel demand and capacity - The policy envisages to more than double the India's domestic steel production capacity to 300 million tonnes by 2030-31.
- Creation of such additional capacity will require extensive mobilization of natural resources, finances, manpower, and infrastructure and a capital investment of about Rs 10 lakh crore
- **Land requirement** - In order to increase steel production capacity, around 91,000 acres of land will be required.
- The Steel Ministry will coordinate with respective state governments to ensure timely availability of litigation-free land to the industries.
- Micro, Small and Medium Enterprises (MSMEs) – The draft policy seeks to improve availability of raw materials by providing long term linkages with the coal industry, and adopt energy efficient technologies.
- The Steel Ministry has proposed setting up **greenfield steel plants** along India's coastline to tap cheap imported raw materials

such as coking coal and export the output in a more cost-effective manner.

- **Coking Coal** - To cut down reliance on expensive imports of coking coal, gas-based steel plants and technologies such as electric furnaces to bring down the use of coking coal in blast furnaces are proposed.
- It anticipates a requirement of Rs.10 lakh crore of fresh investments to meet that goal and expects at least 11 lakh new jobs being created in the process.
- It lays out two alternatives of its vision i.e to create a globally competitive steel industry that promotes inter-sectoral growth and to create a self-sufficient steel industry that is technologically advanced, globally competitive and promotes inclusive growth.

2.7 Implementation of e-NAM

Why in news?

- Finance minister in the Budget has announced that the coverage of the National Agricultural Market (e-NAM) would be extended from 250 mandis to 585 across the country.

What is e-NAM?

- National Agriculture Market (NAM) is an electronic trading portal which networks the existing Agriculture Produce Market Committee (APMC) mandis to create a unified national market for agricultural commodities.
- The NAM Portal provides a single window service for all APMC related information and services including commodity arrivals & prices, buy & sell trade offers, provision to respond to trade offers etc.,

Why the implementation of e-NAM is not easy?

- The plan of a single national agricultural market based on an electronic platform is an excellent one, but implementing it may not be so easy.

- e-NAM will help farmers find the best possible price for their produce by expanding the market nationally and eliminating middlemen.
- The critical link was creating an e-payment system that would allow the buyer credit the money directly into the farmer's bank account. But this has not taken off, and farmers continue to be paid in cash.
- Even in the 250 mandis where e-NAM has been introduced, the farmer still sells only locally, and not nationally.
- States are not playing their part in agricultural market reforms. Eg. Only 10 States have amended the law to allow e-mandis since the national roll-out.
- The rotavirus vaccine was added to UIP in April 2016. Rotavirus infections are the most common cause of diarrhoea in children.
- Finally, the measles-rubella vaccine (MR) is added now to the UIP from February 2017 in five states and Union territories i.e Goa, Karnataka, Lakshadweep, Puducherry and Tamil Nadu.
- India has set an ambitious target of eliminating measles and controlling congenital rubella syndrome (CRS), caused by the rubella virus, by 2020.
- The UIP basket already has vaccines for ten diseases i.e BCG for TB, OPV for poliomyelitis, monovalent measles vaccine for measles, Rota Virus vaccine for Diarrhoea, JEV for Japanese Encephalitis & Pentavalent Vaccine for DPT (diphtheria, pertussis, e whooping cough & tetanus) and Hepatitis B & Pneumonia due to Hib.

What needed to be done?

- Infrastructure such as reliable third-party certification for the produce in every mandi, robust computer systems and uninterrupted web connectivity are need to be in place.
- Farmers must be counselled about the advantages of the e-NAM and its features.
- The holds of the middleman need to be broken. This can be done by bringing the farmer into the formal financial system.
- Once MR is introduced, monovalent measles will be discontinued.

What is rubella?

- Commonly known as German Measles, it is caused by the rubella virus that spread through the air via coughs.
- Unlike measles, rubella is a mild viral infection that mainly occurs in children.
- But infection during early pregnancy may result in a child born with congenital rubella syndrome (CRS) or miscarriage.
- Symptoms of CRS include problems with the eyes such as cataracts, ears such as deafness, heart, and brain.

3. HEALTH

3.1 Measles-rubella vaccine

Why in news?

- Measles-rubella vaccine was recently added to Universal Immunization Programme (UIP).

What were the additions to UIP?

- National Technical Advisory Group on Immunisation recommended more than a year back to include IPV and vaccines for measles-rubella & rotavirus in the UIP.
- Therefore India also launched Injectable Inactivated Polio Vaccine (IPV) in November 2015.
- Congenital rubella infection is believed to affect approximately 25,000 children born in India every year.

What is Measles?

- Measles is a highly contagious infection and one of the major childhood killer diseases,

caused by the measles virus that also spreads through air.

- Initial signs and symptoms typically include fever followed by formation of small white spots form inside the mouth and red rashes which usually starts on the face and then spreads to the rest of the body.
- Complications include diarrhea, blindness, inflammation of the brain, and pneumonia among others.
- Since the introduction there is a sharp decline of more than 50% of deaths in India

What is the future plan?

- In addition, Pneumococcal conjugate (pneumococcal pneumonia) vaccine (PCV) will also become a part of the UIP basket from March 2017 in HP and parts of UP and Bihar.
- PCV is a mix of several bacteria of the pneumococci family, which are known to cause pneumonia — hence ‘conjugate’ in the name.
- Pneumonia caused by the pneumococcus bacteria is supposed to be the most common.
- Pneumonia is responsible for about 20% of under-5 child mortality in India, of which half are of pneumococcal origin.
- It estimated around 23% of the global pneumonia cases originate in India.

What are bivalent, trivalent, OPV and IPV vaccines?

- Oral polio vaccine is made of live attenuated (weakened) polio virus.
- India currently uses the trivalent vaccine made up of all three strains of polio – P1, P2 and P3.
- The other variety, the bivalent one has only attenuated P1 and P3 strains.

India eradicated P2 strain in 1999.

- But the most number of cases of vaccine-derived polio happen because of P2.
- That is why India is switching to bivalent oral vaccine.
- IPV on the other hand is made up of killed polio virus and will give a child immunity from all three strains.
- There is no risk of vaccine-derived polio either.
- In 2012, The World Health Assembly called counties to introduce at least one dose of IPV in all countries using only oral polio vaccine.
- IPV has been introduced to prevent re-emergence of polio in the UIP simultaneously with the existing Oral Polio Vaccine (OPV).
- It provides double protection against polio.
- Until polio is eradicated globally, OPV is still the main preventive measure against polio. Thus, IPV is recommended in addition to OPV and does not replace OPV.

3.2 Treating MDR-TB

Why in news?

- The Delhi High Court accepted the plea of a girl that she must be given access to Bedaquiline, an anti-TB drug to treat MDR-TB.

What is TB?

- Tuberculosis (TB) is an infectious disease caused by Mycobacterium tuberculosis.
- It is spread through the air.
- It can be prevented by the bacillus Calmette-Guérin vaccine.
- Treatment requires the use of multiple antibiotics over a long period of time.
- Antibiotic resistance is a growing problem with increasing rates of multiple drug-resistant tuberculosis (MDR-TB).

Why the government restricted Bedaquiline's use?

- Out of 99,000 new cases of MDR-TB only 164 patients are enrolled for Bedaquiline therapy.
- Bedaquiline's availability is restricted to just five cities.
- Since the girl was not residing in the five cities, her domicile status was held against her from being treated with Bedaquiline.
- Bedaquiline was the first major anti-TB drug discovered in the last 40 years.
- The government restricted its use because of the fear that mycobacterium might develop resistance to the medicine.
- The rampant use of anti-TB medicines had resulted in 4.80 lakh new cases of MDR TB in 2015.

What are the lacunae in managing MDR-TB?

- The rise in drug-resistant TB is because of the inherent weakness of state-run TB control programmes and the lack of awareness among patients, who do not complete the six-month medication.
- Also, slashing the five-year budget of RNTC from Rs 6,500 crore to Rs 4,500 crore has only added to the problem of TB control in the country.
- A delay in the treatment of MDR cases only makes the community more susceptible to the spread of infection.

What can be done to prevent MDR-TB cases?

- Preventing resistance against Bedaquiline is a must, but the manner in which it is being done is impractical and undemocratic.
- If the priority is prevention of drug resistance, then
 1. Strict surveillance of MDR cases;

2. Better community outreach programmes to educate the patient & the healthcare provider against treatment dropout;
 3. Quality assurance on available anti-TB drugs;
 4. Educating physicians against the injudicious use of Anti-TB therapy are far better means of preventing MDR-TB cases.
- The Delhi HC order should be an eye opener to rethink the means of rolling out Bedaquiline therapy more effectively and to introduce other drug treatments (like Delaminat) in India.

3.3 Open camps for Sterilisation

Why in news?

- Over 27 months after 13 women died and 65 took ill at a State-run mass sterilisation camp in Chhattisgarh.
- Following this, the State government has now discontinued all sterilisation services.

What was the recent move?

- Open camps were discontinued.
- The doctor who performed the surgeries has been terminated and representatives of the pharmaceutical company which supplied the medicines are in jail.
- These moves are taken as per the recommendations of a judicial commission headed by retired district judge Anita Jha

What is the effect of it?

- Health facilities, including district hospitals have also stopped sterilisations.
- Instead of providing quality sterilisation services in the aftermath of so many deaths, the government has responded by discontinuing the services.

- As a result of discontinuing them, women have turned to private clinics for family planning.
- It costs around Rs. 8,000- 10,000.
- Those who couldn't afford are required to go to neighbouring Jharkhand and Madhya Pradesh.
- Tribal areas have suffered the most.
- Since the discontinuation of open camps, sterilisation rates in Chhattisgarh for both men and women have dropped drastically.

What should be done?

- It has been a long-standing demand of the health movement in India that open camps be discontinued.
- However, they have to be replaced by adequate facilities at CHCs and district hospitals.
- It needs to be accompanied by awareness on male contraceptive methods such as condom use and vasectomy.
- Family planning is equally a men's issue.
- But currently there is no stress or campaign on male contraception.
- The government does not persuade men into sterilisation the way it does for women.
- The tragedy in Chhattisgarh was a wakeup call.
- It showed that there is high demand, especially among women, despite bad quality services.
- Therefore government should respond by providing quality services to men and women, rather than withdrawing the existing services.

3.4 Health Care System for the Elderly

What is the issue?

- India has a favorable demographic dividend but soon would be offset by rapid ageing of people at the top end of the scale.

What could offset the gains of demographic dividend?

- Demographic dividend (DD) occurs when the proportion of working people in the total population is high.
- This indicates that more people have the potential to be productive and contribute to growth of the economy.
- But this will eventually lead to approximately 20% of Indians being elderly by 2050.
- This would be a dramatic jump from the current 6% level.
- This is a cause of concern for policymakers as India already has the world's second largest population of the elderly i.e people above 60 years of age
- This would increase demand for healthcare services and accommodation and there by generating enormous socio-economic pressures.

What is the need to re-gear the health care system?

- According to the National Sample Survey Organisation's 2004 survey, nearly 3% of elderly were living alone, 9.3% were living with their spouses and 35.6%.
- However many among the younger generation are increasingly left with less time, energy and willingness to care for their parents, or simply emigrate abroad and are unable to do so.
- Therefore elders suffer abandonment by family, destitution, inability to access health

care, low levels of institutional support, loneliness and depression.

- Also as the size of the elderly population expands, there will be a shift in the disease patterns from communicable to non-communicable.

What should be done?

- Even though the private sector is making available a variety of retirement communities across the country in addition to innovations in healthcare delivery, still the elderly poor very much depend on the government to come up with the resources and institutions to support their needs.
- Several mature economies have created multiple models for elder care, such as universal health insurance, networks of nursing homes etc.,
- India should also adopt such a system.
- The advocacy and information campaigns should be to redirect social attitudes toward ageing.
- The health-care system should be regeared toward 'preventive, promotive, curative and rehabilitative aspects of health'.

3.5 Over-Medicalization

What was the issue?

- More hospitals are abandoning the traditional natural birth method by encouraging women to undergo surgical deliveries instead.

What is over-medicalization?

- Obstetrician involvement and unnecessary medical interventions in normal childbirth, without evidence of effectiveness, is called Over-Medicalization of childbirth.
- The problem of over-medicalization has been generally associated with high-income countries where there is the prevalence of private institutions.

- But now it is rapidly becoming more common in low and middle-income countries, also increasing the health costs and the risk of harm.

What are the risks of Caesarean delivery?

- Hospitals push women to have Caesareans since they are far costlier than natural births costing at least Rs 40,000.
 - At times, it's not the healthcare industry to be blamed entirely.
 - There are patients who want their child to be born on a particular date, because it is auspicious. Others wish to avoid the pain of undergoing a natural birth.
 - Caesareans are also likely to cause more infections and certain disorders, which include blood clotting, obstruction in bowel movements, bladder infection, and, in severe cases, even hemorrhage.
 - It also increases the chances of mothers spiraling into post-partum depression and other post-traumatic stress.
 - New-born are also subject to life-threatening risks.
 - There is a possibility that they could get hurt, cut or suffocated during the procedure.
 - When the child grows older, there are greater chances of him/her suffering from obesity or respiratory disorders like asthma as well.
 - Experts claim that natural birth ensures a quicker recovery for mothers, and it gives newborns a family of microbes which strengthen their immunity.
- ### **What is the statistics on the issue?**
- A report published by the ICMR School of Public Health states that in the last decade, Telengana showed 74.8% of surgical deliveries in the private sector, Tamil Nadu showed 58% caesarean deliveries, while Kerala showed 41%.

- The World Health Organization (WHO) states that the optimal caesarean birth rate should be at a minimum, not exceeding 10-15% of the overall deliveries that take place in a country.
- Childbirth is a traumatic experience.
- In the throes of pain, an uninformed woman will be convinced to have a surgical delivery, if her physician plants the idea.
- In high stress situations, even a mere suggestion does the trick.
- It is the responsibility of the parents to be well-versed in the options available to them in order to make informed choices.
- For all reasons and purposes, natural birth is recommended.
- Regardless of everything, it's important that hospitals declare the number of Caesarean births that take place that a stop can be put on unnecessary caesareans.

4. SOCIAL JUSTICE

4.1 Implementation of RTE Act

Why in news?

- A recent study analysed cases in the High Courts and the Supreme Court from 2010 to 2015, which directly affected rights of a child under the RTE Act.

What is the issue?

- The RTE Act has been considered to be a landmark legislation that seeks to realise the fundamental right to education for all children in the age group of 6-14 years.
- But even after eight years the implementation of RTE Act has suffered due to official apathy.
- Therefore judiciary has stepped into a governance vacuum.

What are the indicators of poor implementation?

- Many schools in the country continue to lack adequate drinking water facilities, playgrounds or the necessary infrastructure prescribed by the Act.
- Cases of corporal punishment that are banned under the RTE Act are still being reported.
- Learning outcomes have been found to be very low.
- Other issues include lack of clarity on if all unaided private schools and some specified government schools are prohibited from conducting admission tests/interviews or not.
- Also many private schools continue to charge donations from children.
- Bureaucratic apathy and weak institutional mechanisms are some factors that have contributed to this.

What are the findings of the study?

- The study suggests that some provisions of the Act are more litigated than the others.
- Access to education - 49% of the cases on the RTE Act have dealt with questions of access to education.
- This may be because issues such as denial of admission, fixing age-limits for admission to a particular class, transfer of students from one school to another, and conducting screening tests at the time of admission, are urgent in nature.
- Section 12 - 24% of the cases exclusively refer to Section 12(1)(c) of the Act,
- This mandates all non-minority, unaided private schools to reserve 25% seats for children belonging to economically weaker sections and disadvantaged groups.

- The cases in the section are due to issues like denial of admission by private schools, delayed reimbursement by State governments to private schools, ambiguity over definitions of 'economically weaker sections' and 'disadvantaged groups'.
- Other issues included the applicability of the RTE Act to minority schools, applicability of the no-detention policy to private schools, and the definition of 'neighbourhood' for admission into 'neighbourhood schools'.
- 11% are related to provisions mandating basic facilities and adequate infrastructure in schools.
- Only 5% of the cases are related to the facilities for disabled students prescribed under the Act.
- Only in few cases, the courts have formulated monitoring mechanisms to ensure timely implementation of their orders.

What should be done?

- Grievance redressal - Awareness of the act should be built and grievance redressal mechanisms under the RTE Act should be strengthened.
- This can save litigation costs and diminish barriers of rights to education.
- Strategic litigation across High Courts should also be explored, for pushing implementation of the RTE Act by state governments.
- Civil Societies - More efforts by civil society organisations will be useful in getting targeted judicial orders for the effective implementation of the Act.
- Executive - They should strengthen education delivery mechanisms and summon necessary political will to implement Act.
- Meanwhile, the judiciary should continue to play a significant role in enforcing the RTE Act to hold governments accountable and ensure the Act's enforcement.

What are the limitations of the judiciary?

- Fewer litigations over infrastructural norms and availability of qualified teachers as required under the RTE Act does not necessarily imply that these norms are better implemented than the others.
- They may also not be a high priority for litigants who are generally individual parents.
- Provisions on banning corporal punishment and prescription of pupil-teacher ratio in classrooms have not been contested at all, in spite of anecdotal evidence and news reports.
- Courts are usually demand-driven and give priority to issues that are brought forward by litigants. Hence many provisions of the RTE Act remain under-enforced.
- Many of the disputes are related to district/ State-wise implementation of the Act.
- Therefore courts could not focus on long-term reliefs involving systemic reform.

4.2 Assessing Students on International Standard

Why in news?

- The Ministry of Human Resource Development decided to re-enter the Programme for International Student Assessment (PISA).

What is PISA?

- Programme for International Student Assessment (PISA) is a global evaluation of 15-year-olds conducted by the Organisation for Economic Cooperation and Development to test mathematical, scientific and reading skills of school students.
- A major goal of PISA is to untangle the factors that are associated with educational

outcomes and to guide governments in constructing policies that improve these outcomes.

- During the UPA government, India had quit the test, complaining about questions being set “out of context” in relation to the Indian socio-cultural background.

Is PISA out of Indian context?

- Indian student may find it more comfortable to do sums using mangoes rather than avocados for units.
- But it is to be understood that the context of math and science is the universe and its contents.
- But Shanghai’s students succeeded in test involving European motifs.
- This suggests that the problem lies in India.

Why PISA can be significant?

- India lost out by boycotting PISA in 2012 and 2015, when Asian countries like China, South Korea and Singapore surged ahead.
- It should be understood that PISA is not a contest.
- It is a research exercise generating data which can be compared across borders.
- Finishing last should be seen as an opportunity to improve teaching methods and school systems by intelligent comparison.
- As result of this, International Standards can be adopted by Indian school boards for betterment.
- It is also a reliable indicator of the future intellectual capital of participating countries.
- It is a function of projected GDP, a reflection of the future wealth of nations.
- A country hoping to win the global GDP race should regard PISA as a target.

- The present government has done well to seek to return to PISA’s global testing system.
- But the crucial reform still lies ahead.
- PISA data must be used to improve the structural imbalance and the school system.

4.3 Solutions to Open Defecation Problem

What is pit emptying?

- A pit latrine is a type of toilet that collects human feces in a hole in the ground.
- When the latrine pit is full, the toilet is no longer usable.
- The emptying can either be done manually with shovels and buckets or with motorized pumps.

Why Indians don’t want to use pit latrines?

- As these latrines require periodic manual pit emptying, most of the rural Indians don’t want to use pit latrines.
- They are afraid of the problems they will face when the pit fills up.
- For this reason, they build a very large pit that would take decades to fill up.
- But, latrines with very large pits are expensive. So, most rural families couldn’t afford them and they opt for open defecation.

What is the government’s response?

- Government’s solution to the problem of pit emptying is to promote affordable latrines with two pits.
- The two-pit latrine design is a technical and biological solution to the problems of open defecation and manual scavenging.
- Having a second pit would allow the contents of a first pit to decompose before being emptied.

- According to the Prohibition of Manual Scavenging Act, emptying human waste that has decomposed in a latrine pit is not manual scavenging, and therefore, it is not illegal.
- Also some politicians wanted to shame and embarrass people who defecate out in open, as it would force them to use the toilets.

What is the problem associated with the responses?

- The two-pit latrine design does not address the social consequences associated with pit emptying.
- Families in rural areas don't want to empty a decomposed pit by hand as emptying even a decomposed pit is considered as ritually polluting and would cause them to become outcaste.
- The solution of shaming people is a double-edged sword, because it would make people to feel that they are outcasts.

What is the solution to the problem?

- It is difficult to get people to change life-long habits. It is a change to their daily routine and social status.
- We need to disrupt people's existing behaviour by using powerful motives. But we also want people to have emotional reasons to build and use toilets.
- Recently, Secretary of the Ministry of Drinking Water and Sanitation, emptied the decomposed waste from a twin-pit latrine in Warangal district.
- His action deserves praise because he identified the problem of pit emptying must become central to India's efforts to eliminate open defecation.
- This effort must not stop and demonstrations must be done from celebrities to village leaders across the country.

- So the real challenge lies at effort to change people's minds on how about and where to defecate, who can empty latrine pits, and ultimately, how Dalits should be treated.

4.4 Reluctance to become a Good Samaritan

Why in news?

- An 18-year-old was caught under the rear wheel of a State transport bus in Koppal, Karnataka. He was badly injured and was crying for help. None helped till an ambulance came and took the victim to hospital and the doctors could not save him.

Why people are reluctant to act?

- The Law Commission of India observes that 50% of those killed in road accidents could have been saved had timely assistance been rendered to them.
- Yet when an accident occurs, people are reluctant to help due to following reasons.
- **Hospital procedures** - People fear that they would be made to pay admission costs in a hospital or detained there for long hours.
- **Police Harrasment** - The consequences of involvement can't be predicted or controlled.
- The police don't always convey a sense of security to the common citizen. The person helps is often subjected to the same ruthlessness that the perpetrator might deserve.
- **Crowd mentality** - People gather to watch as there will always be more to see. Even the lone individual who wants to take the initiative also loses the instinct to do so, once the crowd gathers, since they discourage individuality. The pressure to behave like everybody else greatly increases.
- **Mobile phones** - The idea of taking a picture creates the satisfaction of doing something. The fact of sending a picture that spreads

across the country liberates a person from the torment of not doing anything. By creating a distance between the viewer and the object, the camera phone neutralises the horror of seeing someone screaming in pain and thereby it mitigates the guilt.

What are the legal protections available?

- Parliament has not enacted such a law.
- But the Centre has notified guidelines for the protection of those who help accident victims and the SC approved it.
- In January 2016, a Standard Operating Procedure to make these guidelines work was introduced.
- Now, the Union Road Transport Ministry has added a significant clause under which a Good Samaritan's affidavit will have the legal force of a statement.
- The guidelines say that if a statement is required, it should be recorded in a single examination.
- The police should not compel them to disclose their particulars or to be witnesses.
- The Union Health Ministry directed hospitals that they should not detain those who bring accident victims for admission. They should not be required to pay for.

Has the good samaritan law instilled confidence?

- Karnataka has a Good Samaritan law that protects the kind-hearted citizen helping an accident victim from police harassment.
- The enactment of this law marks a step towards change in onlooker behaviour as it acknowledges source of fear.
- The mere enactment was not enough to create the confidence to act in a scene, like the one witnessed in Koppal.

What should be done?

- Only a few State governments have adopted the Good Samaritan guidelines. All States must get actively involved in their implementation.
- Also it will take sometime for people to feel secure under good samaritan law provisions and therefore these law should be heavily advertised.
- Any law that attempts to change people's perception of a state agency demands a parallel change in the behaviour of the agency (police) itself.
- Police should publicise the names of many Good Samaritans over the coming years to make an impact on the public to get rid of its insecurity and apprehensions.
- As the education system was blamed in the incident, the administrators and political leaders don't appreciate what it takes to make education an experience that has the potential to create self-awareness and sensibility.

4.5 Gated Communities

What are Gated communities?

- The term gated community refers to any type of neighborhood that has controlled access using one or more gate that residents or visitors must pass through.
- The trend for such dwellings picked up in southern California in the 1960s.

Why these communities flourished?

- Their most remarkable growth is seen in countries like India, Brazil and Mexico, where they have grown manifold mainly because of a lack of confidence in law enforcement.
- As the middle class grew more disappointed with the state's ability to assure personal safety and basic utilities, it ran into property developers, who offered walled residences.

- Fear of crime and the “outsider” have always been the fundamental reasons for people moving into gated communities.

Why gated communities are not the solution?

- In India, there are frequent reports about criminals who easily breach the porous security of a gated complex.
- Eventually, every gated community dweller must engage with the city. To stop keep looking over our shoulders, our streets and public transport need to be safe.
- Also, in the gated communities, all the action happens within the gates. If the wall wasn't there, life would be conducted outside and therefore, greater social surveillance against petty crimes.
- Gated communities also promotes a general feeling of social paranoia, implying that other parts of the area are unsafe and the gated community is necessary to protect residents.
- Thus, the tall gates of the complex represents the separation of us and them (poor people who are living outside), thereby, laying the basis for more crime.
- These communities may have made some people more secure, but hiding ourselves in private enclaves cannot be a solution to our unsafe cities.

5. INDIA AND ITS NEIGHBOURHOOD

5.1 Mastering in Evacuation

Why in news?

- Minister of State for External Affairs told the Lok Sabha that around 95,500 Indian nationals have been brought back from countries affected by war, internal strife, natural disasters as also due to economic slowdown in the Gulf region during the last two years.

How well is India's evacuation capability?

- On 1986, South Yemen was being engulfed in a civil war that threatened the lives of thousands of foreigners living there.
- While Britain, France and the Soviet Union coordinated to jointly evacuate their nationals, the 850 Indians in the country were forced to wait for several more days till evacuation was facilitated.
- On April 2015, Yemen was once again under unrest. This time, however, the Indian government successfully conducted Operation Raahat to evacuate almost 5,000 Indians and nearly 1,000 citizens from 41 other countries.
- Besides Air India aircraft, the Indian Navy deployed vessels, and the Indian Air Force C-17 Globemasters for strategic airlift.
- Such unprecedented efforts and resources reflect New Delhi's new drive to protect the lives and assets of its citizens abroad in times of crisis.
- But most of these operations are successful because of heroic efforts by individual officials or quick-fix solutions. There is no proper protocol or policy setup.

What should be done?

- The government should document its rich experience in conducting more than 30 evacuations and institutionalise them so that it is passed on to younger generation officials.
- An inter-ministerial committee should prepare a manual with guidelines that establish a clear chain of command and division of competencies, identify regional support bases, assembly points and routes for evacuation and develop country-specific warden systems to communicate with expatriates.

- India's diplomatic cadre must be given specific training to operate in hostile environments.
- The government could instruct the police or army to train Indian Foreign Service probationers to operate in war zones, conduct frequent evacuation simulations and emergency drills and create rapid reaction teams.
- India will have to invest in cooperative frameworks that facilitate coordination among countries that have large expatriate populations in West Asia, in particular Nepal, Bangladesh and Sri Lanka.
- The government will have to assign a greater role to its armed forces, in particular by strengthening the Navy and Air Force's capacity to operate in tandem with civilian authorities.
- It should direct the military to develop a non-combatant evacuation doctrine, designate the Integrated Defence Staff as the nodal organisation to improve inter-services and civil-military coordination.
- To avoid cost inflation and delays, the government must establish a permanent civil reserve air fleet that pools aircraft from all Indian airlines based on pre-established requisition and reimbursement procedures.
- The government will have to invest in new technologies to better monitor the diaspora's profile and mobility.
- This can be achieved by encouraging more diplomatic missions to provide online consular registration forms, developing an online registration system for overseas travellers, utilising social media.
- The government must expand efforts to manage public opinion and be able to conduct a quiet diplomacy that is crucial to safely extricate Overseas Indians from conflict zones.

5.2 CPEC and the Baloch Insurgency

What is the issue?

- The CPEC is a 15-year project between Pakistan and China, which aims to connect the ancient Chinese trading town Kashgar with Pakistan's deep-sea Gwadar port via PoK through a network of highways, railways and oil and gas pipelines and fibre optic cables.
- Gwadar is the crown jewel of CPEC and Balochistan is the home to Gwadar port.
- Yet Balochistan stands to gain little from the massive project, despite being in desperate need of economic opportunity.
- The province's share in the CPEC is a mere 0.5%.

What are the administrative units of Pakistan?

- The administrative units of Pakistan consist of four provinces, one federal capital territory, two autonomous and disputed territories, and a group of federally administered tribal areas.

Who are Baloch people?

- Baloch people are an ethno-linguistic group mainly found in Pakistan, Iran and Afghanistan.
- Balochistan region covers Balochistan Province in south western Pakistan, Sistan and Baluchestan Province in south eastern Iran, and the Balochistan region of southern Afghanistan.
- Baloch nationalism is a movement that claims the Baloch people in the region form a distinct nation.
- The movement propagates the view that Muslims are not a nation and that ethnic loyalty must surpass religious loyalty

- The Insurgency in Balochistan is a guerrilla war waged by Baloch nationalists against the governments of Pakistan and Iran in the region.

What is the reason for insurgency?

- 70% of people in Balochistan live in poverty.
- The maternal death rate in Pakistan is 278 per 100,000, whereas in Balochistan it stands at 785.
- Natural gas was discovered at Sui in Balochistan, yet major parts of the province are still deprived of natural gas.
- It's important to understand that the violence in Balochistan is not just because of terrorism.
- The insurgents are mostly local people longing for their constitutional rights and welfare.
- Therefore most of the insurgent movements in Balochistan have been linked with deprivation and underdevelopment.
- The division of CPEC benefits repeats the same mistake, where the people of Balochistan are not allowed to benefit from the province's own advantages.

What is the problem in Pakistan's approach?

- Pakistan's government has generally regarded Brahamdagh Bugti, the alleged leader-in-exile of the Baloch Republican Army, as the sole representative of the Baloch conflict, particularly pointing to Bugti's India-centric policy.
- Also Indian Prime Minister Narendra Modi made remarks on Balochistan last year.
- Therefore the Pakistani government and military officials tend to blame the violence in Balochistan on Indian meddling in the province.

- But to truly solve the problems in Balochistan, Pakistan's focus must be inward.

What should be done?

- The state needs to differentiate sub-nationalists from the terrorist outfits operating from within Balochistan.
- Terrorist organisations need to be dealt with accordingly as per the national counter-terrorism strategies.
- But the Sub-national groups should be encouraged to come into the national fold by addressing legitimate concerns.
- If the violence still gets out of hand, then counter-insurgency (COIN) strategies can be employed.
- The guilty should be subject to normal court proceedings.
- Media coverage in the region should be increased rather than the current situation of reporters going missing from Balochistan.
- Pakistani authorities must ensure that CPEC doesn't repeat the earlier injustice meted out to the native Balochs. Balochistan must get its fair share of the economic corridor.

5.3 Sehwan Attack

Why in news?

- A suicide attack by ISIS, at the Sufi shrine of Lal Shahbaz Qalandar at Sehwan in Pakistan's Sindh province has killed at least 80 people.

Why Sufi Shrines are targeted?

- Sufism is a mystical and generally moderate form of Islam that is loathed by fundamentalists.
- Jihadis have targeted several Sufi shrines all over Pakistan for several years.
- e.g Attacks on the shrine of Data Ganj Bakhsh in Lahore in 2010 and that of Hazrat Shah Noorani in Balochistan in November 2016.

- The jihadis justify their violence against Sufi shrines as attacks against 'impure' manifestations of the Islamic faith.
- Killing 'unbelievers,' 'heretics' and 'deviants' is an integral part of their plan to create a purer Islamic state.
- The same justification has been used in the past to attack Shias and Ahmadis as well as Pakistan's Christians and Hindus.

What is the actual reason?

- The highly planned, well-publicised attacks on Shias in Iraq and Syria helped the IS mobilise Sunni sectarian sentiment and win recruits.
- IS is using the same strategy in Pakistan to mobilise recruits with sectarian ideology.
- Sehwan Shrine is a prominent symbol of unity as people of all faiths in the subcontinent have been visiting it for centuries, thereby making it a particularly potent target for the IS.

Why Pakistan could not contain repeated attacks?

- Pakistan's ruling class sees terrorism through a geo-strategic lens and not as the consequence of its appeasement and sponsorship of Islamist extremism.
- Some jihadi groups were reportedly nurtured by Pakistan for proxy wars in Afghanistan and against India.
- Pakistan uses them to secure strategic advantage in the region i.e in Afghanistan, Jammu and Kashmir and against India
- But some of them consider Pakistanis as legitimate targets.
- To them Pakistan is as much their religious battlefield as Afghanistan or India.
- One of the explanations for why Pakistan is unable to intercept jihadi terrorists targeting

its own people is that the state apparatus does not outrightly consider all jihadis as its enemy.

- They have double standards.
- E.g 'Operation Zarb-e-Azb' targeted out-of-control Pakistani Taliban in Waziristan but spared groups based in Punjab and Karachi. Hafiz Saeed, the founder of LeT was recently detained but actions against him and Masood Azhar at the U.N. was blocked with Chinese support.
- The jihadis responsible for attacks within Pakistan are deemed 'agents' of Indian intelligence or the Afghanistan National Directorate of Security (NDS).

What should Pakistan do?

- The recent attacks prove that the Pakistan's tolerance for terror groups undermines the country.
- It corrodes stability and civilian governance, damages the investment climate, and inflicts death and injury on thousands of innocent Pakistani citizens.
- Therefore Pakistan should have to delegitimise the jihadi ideology in its entirety.

5.4 India - Bangladesh

Why in news?

- Bangladeshi PM has planned to visit India in early April 2017.

What are the agreements that are expected to be signed?

- Bangladeshi PM's visit will further build on the boost the relations received from signing the historic Land Boundary Agreement in 2015.
- A defence partnership agreement, Teesta water-sharing agreement, the Ganga water barrage project, and other energy & connectivity projects are expected to be announced during PMs Indian visit.

What are issues involved?

- Some of the said agreements involve the Centre-State relations.
- Ex: The movement on Teesta water-sharing has been held up because of West Bengal's reservations.
- So the Central government has to reach out to West Bengal Chief Minister to address them.
- Similarly Bihar Chief Minister is against the Farakka Barrage project.
- Also, the Bangladeshi PM faces an election in 2018. Her opposition accusing her of being soft on India.
- It means, she cannot return home empty-handed on the water question.
- Other major issue is, while the border issue has been resolved, border firing has not ceased.
- Bangladeshi PM also faces an uphill task of addressing India's mistrust over Chinese investment in Bangladesh - \$38 billion pledged in infrastructure cooperation and joint ventures.
- But India has decided to allow its border roads in Mizoram and Tripura to be used by Bangladeshi forces since they are constructing border outposts in the terrain areas.
- Similar steps should be taken to consolidate the gains on other key issues.

5.5 India China – Masood Azhar Issue

Why in news?

- U.S moved a proposal at the U.N.'s Sanctions Committee 1267, to designate Pakistan-based Masood Azhar as a global terrorist.

Who is Masood Azhar?

- Masood Azhar is the founder and leader of terrorist group Jaish-e-Mohammed, active mainly in the Pakistani administered Azad Kashmir.
- India holds Azhar responsible for many terrorist acts in India including the 2nd January 2016 attack on the Pathankot airbase.

Why is China opposing the move?

- China was the only country among the 15-member UN Security Council to oppose the ban on Azhar. The reasons are -
- China and Pakistan are "all-weather friends". Therefore Beijing's wants to keep its ally in South Asia in good terms.
- Pakistan is supporting China within groupings like the Organisation of Islamic Cooperation and others like the Non-Aligned Movement where China has no representation. Therefore this could be payback.
- China also wants to strengthen its relation with Pakistan because of its key role in China's One Belt One Road plans.
- China sees India's growing proximity to the US as a major challenge and this could be a retaliation.
- This also could be counter measure against India for sheltering Dalai Lama.

What is the current position?

- In December 2016, India's efforts to get Azhar banned by the U.N. were blocked by China.
- The current proposal by US said that JeM is a designated terror outfit and so its leaders should be banned and the proposal is supported by the U.K. and France.

- But China opposed and put a hold on the U.S.' move. The "hold" remains for six months and can be further extended by three months.
- During this period, it can anytime be converted into a "block," thereby, ending the life of the proposal.
- Therefore, India has said that the matter has been taken up with the Chinese government.
- Putting Pakistan's Masood Azhar (of the Jaish-e-Mohammed) on the terror list of the United Nations Security Council (UNSC).
- Another possible flashpoint in May 2017 will be of Chinese President Xi Jinping's global conference on the "Belt and Road Initiative (B&RI)," where the CPEC will be highlighted and which Pakistan PM is expected to attend. India had planned not to take part in it due to the "sovereignty issues."

What is UNSC 1267 Committee?

- The UNSC 1267 Committee was established as a result of resolution 1267 (1999).
- It is also known as the Al-Qaida and Taliban Sanctions Committee.
- The Committee comprises all 15 members of the UNSC and decides unanimously and secretly.
- It was established for the purpose of overseeing the implementation of sanctions measures imposed on Taliban-controlled Afghanistan for its support of Osama bin Laden.
- Eventually it has been modified and strengthened by subsequent resolutions.
- Now, if an individual or an organisation is included in the list, it helps in restricting their movement, financial penalties and assets freeze among others.
- Due to its growing political influence in the multilateral arena, China was under no obligation to make nice with Delhi.
- Also China's GDP is now nearly five times larger than that of India and its defence spending is three times bigger.
- Therefore India had to adapt to the political consequences of growing strategic asymmetry.

How India responded?

- India persisted with a two-fold approach.
- One was to continue the campaign for the membership of the NSG and putting MasoodAzhar on UNSC's terror list.
- The other was to take up China's opposition at every diplomatic encounter — bilateral and multilateral.
- This had helped in reaching the first round of the newly instituted strategic dialogue

5.6 India China - Strategic Dialogue

Why in news?

- India's Foreign Secretary S. Jaishankar visited Beijing recently for a "Strategic Dialogue" with Chinese executive Vice-Minister of Foreign Affairs.

What are the thorns in the relationship?

- China's decision to block India's campaign for the membership of the Nuclear Suppliers Group (NSG)
- India and China began to look for a "common ground" on Afghanistan.

What are the developments in Strategic Dialogue?

- The strategic dialogue was divided into five different sub-groups - Afghanistan, nuclear issues, United Nations including the 1267 designation committee, bilateral issues, and consular and visa matters, or people-to-people ties.

- Both the Indian and Chinese delegations included officials dealing with Pakistan and Afghanistan as well as the U.N. and multilateral ties.
- They discussed the possibility of “joint development projects” that could be undertaken despite economic rivalries between the two countries in other parts of the subcontinent.
- Chinese government had expressed its admiration for India’s work on developmental projects, including the Salma Dam in Herat, Afghanistan.
- It also witnessed an effort by both sides to “stabilise India-China relations”.
- These showed that China was open to finding solutions.

What is the reason for China’s actions?

- China had grown economically, and India has been growing because of a predictable international system so far.
- There is a shifting global calculus due to the recent surprise foreign and trade policy moves by the new U.S. administration under Donald Trump.
- e.g Trump’s threat of abandoning the “One China” policy, and backing down on it after talks with Mr. Xi.
- The new unpredictability will affect both.
- Therefore both the countries are trying to bring down the volatility, instead of playing up the differences.

What is the way ahead?

- The positive characterisation of last week’s talks by both sides does not mean the multiple divergences can be bridged any time soon.
- Some issues like the boundary dispute, trade deficit, OBOR, where the differences

between the two sides are too deep, are not easy to resolve.

- But others like India’s NSG membership can be resolved.
- The Indian emphasis should be on perseverance with China that puts self-interest above ideology and seek common ground wherever possible.

5.7 Securing India’s Strategic Autonomy

What is the issue?

- Though China had largely refrained from commenting over India’s missile programme, when India conducted the fourth test of Agni-V, Chinese foreign ministry came out with a statement
- It stated that the UNSC has explicit regulations on whether India can develop ballistic missiles capable of carrying nuclear weapons.

What is the resolution that china talked about?

- China was referring to the UNSC Resolution 1172, 1998.
- It was passed in the aftermath of the nuclear tests conducted by both India and Pakistan in May 1998.
- The resolution had urged India and Pakistan not to develop nuclear weapons delivery platforms like ballistic missiles, to cap their nuclear weapons programmes and cease all fissile materials production.
- This resolution was approved under Chapter VI of the UN Charter and is non-binding.
- Therefore there are no constraints on India pertaining to its weapons and missile programmes.
- But the Chinese media accused India of breaking the UN’s limits on its development

of nuclear weapons and long-range ballistic missile.

- India affirmed that India's strategic capabilities are not targeted against any particular country and India abides by all the applicable international obligations.

Why China reacted?

- The media coverage of the successful test-firing of the two long-range missiles by India was elaborate.
- Despite not being a signatory to the Nuclear Non-proliferation Treaty (NPT), is getting preferential treatment from the rest of the world.
- India had recently joined the Missile Technology Control Regime (MTCR), whereas China's credentials to be in the grouping were found lacking.
- These are the reasons for China's discomfort.
- Therefore apart from raising objections to India's missile testing, it also stalled India's entry into the NSG and acted against Indian interests on the issue of terrorism emanating from the Pakistani soil.

What India should have done?

- India does not appear to be giving a strong response to such Chinese actions.
- Globally military parades have been observed that countries use such ceremonial parades to display their military capabilities to the world.
- During the 2013 Republic Day parade, India had displayed Agni-V.
- It appears that India avoided displaying its nuclear might after 2013 for obvious geopolitical reasons.
- Nuclear deterrence is also about demonstration and display of capabilities.

- Such strategic signalling is often necessary to send a strong message to those questioning India's 'strategic autonomy'.

6. INTERNATIONAL RELATIONS

6.1 India - CLMV

Why in news?

- The 4th India – CLMV Business Conclave held in Jaipur.

What is CLMV conclave?

- Cambodia, Lao PDR, Myanmar and Vietnam collectively, the third largest economy in ASEAN, followed by Indonesia and Thailand.
- Due to close proximity, India is looking to boost trade and investment with the CLMV region as part of the 'Act East' policy.
- The CLMV conclave is an annual feature which provides an opportunity for Indian business leaders to interact with government and business stake holders representing the four countries.
- The conclave facilitates to create and provide a platform for the decision makers from CLMV countries to interact with a range of Indian business companies involved in trading, manufacturing, processing, engineering, consultancy, construction etc.

What is the trade scenario?

- The trade with the CLMV countries grew from \$ 1.5 billion to more than \$ 10 billion in the last 10 years and expressed hope that India will be able to partner in more trade initiatives with these countries to develop a strong India-CLMV vertical within the ASEAN market.
- There are clear verticals for India to facilitate trade with these countries like, organic agriculture produce from Myanmar, value added products from coffee & pepper produce of Vietnam, two & three wheeler exports to Lao PDR etc.

- These countries can take advantage of the tremendous scope in India on skill resources across various sectors.

What is the way ahead?

- India is organising a Business Service Management-cum-exhibition in Myanmar during March, 2017.
- At the event, India will showcase her strengths in the healthcare verticals, viz. Pharmaceuticals, medical technology and health services.
- India's abilities in Agriculture, fisheries, aquaculture, skilling, solar and wind energy can provide a lead to the region.

6.2 Trump's foreign policy

Why in news?

- Donald Trump has issued a series of executive orders consistent with his inaugural speech in which he stressed upon "America First" and elimination of "radical Islamic terrorism".

What is an executive order (EO)?

- The U.S President can issue rules, regulations, and instructions called executive orders.
- They have the binding force of law upon federal agencies and they do not require approval of the United States Congress.
- But the executive orders are subject to judicial review and interpretation.

How international agreements are ratified by the U.S?

- The executive signs the agreement.
- This has to be ratified by the U.S Senate to come into force.
- But the trade agreements, like the TPP, are approved using Trade Promotion Authority authorization, in which the US Congress is required to hold a yes/no vote on any agreements without modification.

What are the recent EOs regarding Foreign Policy?

- The US president has signed an executive order formally withdrawing the country from the Trans-Pacific Partnership (TPP) trade deal.
- He signed an EO to pose a three-month ban on immigrants from seven Muslim majority countries - Iraq, Syria, Iran, Sudan, Libya, Somalia and Yemen.
- He also suspended the refugee programme for four-months to provide time to review how refugees are vetted i.e examined before they are allowed in the U.S.
- He is also preparing to issue EOs that will bring restrictions on H1-B and other visas.

What are the consequences?

- TPP - To come into force, the TPP needed to be ratified by at least six signatories that accounts for 85% of the total GDP of the bloc.
- US is the largest economy in the bloc. Unless it ratifies the TPP cannot come into force. Therefore the agreement is no longer a possibility.
- This withdrawal greatly reduces the possibility of a US-led regional order in the Asia Pacific which was the central theme of the US' Pivot to Asia Policy.
- Visa Ban - In theory, the policy is meant to ban terrorists until better vetting methods are formulated.
- But this move sends back people to a war zone or places that they fled due to political persecution.
- The ban on refugees is against the principle of freedom, at time where the refugee population around the world is highest since WWII.
- H1B restrictions - Indians hold the majority of H1B visas and L-1 visas. The current move

is aimed at bringing back the original intent of H1B visas i.e to hire additional talent to support US not but not to hire cheap labor that replaces American workforce.

- But the Indians also contribute USD 1 billion annually to the US.
- Indian IT industry contributes to about 4 lakh direct and indirect jobs in the US and additional USD 5 billion in taxes annually.
- The move also increases inspector raj and ends employment authorisation cards to spouses on such work visas.
- His domestic actions regarding the reduction of environment clearance rules reflect his non serious attitude towards climate change. “We are the first generation to feel the effect of climate change and the last generation who can do something about it.” Therefore it is of major concern.

6.3 What 'America First' means for India?

Why in news?

- The US President on his swearing in ceremony has announced the Capitals of World countries saying from that day onwards, it's going to be only “America First”.
- Since then several world capitals have heard various interpretations of this announcement, resulting in a more uncertain world.

What are the common grounds?

- Security - Both the administrations would be interested in the defeat of Radical Islamic Terrorism.
- Defence - India is designated a major defence partner by the Obama administration.
- Therefore India's requests for high technology are now considered with a 'presumption of approval' as opposed to 'presumption of denial'.

- The Trump administration is also willing favourably look at India's pending request for Avenger armed drones and carry forward the ongoing cooperation between the two countries in defence.

What are the areas of contentions?

- NGO - The continuing crackdown on U.S.-based Christian charities operating in India can create a rift as the evangelical groups have far higher influence in the current White House than in the previous one.
- Jobs - Both the governments have promised job creation. Therefore they could be competing in this area because the last decade witnessed a movement of U.S. jobs to India, and of Indian workers to the U.S.
- H-1B Visa - The business model of Indian IT is to locate a crucial part of their workforce in the U.S. who support the operation of jobs carried out in India.
- But in recent years, these companies have increasingly hired Americans in their local workforce. So a crackdown on H-1B visas will not affect the business model
- But the changes in laws that will not allow these companies to relocate the jobs at all will not be welcomed by India.

What should India do?

- Though it has been signalled by the new administration that India would be a friend, it is not of top priority right now.
- Therefore India must do more to catch the attention of the new administration.
- Not much is needed to be done in areas like cyber security, intelligence sharing, space, disease control, maritime surveillance, agriculture, education and climate change.
- They should be allowed to continue in the already existing pace.

- The new administration might want India to openly partner with US in tackling China.
- Recently US reiterated a long pending demand to sign the COMCASA (Communications Compatibility and Security Agreement) that would enhance joint surveillance of Chinese vessels.
- India's consistent demand that the U.S. bring more pressure on Pakistan to take action against terrorist groups could be met with another demand for Indian troops in Afghanistan.
- They may be less understanding about India's domestic sentiment.
- Therefore these areas to be treaded cautiously.
- India also offered scholarships and fellowships to Rwandan students to enable them to pursue undergraduate, masters, and research courses in India.

How the MoUs will be useful?

- With direct flights between the two countries, the people to people exchange will be more fruitful.
- With the air services agreement, the tourism sector will get a major boost.
- India-Rwanda Innovation Growth Program is being launched. It will expand ties in Science, Technology and Innovation.
- Under the Programme, 20 demonstrated and validated Indian technologies and innovations are expected to be adopted over a period of two years.
- The joint ventures created with Rwandan partners can deliver many sustainable social enterprises that will stimulate economic development in Rwanda.

6.4 India - Uganda & Rwanda

Why in news?

- Vice President (VP) had returned to India after concluding his five-day visit of Rwanda and Uganda.

What are the MoUs signed between India and Rwanda?

- A bilateral air services agreement was signed, thus enabling direct flights between the two countries. Rwandan Airways will begin direct flights between Kigali and Mumbai from April 2017.
- The other two MoUs are setting up of an entrepreneurial development centre in Rwanda and exemption of visa for entry of diplomatic and official passports.
- Rwandan government also cited its desire of wanting many Indian pharmaceutical companies in Rwanda.
- Indian government asked questions about President 'Paul Kagame's governance model' that helped Rwanda become one of the cleanest and well-run states in Africa.

What happened during Uganda visit?

- This was the first high-level bilateral visit to Uganda from India since 1997 and first high-level visit to Rwanda ever.
- India and Uganda decided to expand cooperation in the field of energy sector and training of personnel for space programme and peaceful use of atomic energy.
- Uganda has pitched for Indian companies to manufacture automobiles locally to discourage import of cars.
- At the India-Uganda Business Forum, the VP has emphasised that business ties with Uganda is a "key pillar" of the bilateral relationship.

Uganda & Rwanda - Geography

- The equator passes through the African countries of Gabon, Congo, the Democratic

- Republic of Congo, Uganda, Kenya and Somalia. It also passes through Lake Victoria.
- Rwanda (Capital. Kigali) and Uganda (Capital. Kampala) are both land-locked countries.
 - Rwanda, in east-central Africa, is surrounded by the Democratic Republic of the Congo, Uganda, Tanzania, and Burundi.
 - Uganda is bordered on the west by Congo, on the north by the Sudan, on the east by Kenya, and on the south by Tanzania and Rwanda.
 - The highest point of Rwanda is Karisimbi, which peaks at 14,826 ft.
 - Numerous lakes dot the landscape, with Lake Kivu making up most of Rwanda's western border. Lake Kivu is one of the 20 deepest lakes in the world, and has a maximum depth of 1,575 ft.
 - Four of East Africa's Great Lakes - Lake Victoria (second largest inland freshwater lake in the world), Lake Kyoga, Lake Albert, and Lake Edward lie within Uganda or on its borders.

6.5 Israel's Expanding Settlement

Why in news?

- Israel passed a legislation that would legalise nearly 4,000 Jewish settler homes on private Palestinian lands in the West Bank.

What are settlements?

- Settlements are communities established by Israel on land occupied in the 1967 Middle East war.
- This includes the West Bank, East Jerusalem and the Golan Heights.
- Prior to that no Israeli citizens had lived in the territory.
- In 1968 Israeli government reluctantly allowed Jews to stay "temporarily."

- Since then hundreds of thousands of Israeli Jews now reside in the West Bank, citing religion, history and Israel's security among their reasons for being there.
- There are 131 settlements in the West Bank, housing about 385,000 Israeli Jewish settlers, and 97 outposts - settlements built without official authorisation.
- Palestinians, along with the rest of the world, see their presence as one of the key obstacles to a peace agreement and the creation of a Palestinian state.
- Palestinians say the presence of settlements in the West Bank and East Jerusalem - land they seek for a future state - make such a state with contiguous territory impossible.
- They have demanded Israel freeze all settlement activity as a precondition for resuming peace talks.

What is the legislation about?

- Despite international criticism, successive governments have supported the settlements.
- The legislation allows the Israeli government to confiscate private Palestinian land if the land-owners are unknown.
- If known, they will be compensated in cash or kind.

What will be the impact?

- The legislation seeks to extend Israeli law to the West Bank.
- It can be overturned by the judiciary.
- Israel's Attorney-General has said he wouldn't defend the bill in the high court as it is unconstitutional and violates international law.
- But this is unlikely to stop the current-government from taking more Palestinian land.

- Earlier UN Security Council demanded that Israel stop all settlement activity in the Occupied Territories.
- An international conference attended by more than 70 countries urged both sides in the conflict to resume talks
- In this scenario, Israel's legislation shows its disregard for international opinion and institutions.
- Since, the US established formal diplomatic ties with Beijing in 1979, it had to sever ties with Taiwan and closed its Taipei embassy.
- This has resulted in Taiwan's diplomatic isolation from the international community.

What is behind the China-Taiwan divide?

What is the Israel's stand?

- Israel still says it is committed to the two-state solution.
- But the two-state solution will not be relevant if it continues to grab Palestinian land.
- The current government has shown no interest in resuming negotiations.
- This is compounded by the election of Donald Trump as U.S. President, who also does not believe in the two-state solution.
- The 'One-China' policy can be traced back to 1949 and the end of the Chinese civil war.
- The defeated Nationalists, also known as the Kuomintang, retreated to Taiwan and made it their seat of government while the victorious Communists began ruling the mainland as the People's Republic of China.
- Both sides said they represented all of China. Since then China's ruling Communist Party has threatened to use force if Taiwan ever formally declares independence.

6.6 One China Policy

Why in news?

- The new U.S. administration has agreed to honour the long-standing 'One China Policy, after previously placing it in doubt and infuriating China.
- Initially, many governments including the US recognised Taiwan and they shied away from Communist China.
- But the mutual need to develop relations with China begun in the 1970s, and as a result, the US and other countries started cutting ties with Taipei in favour of Beijing.

What is the 'One China' policy?

- The One China policy is a key cornerstone of Sino-US relations. It is the diplomatic acknowledgement of China's position that there is only one Chinese government.
- Under the policy, the US recognises and has formal ties with China rather than the island of Taiwan, which China sees as a breakaway province.
- China insists Taiwan is an inalienable part of one China. So, any country that wants diplomatic relations with mainland China must break official ties with Taipei.
- ***What happened in the recent weeks?***
- U.S. stated commitment to honour the One China policy.
- But the move showed a bad diplomatic judgment on the part of U.S.
- This doesn't mean that the U.S. must accept with China on all global issues.
- The challenge before the U.S. is to address issues with Beijing without disrupting the Sino-U.S. equilibrium.

6.7 Greece struggling to meet Bailout conditions

Why in news?

- The future of Greece's 86 billion Euros bailout hangs in the balance in the absence of crucial backing from the IMF.

What is Greece debt crisis?

- After the creation of Eurozone, Euro currency and European Central Bank, Greece had begun to borrow large amounts of money at very low-interest rates.
- The borrowings happened primarily because of politicians could use it for populist programmes like high pensions, low taxes, etc.,
- This led to increasing govt debt, which Greece managed to repay with borrowing even more money.
- The cycle has lasted until 2008 when the US housing market suffered a collapse and the entire globe became engulfed in the financial crisis.
- With global financial markets still reeling, Greece announced in October 2009, that it had been understating its deficit figures for years, thus, raising alarms about the soundness of Greek finances.
- Thus by the Spring 2010, Greece couldn't borrow anymore and couldn't repay its debts and it was veering toward bankruptcy, which threatened to set off a new financial crisis.
- To avert the calamity the IMF, the ECB and the European Commission have issued the first of three international bailouts for

Greece, which was more than 240 billion Euros.

- Greece, in order to receive bailouts, has agreed to austerity measures, which would have it to cut spending, raise taxes, etc.,
- This is a highly unpopular measure in Greece and has led to severe unemployment and riots.
- Till now, Greece has received 3 major bailouts. Yet, Greece is still in debt and has been unable to repay the bailouts.

What is the recent development?

- Athens has to repay a loan instalment by July, 2017, in order to avail of the next part of the rescue funds under the terms of the 2015 deal.
- But there is uncertainty, with the EU and the IMF are in confrontation over the health of the Greek economy and Greek's unwillingness to adopt more austerity than what was agreed.
- The report by IMF recently pointed out that the bailout target of a 'budget surplus of 3.5% of GDP was unrealistic' and reiterated the need for urgent debt relief.
- Also, the IMF's demand that if the country again fails to meet fiscal targets, the parliament must legislate additional measures to meet fiscal targets, has raised the agitation among Greek legislators.
- Germany and other creditor countries are now concerned about the difficulty of garnering domestic political support in the absence of more direct backing from the IMF.



PAPER - III

7. BUDGET 2017**7.1 Key Features of Budget 2017-2018****Why in news?**

- The 2017 Union Budget was presented by Finance Minister Arun Jaitley on February 1st, which is a month earlier than it is usually done.

What were the key features?

- Finance Minister introduced the budget by listing out the achievements of the government at the end of the half term, followed by pointing out the challenges in the upcoming year and finally presented the roadmap for the next year.

- Achievements - According to him, during the 1st of 2016-17 -

- CPI-based inflation declined from 6% to 3.4%
- GDP grew at 7.2 %
- India's Current Account Deficit declined from about 1% of GDP to 0.3% of GDP
- FDI grew 36%, despite 5% reduction in global FDI inflows.
- Foreign exchange reserves have reached 361 billion US Dollars as on January, 2017
- Measures against black money launched
- Fiscal consolidation efforts were taken

➤ **Reforms during last year**

- Passage of the Constitution Amendment Bill for GST
- Demonetisation

- Enactment of the Insolvency and Bankruptcy Code
- Amendment to the RBI Act for inflation targeting

➤ **Budget Reforms**

- Presentation of Budget advanced to 1st February
- Merger of Railways Budget with General Budget
- Removal of classification of plan and nonplan expenditure to facilitate a holistic view of allocations for sectors and ministries.

➤ **Challenges in 2017-18-**

- Economic and political developments like Brexit & change of administration in US
- Plans to increase US Federal Reserve rate that may lead to lower FDI and higher outflows of funds.
- Uncertainty of price of crude oil and other commodities
- Growing protectionism i.e against globalization

➤ **Roadmap & Priorities**

- Agenda for 2017-18 - "Transform, Energise and Clean India" (TEC India)
- TEC India seeks to transform the quality of governance and quality of life of our people, energise various sections of society, especially the youth and the vulnerable, clean the country from corruption, black money and non-transparent political funding
- Ten distinct themes are formulated to bring out this agenda.

➤ **Farmers-**

- A sum of Rs. 10 lakh crore is allocated as credit to farmers, with 60 days interest waiver.
- NABARD fund will be increased to Rs. 40,000 crore.
- Government will set up mini labs in Krishi Vigyan Kendras for soil testing.
- A dedicated micro irrigation fund will be set up for NABARD with Rs 5,000 crore initial corpus.
- Irrigation corpus increased from Rs 20,000 crore to Rs 40,000 crore.
- Dairy processing infrastructure fund will be initially created with a corpus of Rs. 2000 crore.
- Issuance of soil cards has gained momentum.
- A model law on contract farming will be prepared and shared with the States.
- Coverage of National Agricultural Market (e-NAM) to be expanded from 250 markets to 585 APMCs.

➤ **Rural Population**

- The government targets to bring 1 crore households out of poverty by 2019.
- 5 lakh farm ponds will be taken up under the MGNREGA.
- Over Rs 3 lakh crore will be spent for rural India.
- MGNREGA to double farmers' income.
- Steps to ensure participation of women in MGNREGA up to 55%.
- Space technology will be used in a big way to ensure MGNREGA works.
- The government proposes to complete 1 crore houses for those without homes via Pradhan Mantri Awaas Yojana.

- Will allocate Rs. 19,000 crore for Pradhan Mantri Gram Sadak Yojana in 2017-18.
- The country well on way to achieve 100% rural electrification by March 2018.

➤ **For youth**

- Will introduce a system of measuring annual learning outcomes and come out with an innovation fund for secondary education.
- Focus will be on 3,479 educationally-backward blocks.
- Innovation Fund for Secondary Education to encourage local innovation
- Colleges will be identified based on accreditation.
- SWAYAM platform to enable students to virtually attend courses taught by the best faculty.
- National Testing Agency to conduct all entrance examinations for higher education institutions.
- Pradhan Mantri Kaushal Kendras to be extended to more than 600 districts across the country.
- Skill Acquisition and Knowledge Awareness for Livelihood Promotion programme (SANKALP) to provide market relevant training to 3.5 crore youth
- Skill India mission was launched to maximise potential by setting up 100 India International centres.
- Incredible India 2.0 Campaign to promote tourism and employment.

➤ **Poor and Underprivileged**

- Rs.500 crore allocated for Mahila Shakthi Kendras.
- Under Maternity Benefit Scheme, Rs. 6000 will be transferred to pregnant women who undergo institutional delivery and vaccinate their children.

- A sum of Rs. 1.8 lakh crore allocated for women and children.
- Elimination of tuberculosis by 2025 targeted.
- Health sub centres, numbering 1.5 lakh, will be transformed into health wellness centres.
- Two AIIMS to be set up in Jharkhand and Gujarat.
- Will undertake structural transformation of the regulator framework for medical education.
- Allocation of around Rs. 52,000 crore for Scheduled
- Aadhaar-based smartcards to senior citizens to monitor health.
- National Housing Bank to refinance individual housing loans of about Rs. 20,000 crore
- 500 stations to be made differently-abled friendly.
- Railways will offer competitive ticket booking facility.
- Rs. 64,000 crore allocated for highways.
- High speed Internet to be allocated to 1,50,000 gram panchayats.
- New Metro rail policy will be announced with focus on innovative models of financing.
- A DigiGaon initiative to provide tele-medicine, education and skills through digital technology.
- Incentive schemes like M-SIPS and EDF for creating an eco-system to make India a global hub for electronics manufacturing.
- A new and restructured Central scheme with a focus on export infrastructure, namely, Trade Infrastructure for Export Scheme (TIES) will be launched in 2017-18.

➤ Infrastructure

- A total allocation of around Rs. 40 lakh crore for infrastructure.
- Total allocation for Railways is Rs. 1,3 lakh crore.
- No service charge on tickets booked through IRCTC.
- Raksha coach with a corpus of Rs. 1 lakh crore for five years (for passenger safety).
- Unmanned level crossings will be eliminated by 2020.
- 3,500 km of railway lines to be commissioned this year up from 2,800 km last year.
- SMS-based "clean my coach service" is put in place.
- Coach mitra facility will be introduced to register all coach related complaints.
- By 2019 all trains will have bio-toilets.

Energy sector

- A strategic policy for crude reserves will be set up.
- Rs. 1.26,000 crore received as energy production based investments.
- Trade infra export scheme will be launched 2017-18.

Financial sector

- Bill on resolution of financial firms will be introduced in this session of Parliament.
- The shares of Railway PSEs like IRCTC, IRFC and IRCON will be listed in stock exchanges.
- Foreign Investment Promotion Board (FIPB) will be abolished.
- A Computer Emergency Response Team for our Financial Sector (CERT-Fin) will be established

- Pradhan Mantri Mudra Yojana lending target fixed at Rs 2.44 lakh crore for 2017-18.

Digital Economy -

- The government will introduce two schemes to promote BHIM App - referral bonus for the users and cash back for the traders.
- Negotiable Instruments Act might be amended.
- DBT to LPG consumers, Chandigarh is kerosene-free, 84 government schemes are on the DBT platform.
- To introduce law to confiscate the within the country assets of the economic offenders who flee India.
- Proposed to create a Payments Regulatory Board in the Reserve Bank of India.
- Aadhar Pay, a merchant version of Aadhar Enabled Payment System, will be launched shortly.

Public Service

- Head post office as the central office for rendering passport service.
- A Centralised Defence Travel System to help our soldiers and officers in online ticket booking
- Web based interactive Pension Disbursement System for Defence Pensioners.

Affordable Housing And Real Estate Sector -

- Under the scheme for profit-linked income tax deduction for promotion of affordable housing, carpet area instead of built up area of 30 and 60 Sq.mtr. will be counted.
- For builders for whom constructed buildings are stock-in-trade, tax on notional rental income will only apply after one year of the end of the year in which completion certificate is received

- For Joint Development Agreement signed for development of property, the liability to pay capital gain tax will arise in the year the project is completed

Transparency In Electoral Funding -

- Maximum amount of cash donation, a political party can receive, will be Rs.2000/- from one person.
- Political parties will be entitled to receive donations by cheque or digital mode from their donors.
- Amendment to the Reserve Bank of India Act to enable the issuance of electoral bonds in accordance with a scheme that the Government of India would frame in this regard.
- Exemption from payment of income-tax to the political parties would be available only if they fulfil these conditions.

Tax proposals

- India's tax to GDP ratio is not favourable.
- Only 45% of registered companies have filed returns for 2016-17.
- Proportion of direct tax to indirect tax is not optimal.
- Individuals numbering 1.95 crore showed an income between Rs. 2.5 lakh to Rs. 5 lakh.
- Only 1.72 lakh people showed income of more than Rs. 50 lakh a year.
- Holding period for long term capital gain lowered to two years
- Proposal to have a carry-forward of MAT for 15 years.
- Capital gains tax to be exempted for persons holding land from which land was pooled for creation of the state capital of Andhra Pradesh.

- In order to make MSME companies more viable, income tax for companies with annual turnover upto Rs.50 crore is reduced to 25%.
- Basic customs duty on LNG reduced from 5% to 2.5%
- The Income Tax Act to be amended to ensure that no transaction above Rs 3 lakh is permitted in cash.
- The limit of cash donation by charitable trusts is reduced to Rs 2,000 from Rs 10,000.
- Allowable provision for Non-Performing Asset of Banks increased from 7.5% to 8.5%.
- 14. Maximise efforts for e-assessment in the coming year through RAPID (Revenue, Accountability, Probity, Information and Digitisation)

Personal income tax

- Existing rate of tax for individuals between Rs. 2.5- Rs 5 lakh is reduced to 5% from 10%.
- All other categories of tax payers in subsequent brackets will get a benefit of Rs 12,500.
- Simple one page return for people with an annual income of Rs. 5 lakh other than business income.
- People filing I-T returns for the first time will not come under any government scrutiny.
- Ten % surcharge on individual income above Rs. 50 lakh and up to Rs 1 crore to make up for Rs 15,000 crore loss due to cut in personal I-T rate.
- 15 surcharge on individual income above Rs. 1 crore to remain.

7.2 Budget 2017 - Income Tax

What are the changes made?

- The income tax for earning between ₹ 2.5 lakh and ₹ 5 lakh a year is reduced from the rate of 10% to 5%.
- All the other categories of tax payers in the subsequent slabs will also get a uniform benefit of ₹ 12,500 per person.
- The existing rebate for those earning ₹ 5 lakh or less will now be reduced to ₹ 2,500 and it is available only to those earning an income of up to ₹ 3.5 lakh.
- A surcharge of 10% is levied on tax payable for those with annual taxable income between ₹ 50 lakh and ₹ 1 crore.
- The existing surcharge of 15% of tax on people earning more than ₹ 1 crore will continue.

How all tax payers benefit of up to Rs. 12,500?

- People who earn below Rs.2.5 lakh do not pay any income tax.
- People who earn above Rs. 2.5 lakh pay IT, only for the amount exceeding Rs. 2.5 lakh. e.g If a person earns 5 lakh per annum, he pays tax for 2.5 lakh only. The initial 2.5 lakh is outside the ambit of tax.

Year	Yearly Income	Taxable Amount	Tax rate	Rebate amount	Net Tax amount
2016	3,00,000	50,000	10% i.e 5,000	5000	0
2016	5,00,000	2,50,000	10% i.e 25,000	5000	20,000
2017	3,00,000	50,000	5% i.e 2500	2500	0
2017	5,00,000	2,50,000	5% i.e 12,500	0	12,500

What is a rebate?

- For the people with total income less than 5 lakh rupees/annum, section 87A of Income-tax Act, provide for a rebate of an amount equal to 100% of such income-tax or an amount of Rs. 5000, whichever is less. e.g If one pays an IT of Rs.7500, Rs. 5000 will be given back, making the tax amount only to Rs.2500.

What is the change made in Budget 2017?

- The existing rebate amount is reduced from Rs.5000 to Rs.2,500 and it is available only to those earning an income of up to Rs.3.5 lakh and not for those earning upto Rs. 5 lakh.

Year	Yearly Income	Taxable Amount	Tax rate	Rebate amount	Net Tax Amount
2016	3,00,000	50,000	10% i.e 5,000	5000	0
2016	5,00,000	2,50,000	10% i.e 25,000	5000	20,000
2017	3,00,000	50,000	5% i.e 2500	2500	0
2017	5,00,000	2,50,000	5% i.e 12,500	0	12,500

7.3 Budget – Electoral Funding**What is the present condition of electoral funding in India?**

- According to the Association of Democratic Rights, 69% of the total income reported by the country's six national and 51 regional parties, during for the period of 2004-05 and 2014-15, came from unknown sources.
- Only 16% came from named donors and the remaining 15% accrued from other sources such asset sale, and membership fees.
- On the other side, more than three-fourth of the 1,900 parties registered with the Election Commission– haven't contested elections for years.
- Each of them is a possible platform to launder illegal money.
- The lack of transparency and accountability in relation to political donations also breed the ground for rent-seeking and corruption.
- Businesses, small and big, contribute funds to a political party or its candidate with the expectation that the favour would be returned. They influence policy and

government actions when their friendly political party comes to power.

- This is not unique to India, but unlike many mature democracies there is no institutional framework to deal with the problem.

What are the provisions in the budget?

- Maximum amount of cash donation, a political party can receive, will be Rs.2000/- from one person.
- Political parties, however, will be entitled to receive donations by cheque or digital mode from their donors.
- Amendment to the Reserve Bank of India Act to enable the issuance of electoral bonds in accordance with a scheme that the Government of India would frame in this regard.
- Exemption from payment of income-tax to the political parties would be available only if they fulfil these conditions.

What are the shortcomings?

- The ceiling in the ceiling to Rs. 2,000 is unlikely to stop the disguising of huge, off-the-books cash donations from corporate houses and vested interests as small

contributions from ordinary party workers and sympathisers.

- Also this will not reduce the proportion of cash from unverifiable sources in the total donations received.
- Ordinary citizens are encouraged to make payments using digital means. But the political parties are being allowed to accept donations up to Rs 2,000 in cash.
- There is no cap on the amount a party may receive in cash as a donation.
- The details of the electoral bonds scheme are not known yet.
- But the FM said that these bonds will be bearer in character to keep the donor anonymous. The problem with political financing is that 75-80% of the declared income of political parties comes from unknown sources. The current move is also against transparency.

What should be done?

- Transparency in political financing will happen when the political establishment realises that the only way to get out of the shackles of big and black money is to become open.
- The government can do this by revising its affidavit in the Supreme Court to say all political parties should be under the purview of the RTI Act, thus honouring the Central Information Commission's 2013 decision.
- A level playing field for all stakeholders in a multi-party democracy should be ensured. The more competitive a democracy gets, the better it is for the people of the country.
- Therefore the idea of a National Election Fund should be revisited.
- Such a fund could be declared as the only channel through which businesses and individuals can contribute to political parties.

Like the finance commission decides how to distribute central transfers to states, the Election Commission or any institution created for the purpose of administering the fund can decide how the donations are shared among parties.

Such an initiative will have to be supported by other measures such as stricter audits for books of accounts maintained by political parties and cracking down on parties that exist only on paper.

7.4 Budget 2017 – Health

What are the provisions in the budget for health?

- Elimination of five infectious diseases,
- Strengthening of rural sub-centres,
- Recruitment of specialist doctors in govt hospitals,
- Increased allocation for programmes for women and children, and
- Free treatment for the elderly poor.

What are the shortcomings?

- Since Independence, a significant portion of the health budget has been allocated to infectious disease control programmes.
- Now these diseases account for less than 10% of deaths and 15% of ill-health in the country.
- Therefore there should be increased budgetary support for the prevention and control for non-communicable diseases like cancer, diabetes, hypertension etc., which are the major causes of sickness, disability and death in the country today.
- It is debatable as elimination of these disease is an unpredictable public health investment.
- Eliminating kala-azar and filariasis – now restricted to few areas – may be feasible. The

epidemiology of leprosy and tuberculosis are so different that financial investment for their elimination warrants caution.

- The living conditions of urban slums provide the ideal environment for proliferation of infectious diseases, and could easily undo targets of eliminating tuberculosis. But it was not addressed in the budget.
- The WHO has been pointing to the lack of integration of private practitioners with the national mission on tuberculosis for guaranteed access to drugs, and lack of continuous monitoring of such patients.
- The health budget has retained the traditional approach.
- But more innovative allocations, like the budgetary provision for the elderly poor, are required.

7.5 Defence Budget - Ignoring Modernisation

What is the current situation?

- Till the mid-1980s, defence pensions were counted as part of the defence budget.
- Later pensions were taken out to avoid adverse international scrutiny of burgeoning defence expenditure.
- It was only re-included in the budget last year.
- The Supreme Court stated that the pensions are deferred wages, and technically this means that these are payments paid for active military service rendered in the past.
- Since there is no way to estimate the future pension budget of 14.7 lakh armed forces personnel currently in service, including it in the defence budget is a pragmatic way of accounting for the expenditure.

What are the features in current budget?

- The total defence budget for Financial Year 2017-18 is therefore around Rs 3,60,000 crore.
- Pensions apart, the salary bill for the armed forces this year would be around Rs 1,07,000 crore.
- This takes up a bulk of the defence budget.
- This only partially accounts for the Seventh Pay Commission recommendations, as allowances are yet to be fixed as per the new scale.
- If the five core demands of the military chiefs on the anomalies of the Pay Commission are conceded by the government, the salary bill will shoot up further.
- In FY2017-18, Rs 86,488.01 crore has been earmarked for capital expenditure of the defence services; and Rs 1,82,534.42 crore is for revenue expenditure.
- Revenue expenditure is for operating expenses of the Defence Ministry while the bulk of the capital expenditure is for procurement of military equipment to modernise the armed forces.
- As finance secretary explained to the parliamentary standing committee on defence, the Finance Ministry is not really concerned with this division of expenditure.
- It only allocates the total money and leaves the revenue and capital allocations to the discretion of the ministry.

What has been for defence modernisation?

- Over the years, governments have taken to making budgetary announcements with high allocation for capital acquisition to ward off any criticism about forsaking defence modernisation.

- By the time revised estimates are prepared, a portion of that allocation is transferred towards revenue expenses or returned to the government.
- E.g In the 2016 budget around Rs 78,000 crore was allocated for capital expenditure at the budgetary stage, which came down to Rs 71,000 crore at the revised estimates stage.
- The amount was transferred to revenue expenditure to meet the increased salary bill.
- In the current defence budget of Rs 3.6 lakh crore — which is 2.14 per cent of India's GDP — only Rs 5,000 crore is left for new defence deals.
- If these defence deals are assumed to have an upfront payment of 10%, the total cost of equipment that can be bought in the coming financial year is Rs 50,000 crore.
- But one single deal for 36 Rafale fighters signed last year was alone worth Rs 59,000 crore.
- Therefore any expectations of greater defence modernisation in the coming year would thus be futile.

What is the way ahead?

- The bureaucracy and the armed forces take a lot of flak for stalled defence procurements, but the real constraint is finding resources.
- In a slowing economy with multiple competing demands, it is always a challenge for the government to find additional resources for defence.
- The only other option is to rebalance and restructure the armed forces.

7.6 No Green Consciousness

What is the issue?

- The environment does not find any mention in Finance Minister Arun Jaitley's Budget speech.

- While the allocation for the Ministry has actually increased in this year's Budget key schemes have seen their allocations reduced.

What are the affected programmes?

- Project Tiger outlay has fallen from Rs.365 crore in the revised estimates to Rs.345 crore for 2017-18.
- Coastal zone management and clean energy funds have been increased, but funds for prevention of water pollution and climate adaptation are meagre.
- The Climate Change Action Plan, incidentally, has received a princely sum of around Rs.40 crore.

What is the contradiction?

- The silence of both the Budget and the Economic Survey 2016-17 is at odds with India's commitments in the Paris agreement.
- A reduction in the emissions intensity of the GDP cannot be achieved through a renewables drive alone.
- It is estimated that just one of the targets of adding additional carbon sinks of 2.5 to 3 billion tonnes of CO₂-equivalent — would need investments of Rs.1lakh crore annually for afforestation.
- There is no reflection of this commitment in the Budget.
- Despite the country being lambasted on all fronts for rising air pollution, the Government has failed to conduct comprehensive impact studies.
- Two-year-old guidelines on air pollution control are yet to be implemented and no additional allocations have been made for the same.
- The more worrying fact is the relaxation of environmental laws & regulations, the under-utilisation of funds despite needs and the lack of transparent approval process. Therefore they have to be adequately addressed.

7.7 Oil Major

Why in news?

- India is planning to create an oil major by merging its state-controlled oil and gas companies to create a new international player.

Why is it needed?

- Indian PSU energy companies such as ONGC, Oil India, Indian Oil and BPCL have either by themselves, or in consortium, bought asset stakes abroad.
- But their purchases are small in comparison to those of big national oil companies, like those from China, and independent oil companies such as Exxon Mobil and BP.
- Thus the concept of oil merger will enable us to withstand the highly competitive arena of global energy asset shopping.
- Oil major could help explore interests in both exploration and refining businesses.
- Bigger scale and balance sheet size could give Indian energy companies better bargaining power and access to big capital.
- Also, an integrated company will better withstand fluctuations in global oil market.
- With oil and gas prices subdued, global energy assets are available at reasonable cost, making it a good time to buy.

Why the merger was opposed in the past?

- In 2004-05, V Krishnamurthy committee recommended that rather than creating a mega entity in the sector, it would be better to strengthen the structure of the state-owned oil companies, through policy measures and improvement in managements.
- The rationale behind the idea of mergers was to achieve operational synergies and to trim costs. This would eventually mean cutting the jobs and boosting profitability.

- But the decision against mega merger was based on cases of restructuring and acquisitions in the global oil industry, where only 29% of such transactions has led to the higher returns for the shareholders.
- They also said, the major cause for the failure of mergers was the handling of people working in many of these firms.
- Then there is also the danger of monopolies and cartels being created in the industry - that would inhibit the competition.
- Each Indian PSU oil companies are operating in distinct areas such as process of refining or exploration. So, disturbing this goes against the normalcy.
- In 1995, a reform group gave a similar view. They said a giant entity in the sector wasn't something desirable, since it could mean destabilisation of some of the companies and the industry besides creating problems for consumers.
- In 2014, another committee was tasked with working out a road map for reducing India's import dependency in the hydrocarbon sector by 2020.
- It made out a case for empowering and strengthening national oil companies and to strengthen the board processes with greater accountability and autonomy.
- In short, the costs far outweighed the benefits which could arise from a possible merger.

8. ECONOMY

8.1 Public Sector Asset Rehabilitation Agency (PARA)

Why in News?

- The Economic Survey (2016-17) called for a need to set up a government-owned asset reconstruction company, PARA.

What is a TBS problem?

- The Economic Survey of 2015-16 recognised a key issue called 'the twin balance sheet' problem.
- The balance sheets of both public sector banks (PSBs) and some corporate houses private entities are in bad condition i.e overleveraged and distressed private companies and the rising NPAs in Public Sector Bank balance sheets.
- India has been fighting with its twin balance sheet (TBS) problem since global financial crisis.
- It is important because it is discouraging private investment in the country and hence growth in all sectors.

What is the current situation?

- TBS was considered a minor problem, which would be resolved as economic recovers. But the problem has only worsened.
- Earnings of the stressed companies have deteriorated, forcing them to borrow more to sustain their operations.
- Since 2007-08, the debts of the top 10 stressed corporate groups have multiplied five times.
- Around 12% of the gross advances of public sector banks turned non-performing.
- Hence the private corporate sector has been forced to curb its investments, while banks have been reducing credit in real terms.
- To sustain growth, these trends should to be reversed and the only way to do so is by fixing the underlying balance sheet problems.

What is the need for centralised approach?

- Size - So far, the strategy has been to solve the TBS through a decentralised approach. The banks have been put in charge of the restructuring decisions.

- But it has become less effective because the banks have simply been overwhelmed by the size of the problem.
- Companies - It's not just about banks, but it is also a lot about companies. So far, public discussion of the bad loan problem has focused on bank capital. But securing funding is actually the easiest part than finding a way to resolve the bad debts.
- Not just a moral problem - Though crony capitalism and diversion of funds is also important reasons, a bulk of the problem has been caused by unexpected changes in the economic environment. Therefore it
- Stressed debt is heavily concentrated in large companies.
- Many of these companies are unviable at current levels of debt, requiring debt write-downs.
- Banks are finding it difficult to resolve these cases, despite a proliferation of schemes to help them.
- Other mechanisms like Private Asset Reconstruction Companies (ARCs) haven't proved any more successful than banks in resolving bad debts and are too small to handle the large cases.
- Delay is costly - Since banks can't resolve the big cases, they have simply refinanced the debtors. But this is costly for the government, because it means the bad debts keep rising, increasing the ultimate recapitalisation bill.
- Therefore a centralized approach could eliminate most of the obstacles currently plaguing loan resolution.

How would a PARA actually work?

- It could solve the coordination problem since debts would be centralised in one agency.
- It could be set up with proper incentives by giving it an explicit mandate to maximise recoveries within a defined time.

- It would separate the loan resolution process from concerns about bank capital.
- It would purchase specified loans from banks and then work them out, depending on professional assessments of the value-maximising strategy.
- Once the loans are off the books of the public sector banks, the government would recapitalise them, thereby restoring them to financial health.
- Similarly, once the financial viability of the over-indebted enterprises is restored, they will be able to focus on their operations, rather than their finances.
- **Administrative Efficiency** - It is a way of ensuring that state welfare transfers are more efficient so that the state can concentrate on other public goods.

What are its basic principles?

- The main features of UBI are that it should be universal and not targeted.
- It should be unconditional and not tied to work or employment, and it should be in cash.
- UBI is envisaged as a method of redistribution of resources from the rich to the poor.
- It is envisaged as providing all person with an income to lead a dignified life.
- The UBI proposed in the Economic Survey is hostile to each of these objectives.

8.2 Universal Basic Income

What is a UBI?

- A universal basic income (UBI) is an unconditional and universal right. It requires that every person should have a right to a basic income to cover their needs, just by virtue of being citizens.
- The Economic Survey is pitching UBI for the following reasons.
- **Social Justice** - A UBI promotes many of the basic values of a society which respects all individuals as free and equal.
- **Poverty Reduction** - Conditional on the presence of a well-functioning financial system, a Universal Basic Income may simply be the fastest way of reducing poverty.
- **Agency** - The poor in India have been treated as objects of government policy. An unconditional cash transfer treats them as agents, not subjects.
- By taking the individual and not the household as the unit of beneficiary, UBI can also enhance agency, especially of women within households.

What are the flaws in proposed UBI?

- Its proposal constitutes an attack on welfare schemes.
- The Economic Survey wants UBI not to supplement, but to replace all existing social welfare schemes and all current in-kind and cash transfers
- It is technically and ethically wrong to compare the costs and benefits of UBI with those from a range of subsidies relating to food and nutrition (PDS, school meals, ICDS), education etc., as is done in ES.
- ES also stated that UBI is not framed as a transfer payment from the rich to the poor.
- While the basic income is given to all, the manner in which the basic income is funded has to ensure that society transfers resources from the rich to the poor.
- The ES also does not propose any new resource mobilisation or taxation to meet the goal of UBI.

What a genuine UBI would entail?

- UBI equivalent to the expected income transfer under MGNREGA itself would cost Rs. 510,000 crore.
- This is more than 10 times the allocation in the current Budget for MGNREGA (Rs. 48,000 crore).
- Resource mobilisation has to increase ten-fold for India to afford the universal basic income without cutting back on other social welfare programmes.
- Unless the government seriously increases tax resources, the proposal for a universal basic income is at best a fantasy idea.

8.3 RBI'S Monetary Policy**Why in news?**

- RBI released sixth bi-monthly monetary policy for 2016-17.

What is the current move?

- The RBI did not cut the policy rate.
- It held it constant at 6.25%.
- It also indicated that the monetary policy stance was now neutral, rather than accommodative i.e there will be no more rate-cuts in the next three-six months at least, unless there is a dramatic fall in core inflation levels.
- The decision was taken with the support of all six members of the Monetary Policy Committee.

What are the reasons for holding the repo rate constant?

- A rate cut was expected because the private investment continues to be depressed, and the lending to industry has sharply slowed.
- RBI did not change the rate stating the stickiness of 'core' inflation as the main reason.

- RBI is focused strictly on targeting consumer price inflation.
- The non-fuel and non-food inflation continues to be sticky at 4.9%, mainly due to stickiness in price gains for housing, health, education, personal care and household services, in spite of a decline in the overall rate of inflation.
- This suggests that inflation expectations continue to be higher than RBI can be comfortable with.
- There is also significant uncertainties in the future path of inflation and growth like the possibility of an increase in crude oil prices, volatility in the exchange rate on account of global financial market developments that could increase pressures on domestic inflation and the effects of the Seventh Pay Commission.
- Any cost-push shock to prices could, therefore, have a cascading effect, causing the central bank to miss its stated inflation target of four per cent.

What is RBI's explanation?

- It argues that it is not rates that are necessarily the constraint.
- It points out that "timely transmission" of the policy rates to banks' lending rates needs the banks' non-performing assets issue to be more swiftly addressed.
- RBI also feels that it cannot use monetary policy to revive growth.
- To revive investment, the government must address the banks' problems with greater urgency.

8.4 SBI Merger**Why in news?**

- The government has set the date for the merger of the State Bank of India with its

five associate banks on April 1, 2017. The proposal to merge Bharatiya Mahila Bank (BMB) with SBI is still under consideration.

What will happen due to the merger?

- The five associate banks - State Bank of Bikaner and Jaipur (SBBJ), the State Bank of Mysore (SBM), the State Bank of Travancore (SBT), the State Bank of Hyderabad (SBH) and the State Bank of Patiala (SBP), will merge into SBI.
- All shares of these associate banks will cease to exist as individual entities and will be transferred to the SBI.
- The merger will also mean that all SBI associate bank customers will become SBI customers and all associate bank employees will become SBI employees.
- They will be eligible for the same retirement benefits like SBI employees i.e provident fund, gratuity and pension
- Initially, SBI had seven associate banks — two of them, the State Bank of Indore and the State Bank of Saurashtra, were merged earlier.

Why is the merger important?

- The merged entity will have one-fourth of the deposit and loan market.
- It would have deposits worth Rs.26 lakh crore and nearly Rs.18.76 lakh crore worth advances on its books.
- It would also have close to 24,000 branches and an employee strength of 2,71,765.
- The consolidated balance sheet will increase up to 40%.
- The SBI's market share will increase from 17% to 22.5-23%.
- **Size** - It will be almost five times the size of India's second largest bank i.e PNB.

- Size of the bank is important as there is a huge financing need in the country, especially in infrastructure.
- No Indian bank features among the top 50 banks globally.
- With the merger, the SBI could break into the list of top 50 banks of the world, in terms of asset size.
- **Cost** - It will result in major cost savings as the treasury operations are merged and streamlined, along with audit processes and assets like physical offices and the information technology infrastructure.
- **Transparency** - The accounting will also be more transparent, allowing for clearer judgements about financial health.

What are the issues to be addressed?

- **NPA** - The combined balance sheet will bear the burden of a poor bad loans ratio with gross non-performing assets (NPAs) at 8.7% of combined advances and a provisional coverage ratio of about 60% (profits are set aside to cover only 60% of NPAs).
- **Capital** - SBI will need large sums for recapitalisation to meet Basel-III prudential standards.
- **Downsizing** - The efficiency and the operational dynamics will depend on the ability to cut redundancies, reduce number of branches and downsize manpower surplus to requirements.
- This will be opposed by the unions, which have formed a nine-union united front to block the process.
- **Independence** - It will also depend on the merged entity being allowed the freedom to operate on purely commercial considerations.
- **Interference** - SBI also suffers from political interference. This is the primary cause for poor non-performing ratios of many public sector banks. The risks of such interference

in the merged SBI are higher since it controls a larger share of assets.

- **Bigger Risk** - The merged SBI will require very stringent oversight and supervision to prevent triggering systemic risks in the event of failure.
- If the merger works, other public sector banks could be merged in a similar fashion to create three or four larger and more efficient banking entities.
- But other banks have far greater variation across parameters than what exists among SBI and its associates.

Why the merger is facing resistance?

- Employees are fearful of losing their jobs.
- They are also worried that their promotion prospects may be hampered due to curtailment of seniority. Further, rationalisation of branches due to overlap may lead to their relocation.

8.5 State of the Economy

What is the issue?

- Our economy relies on public investment and private consumption to revive private investment and growth.
- Therefore the recent official statistics on prices and industrial activity signals tough times ahead.

What are the worrying trends?

- **Industry** - The industrial output dropped by 0.4% in December 2016 i.e a 2% decline in manufacturing and a 6.8% decline in consumer goods.
- This might result in low employment generation and price rise of finished goods.
- **Consumer & Wholesale price** - In December consumer prices had risen fractionally faster (3.4%) than wholesale prices (3.39%).

- But in January, wholesale prices have risen at 5.25% and the pace of price rise at the consumer level was at 3.2%.
- Soon the consumer prices will catch up with the whole sale price, raising the inflation levels.
- This price rise is not because of the food prices. The food prices are not a problem currently because of a normal monsoon.
- The current whole sale price rise is because of the rise in consumer prices of non-food articles and fuel.
- The price of fuel and power rose at 18.14%, manufactured products grew by 4% and minerals by 1%.
- **Oil Price** - There is a belief that higher shale gas output will check a further spike.
- Yet a rise in oil prices beyond \$65 a barrel would be a cause for concern for India's growth and Centre's fiscal arithmetic.
- Excise duties on petroleum products were raised when prices were low to protect consumers from an upward price shock.
- Cutting those duties will upset revenue calculations, but leaving them untouched will affect spending and growth.
- **Interest rate** - The RBI has cited 'transitory effects of demonetisation on inflation and output' as the rationale for not changing the interest rates and shift from an accommodative monetary stance to 'neutral'.
- RBI is unlikely to ease its stance unless it sees executive action against inflation risks.

8.6 Holes in the Social Security Net

Why in news?

- A survey is conducted seeking evidence on whether the social security measures work in the face an economic shock

like demonetisation and whether these programmes themselves face disruption because of demonetisation.

What are the findings of the survey?

- On an average, people visited the bank thrice since demonetisation. 30% had made more than three visits.
- 10% of respondents had not gone to the bank even once showing that they are out of the formal economy.
- People viewed demonetisation as a disruptive measure which impacted access to social security.
- First, it was a push from post office to bank account, then to open multiple bank accounts, including Jan Dhan accounts, then to get an Aadhaar card, an ATM card and so on.
- And there is the mandatory introduction of Aadhaar to access MGNREGS work from the next financial year, which has ridden roughshod over the orders of the Supreme Court and is likely to cause massive exclusion.
- Only 30% of those who went to the bank were able to receive their pension or wages. About 57% were denied them at least once.
- 73% of MGNREGS households and about 52% of pensioners said they had a greater need for these entitlements after demonetisation.

Did MGNREGA provide the needed relief?

- According to the Ministry of Rural Development's data, after demonetisation, people worked more on MGNREGS than what was planned, while in the previous year it was consistently less than planned.
- This was perhaps due to the enhanced allocation via a second supplementary budget of Rs 4,000 crore to the MGNREGS, announced after demonetisation.

- The ministry released 43% more funds to states over the last three months, compared to the same time period last year.
- But 53% of all MGNREGS wage payments were delayed in FY 2016-17 up to January.
- 60% of these were delayed beyond 30 days.
- Pension payments, though comparatively better, were also delayed.
- People made multiple trips to the bank to check whether their money had been deposited or not.
- But MGNREGS workers made more visits to the bank than pensioners, reflecting greater uncertainty in wage payments.
- About 70% of workers, who went to the bank returned empty-handed, compared to only 30% of pensioners who were denied their pensions.
- Being denied cash at the bank may not be entirely due to demonetisation but it reflects weak delivery systems, uncertainty and under-resourcing.
- MGNREGS and the National Social Assistance Programme (NSAP) have the potential to provide social security in times of an economic shock.
- But it did not effectively provide because of patchy implementation.

8.7 UDAY Scheme - Report Card

Why in news?

- Motilal Oswal released a report on the performance of UDAY scheme.

What are the problems in DISCOM?

- DISCOMs are distribution companies.
- State DISCOMs have been supplying electricity at tariffs that are far below cost for decades.

- States have been reluctant to revise power tariffs in line with rising costs for political reasons.
- Other inefficiencies like large transmission and distribution losses on power, have further strained the finances of the DISCOMs.
- They have been borrowing heavily from banks to keep themselves running.
- The debt totalled to Rs.4.8 trillion in September 2015.

What is UDAY Scheme?

- Under the scheme, States will take over three-fourths of the debt of their respective DISCOMs (50% takeover in 2015-16 and 25% in 2016-17).
- The governments will then issue 'UDAY bonds' to banks and other financial institutions to raise money to pay off the banks.
- The remaining 25 per cent of the discom debt will be dealt within one of the two ways — conversion into lower interest rate loans by the lending banks or be funded by money raised through discom bonds backed by State guarantee.
- Backing from the State will help bring down the interest rate for the discoms.

What are its features?

- States shall take over 75% of DISCOM debt as on 30 September 2015 over two years -
- DISCOMs are expected to issue bonds for the remaining 25% of their debt.
- Government of India will not include the debt taken over by the States as per the above scheme in the calculation of fiscal deficit of respective States in the financial years 2015-16 and 2016-17.
- States not meeting operational milestones will be liable to forfeit their claim on Integrated Power Development Scheme

(IPDS) and DeenDayalUpadhyaya Gram JyotiYojana (DDUGJY) grants.

What are the findings of the report?

- UDAY failed to reform the State-run power distribution sector, despite 82% of bailout package (bonds) utilised by States.
- Out of the 21 States that participated in the scheme, operational losses increased in seven States during April-September 2016.
- Operational loss is the difference between the average cost of supply (ACS) and average revenue realised (ARR).
- The exceptions are Gujarat and Chhattisgarh. While Gujarat discom increased profits, Chhattisgarh earned a positive margin.
- They were one of the few better managed discoms (along with West Bengal that didn't participate in UDAY) and continue to remain so.

What are the implications?

- Aggregate Technical and Commercial (AT&C) losses have increased by 0.7 per cent to 16.1 per cent in 10 states, including Haryana, Karnataka, Maharashtra, Rajasthan, Andhra Pradesh, Bihar, Punjab, Chhattisgarh, Uttarakhand and MP.
- Revenue loss can be a function of either high cost of electricity purchase or low tariff.
- But AT&C loss is a clear measure of the operational efficiency of a discom.
- Like the previous two bailout packages in 2001 and 2012, UDAY too insisted on reducing AT&C losses to a respectable 15%.
- But the figures show DISCOMs utilized funds to clear the balance-sheet without much attempt to improve efficiency.
- If there is no improvement in operational efficiency, there will soon be need for another UDAY.

8.8 Spectrum Cap

Why in news?

- Vodafone and Idea are in merger talks.
- They are planning to ask the Department of Telecommunications (DoT) to relax the ceilings on spectrum ownership.

What is the spectrum cap?

- Energy travels in the form of waves known as electromagnetic waves.
- These waves differ from each other in terms of frequencies.
- This whole range of frequencies is called the spectrum.
- In telecommunication like TV, radio and GPRS, radio waves (electromagnetic waves) of different wavelengths are used. They are divided into bands based on frequencies.
- The spectrum cap is the limit of radio-waves a telecom operator can hold for providing wireless services.

What are the current rules?

- Spectrum cap rules are to prevent an operator from accumulating unreasonable amount of spectrum that might result in the monopoly of the operator.
- At present, a single telecom network cannot own more than 50% of the wavelengths in a single band and 25% of all the wavelengths assigned in a telecom circle.

Why the ceiling should be reduced?

- If these two Tele Companies actually merge, the resultant entity would need to surrender a significant amount of spectrum under these current rules.
- **Irrelevant** - These restrictions were put in place when there were 8 - 10 networks in each circle to protect the smaller networks from the bigger ones.

- But this hyper-competition has been reduced leading to around four large networks in each circle. Hence the current rules become irrelevant.
- **CCI** - Though cartelisation amongst the networks is a genuine threat, but there is Competition Commission of India to ensure that it doesn't happen.
- **Quality** - If the base of a network subscribers rises, its inability to buy spectrum will severely impact the quality of its service.
- **Restricted choices** - A smaller network can't sell its spectrum since the caps restrict their choice. It can only negotiate with those networks which have spectrum way below the ceiling.
- **Consumption increase** - In the last few years, there is a steep rise in data consumption. So, the networks need more wavelengths. But their efforts are hindered by the caps.
- It also impacts the ease of doing business as the exits of network and consolidation are being difficult because of the cap.
- The government wants to leverage mobile networks for better governance which would also require more spectrums.

8.9 Cost Regulation on Cardiac stents

Why in news?

- National Pharmaceutical Pricing Authority (NPPA) has capped the prices of medical stents, which are used to treat coronary artery disease.

What is a stent?

- A stent is a tube-shaped device that, when inserted into a blocked blood vessel, can help clear the blockage.
- This is sometimes done through physical means (Bare metal stents BMS) but often

through the drugs that the stent gives out at a slow rate (drug-eluting stents).

What is the current move?

- The price cap for BMS is Rs 7,260 while that for a drug-eluting stent is Rs 29,600.
- It has brought the price up to 40% lower than their existing market rates.
- The notification makes no distinction on whether a stent is branded or unbranded, manufactured locally or abroad.
- So long as it is being sold in the country, no stent can cost more than the current capped price.
- Those selling at lower than the ceiling prices will have to maintain the existing MRP.
- All health service providers using coronary stents and billing directly to patients also will have to comply with the price ceilings.

What is the need to regulate?

- Higher cost of necessary stents.
- The fact that nearly two-thirds of the high out-of-pocket expenditure on health incurred by Indians went towards drugs.
- There was irrational use of medical technologies, including cardiac stents and knee implants because of the profit margin available.

What will be the impact?

- This makes stents more accessible to patients who really need them.
- Helps in reducing the dependence of weak insurance cover available.
- Reduces the incentive for unethical hospitals to use them needlessly.
- It provides an opportunity to expand the availability of stents, and by extension angioplasty procedures, in the public health system.

What is the health care providers' demand?

- They often demand market-determined pricing of medical technologies on the ground that newer ones will not be available under a regulated regime.
- In the case of cardiac stents, this argument does not hold water since stakeholder consultations held by the NPPA in January revealed that there are huge unethical mark-ups in the supply chain.
- It would serve the cause of medical innovation if costing is transparent, and a system of risk pooling is introduced to help patients get expensive treatment without high out-of-pocket spending.

What should be done?

- A two-pronged approach should be followed by Centre i.e. it should monitor expenditures jointly in partnership with the community, use regulation where needed, and also raise public spending on health.
- District hospitals should offer cardiac treatments uniformly.
- This should be a priority programme to be completed in not more than five years.

8.10 Junking the TPP

Why in news?

- US had exit from the Trans-Pacific Partnership (TPP) and the North American Free Trade Agreement (NAFTA).

What is TPP?

- It is an agreement between 12 Pacific Rim countries including the US, Japan, Canada, Mexico, Vietnam and New Zealand, together accounting for 40 per cent of world gross domestic product.
- The TPP contains measures to lower both non-tariff and tariff barriers to trade,

and establish an investor-state dispute settlement (ISDS) mechanism.

- NAFTA is essentially a tariff union between the US, Canada and Mexico that has been operational since 1994.

What is the impact of US abandoning TPP?

- The biggest losers would be Vietnam, Singapore and Malaysia.
- Some of them had low tariff access to the US but would gain through the removal of non-tariff barriers.
- With TPP out of the way, Regional Cooperation and Economic Partnership (RCEP) that includes both India and China would gain ground.
- Thailand and Korea that were excluded from TPP are part of the RCEP and would stand to gain.
- The TPP purported to do more than just slash tariffs.
- It included higher standards on a bunch of things such as anti-corruption measures, intellectual property obligations, human rights and child labour conditions, and environmental commitments came within its ambit.
- These issues might stand unaddressed for now.

What is the impact on India?

- India declined to join because of some of the restrictive conditions that the pact implied.
- The RCEP might have China as its pivot, but would include all ASEAN countries and would cover goods, services, investments, competition and intellectual property rights policy among other things.
- India stands to gain from this but has to reconcile to the prospect of China's role and

leveraging the trade agreement to further its political aspirations in the region.

- Therefore India will not be hurt by junking the TPP.

8.11 Steps to curb Thin Capitalisation

Why in news?

- The steps were taken in Union Budget 2017 to address the issue of thin capitalisation

What is Thin Capitalisation?

- When a local company has more debt than equity, the situation is called thin capitalisation.

Why is thin capitalisation bad?

- Generally interest paid for a debt is not taxed.
- Therefore an Indian unit would pay high interest to the foreign associated firm to avoid tax.
- Also the interest paid by the local company to the foreign associate was taxable at a lower rate when the foreign company was registered in a tax treaty country.

What is EBITDA?

- Earnings before interest, tax, depreciation and amortization (EBITDA) is a measure of a company's operating performance.
- It is a way to evaluate a company's performance without having to include financing decisions, accounting decisions or tax environments.

What are the measures taken?

- Section 94 B in the Finance Bill increased the tax burden on local company which have low equity but have taken high debt from foreign associates is increased.
- Now if the interest paid by a local company is more than 30% of Ebitda, it will not allowed any tax exemption.

- Section 94 B is applicable to an Indian firm or MNC operating via permanent establishment in India, which has debt from a non-resident associated enterprise and pays interest or similar consideration of over Rs 1 crore to the associated enterprise.
- It is mainly used to control pests in buildings (structural fumigation), soil, grain, and produce.
- It is also used during processing of goods to be imported or exported to prevent transfer of exotic organisms.

What are the consequences?

- Introduction of thin capitalisation rules is in line with international practice.
- But it also has some negative effects.
- Tax payment of several companies with high debt and low Ebitda could increase, reducing their profitability.
- This provision could have an adverse impact on capital intensive and highly leveraged companies.
- This will affect the capacity of a borrower to repay the interest on borrowings and therefore it is a negative for banks too.
- New companies setting up branches or subsidiaries will also need to factor in the thin capitalisation limitations while determining their funding structure i.e. might deter new investments.

9. SCIENCE AND TECHNOLOGY

9.1 Non-fumigated wheat

Why in news?

- From March 31, 2017, the wheat imports to India must be fumigated with methyl bromide at the port of origin, else, the cargo would be disallowed from entering Indian shores.

What is fumigation?

- Fumigation is a method of pest control that completely fills an area with gaseous pesticides (or fumigants) that suffocates or poisons the pests within.

Why is India insisting on fumigation?

- It is seen as the most effective way to kill all pests, insects and nematodes.
- Substitution is a costly proposition and a tricky one in colder climates.
- Instead of methyl bromide, aluminium phosphide can be used as a fumigant.
- But what can be done in 16 hours with methyl bromide takes three days with aluminium phosphide and the cost also increases three times.

What is the plant quarantine order?

- The Plant Quarantine (Regulation of Import into India) Order, 2003 has a stipulation that all imports of agricultural produce be fumigated with methyl bromide.
- However, the developed nations are agitated over this stipulation.
- The reason being Methyl bromide is forbidden in developed nations, and its use was restricted by the Montreal Protocol due to its role in ozone depletion.
- In the past, if fumigation is not done at the port of origin, the consignments can be fumigated at Indian ports on paying a penalty of around of \$375 per tonne against the normal fee of \$75 per tonne.
- But, from March 31, fumigation will have to be done only at the port of origin.

What is the recent issue?

- Some global companies, in collusion with importers, are forging the certificates showing ships were fumigated.

- This could lead to tonnes of non-fumigated wheat entering India among imports over 5.5 million tonnes in 2016-17.
- To avoid paying \$375 per tonne, some importers showed wheat consignments were fumigated en route.
- The Earth consists of four concentric layers.
 - The crust is the outer layer of the earth of 0-60 km thick. There are two different types of crust: continental crust and oceanic crust. The crust is made up of tectonic plates, which are in constant motion.
 - The mantle is of approximately 2,900 km thick. The mantle is made up of semi-molten rock called magma. In the upper parts of the mantle the rock is hard, but lower down the rock is soft and beginning to melt.
 - The outer core is a liquid layer, also made up of iron and nickel. It is still extremely hot, with temperatures similar to the inner core.
 - The inner core is in the centre and is the hottest part of the Earth. It is solid and made up of iron and nickel with temperatures of up to 5,500°C.

What is government's response?

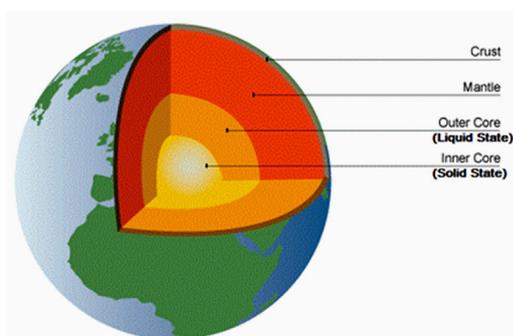
- The new rules from March 31 could permit some relaxations, given that imports have already been contracted.
- In the meantime, India could allow import of wheat from countries till the time it analyses pest risk control reports sent by them.
- The Press Trust of India recently said that the government was considering relaxing rules related to fumigating pulses imported from Canada.

9.2 Why earth's inner core doesn't melt?

Why in news?

- Scientists at KTH Royal Institute of Technology in Sweden have discovered a new explanation for why the crystallised iron core of the Earth remains solid, despite being hotter than the surface of the Sun.

What is the structure of the earth's interior?



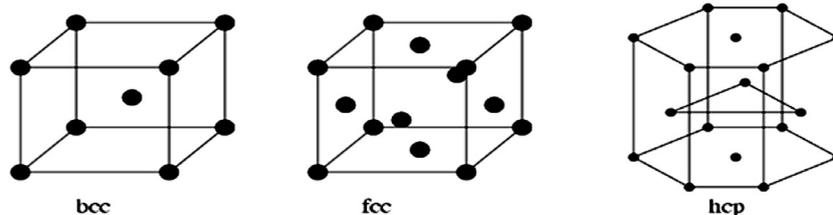
Why is the inner core solid?

- The inner core is composed of about 96% pure iron along with nickel and possibly light elements.
- The pressure here is 3.5 million times higher than surface pressure and temperatures around 6,000°C.
- Due to the enormous pressure the effect of the temperature is offset and the molten iron is solidified.

What is the new discovery?

- The solid core is an unobservable feature of our planet.
- So understanding this depends on knowing the crystal structures.
- Atoms in a molten metal are close to each other with no regular arrangement.
- But when the molten metal solidifies the atoms arrange themselves in definite structures called crystal structures.

- Maintaining of these definite structures is essential for a metal to stay solid.
- Like all metals, the crystal structures of iron change depending on the temperature and pressure.
- At room temperatures and normal atmospheric pressure, iron exists as a body-centred cubic (BCC) phase i.e crystal architecture with eight corner points and a centre point.
- At extremely high pressure, the crystalline structures transform into 12-point hexagonal forms, or a close packed (HCP) phase.



- At Earth's core, due extreme pressure and temperature, scientists have proposed that the atomic architecture of iron must be hexagonal.
- At low temperature, BCC is unstable and crystalline planes slide out of the ideal BCC structure, becoming a liquid.
- But at high temperatures, the stabilisation of these structures begins much like a card game — with the shuffling of a “deck.”
- In the extreme heat of the core, atoms no longer belonged to planes because of the high amplitude of atomic motion. Therefore on the edge of the inner core, pieces of crystals' structure continuously melt and diffuse.
- They are again continuously reinserted into the solid core and become solid due to high pressure, like shuffling deck of cards.
- This energy distribution cycle keeps the crystal stable and the core solid.
- The sliding of these planes is a bit like shuffling a deck of cards. Even though the cards are put in different positions, the deck is still a deck. Likewise, the BCC iron retains its cubic structure.
- Such a shuffling leads to an enormous increase in the distribution of molecules and energy — which leads to increasing entropy, or the distribution of energy states.
- This in turn, makes the BCC stable and if the BCC is stable the metal will remain solid.

9.3 ISRO – 104 Satellites

Why in news?

- The PSLV-C37 launched 104 satellites from 7 countries.

Why this launch is significant?

- Isro's Polar Satellite Launch Vehicle, or PSLV, has flown 38 times before.
- In June 2016, ISRO's PSLV-C34 launched 20 satellites.
- ISRO now used the same rocket this time.
- With extra boosters attached, it has been made capable of handling the almost 1,400 kg of weight that the 104 satellites presented.
- The main payload was the Cartosat-2D, weighing over half the total weight.

- The others were two Indian nanosatellites (INS-1A and INS-1B) and 101 nanosatellites belonging to research facilities in USA, Kazakhstan, Israel, The Netherlands, Switzerland, and the UAE.
- Most of the nanosatellites were from a California-based company, which called them “doves”.
- Russia’s Dnepr rocket carried 37 payloads in 2014. Therefore the current mission carried almost 3 times the record number of satellites launched in a single mission.
- No great technological leap is involved in increasing the number of satellites.
- The number of satellites that can be loaded on a rocket is restricted only by the space available and the carrying capacity of the launch vehicle.
- So smaller and lighter satellites have made it possible for rockets to carry more of them.
- Calculating and managing the various trajectories for these satellites was a complex task and ISRO deserves to be complimented for this.
- Such an orbit places a satellite in constant sunlight and is useful for imaging, spy, and weather satellites.

What are the achievements?

- The mini- and nano-satellite market is a large and lucrative one, and ISRO is doing well to exploit it.
- This is particularly credit-worthy since it is a government agency.
- On an average, ISRO carries out 4/5 launches a year. Other non-commercial successes include the 2008 Chandrayaan moon mission and the Mars Orbiter Mission.
- ISRO has also successfully launched rockets with cryogenic engines.

What should be done?

- China launches almost 20 times a year and the commercial market now expects launches to carry at least above 3,500 kg.
- Doing so with a PSLV rocket is a difficult proposition; it does not have sufficient power.
- Therefore ISRO needs to get its Geosynchronous Satellite Launch Vehicle, or GSLV, into the market as fast as possible.
- GSLV was created using Russian engines originally.
- In September last year, an indigenous cryogenic engine was used for the first time on an operational GSLV flight.
- So ISRO should concentrate on locally-made cryogenic engine is quite a different proposition ensuring cutting-edge power in its rockets, and not be permanently distracted by the cost arbitrage provided by the mini- and nano-satellite market.

What is a Cartosat?

- Cartosat-2D is an Earth observation satellite in a sun-synchronous orbit.
- It is the fifth of the Cartosat-2 series of satellites.
- It is used to produce high-resolution images of the Indian landmass for applications like rural and urban management, coastal land use and regulation, monitoring of road networks or water pipelines, and for building various kinds of land information systems.
- A Sun-synchronous orbit is a geocentric orbit that combines altitude and inclination in such a way that the satellite passes over any given point of the planet’s surface at the same local solar time.

What makes ISRO stand out?

- ISRO stands for excellence when a majority of government institutions suffer from challenges in terms of capacity and execution. It is because of,

- Autonomy - ISRO reports directly to the PM's office rather than a line ministry.
- Line ministries and its bureaucrats have a tendency to micromanage everything. But the PMO works differently since its officials don't have the time to supervise the affairs of every institution under its ambit.
- ISRO, therefore, has a real autonomy than other govt agencies.
- Location - Most govt departments being located in Delhi are vulnerable to the authority of the parent ministry and the concerned bureaucracy.
- ISRO, headquartered in Bengaluru, is distant from Delhi and immune from the its drawbacks. It has the right ecosystem to attract talent and build its knowledge capabilities.
- Human Capital - Unlike other govt agencies which are staffed by generalists, ISRO is staffed by specialists.
- Private Sector - ISRO is also more liberal in cooperating with and working with the best in the private sector. The building blocks of many of ISRO's successes come from outside the govt system.
- Today there are 3,449 known exoplanets.
- Before the recent discovery, astronomers had spotted only 348 smaller terrestrial planets with Earth-like mass.
- Only a handful of those were in a "temperate" zone that would allow for the presence of liquid water which is a key ingredient for life.

How are exoplanets detected?

9.4 Exoplanets

Why in news?

- Seven Earth-like planets orbiting a small star in our Galaxy called Trappist-1, are recently discovered.

What is an exoplanet?

- Exoplanet refers to any planet that is outside our Solar System.
- They are generally part of star systems.
- There are some "rogue" exoplanets, which are not attached to any star system.
- The first exoplanet was detected in 1995.
- There are several ways to find planets that cannot be directly observed.
- Spectrum - This involves looking for changes in the colour spectrum emitted by a star due to the gravitational pull of one or more invisible planets.
- If these patterns are regular and cyclical, corresponding to a tiny wobble in the star, chances are they are caused by a planet.
- Pictures - Snapping a picture of an exoplanet in front of its star.
- Gravitational Micro-Lensing - The light from a distant star is bent and focused by gravity as an orbiting planet passes between the star and Earth. It is focussed in the same way that a magnifying glass focuses the Sun's light onto a tiny, bright spot.
- Transit method - When a planet passes directly between its star and an observer – an astronomer peering through a telescope, or a satellite in space – it dims the star's light by a tiny but measurable amount.
- This method has been the most successful so far.
- 79% of the exoplanets – including the seven orbiting Trappist-1 – are found this way.
- Scientists announced the discovery of three planets of TRAPPIST 1, a year before.
- The team found four more through ground-based telescopes, including the U.S. National Aeronautics and Space Administration's Spitzer Space Telescope.

- Since the dwarf star is much cooler than the Sun, the dimming of light each time a planet passes or transits before the star could be easily recorded from Earth.

How it is different from our solar system?

- Unlike in the case of our solar system, the planets have apparently formed far away from the star and gradually migrated towards it.
- The seven planets are tightly packed around the star.
- The closest planet takes just 1.5 days to complete an orbit and the farthest one takes 20 days.

Why is the TRAPPIST 1 significant?

- All seven planets could possibly have liquid water — a key to life as we know it on Earth.
- Three planets among them have the greatest chance.
- This is by far the largest collection of Earth-like planets in the habitable 'Goldilocks' zone of a star i.e neither too close nor too far from a star, which raises the possibility of liquid water being present on the surface.
- Scientists are now keen to know if the planets are Earth-like, by ruling out the presence of hydrogen gas enveloping them. The composition of the atmosphere can be identified by measuring the wavelength characteristics of light.
- Since the TRAPPIST-1 system is close by and the star is cool enough, it would be easier to decipher the various critical features of the planets.
- If there is life on these planets, we would know this in about 10 years making the search for extraterrestrial life has just become more focussed.

10. ENVIRONMENT

10.1 Role of Ponds in Global Warming

Why in news?

- A study has found that due to the seven years of higher-than-ambient temperatures, the ability of a pond to absorb carbon dioxide reduced by 50% but the release of methane nearly doubled.

What is the Greenhouse Effect?

- The GHGs are transparent to incoming solar radiation, but are opaque to some wavelengths of heat radiated from the Earth.
- So they trap heat, which leads eventually to a warming of the lower atmosphere. This is called Greenhouse effect.
- The main source of man-made carbon pollution is the burning of fossil fuels, accounting for more than 70% of global greenhouse gas emissions.
- The rest comes from deforestation, the livestock industry, and agriculture.
- For each greenhouse gas, a Global Warming Potential (GWP) has been calculated to reflect how long it remains in the atmosphere and how strongly it absorbs energy.
- Gases with a higher GWP absorb more energy, per pound, than gases with a lower GWP, and thus contribute more to warming Earth.
- The order of most abundant GHGs in the Earth's atmosphere is Water vapor, Carbon dioxide, Methane, Nitrous oxide, Ozone, Chlorofluorocarbons.
- Methane is about 25 times more effective in trapping the sun's radiation in our atmosphere than carbon dioxide, which is the dominant GHG.

Greenhouse gas	Average lifetime in the atmosphere	Global warming potential of one molecule of the gas over 100 years (Relative to carbon dioxide=1)
Carbon dioxide	50-200 years*	1
Methane	12 years	21
Nitrous oxide	120 years	310
CFC-12	100 years	10,600
CFC-11	45 years	4,600
HFC-134a	14.6 years	1,300
Sulfur hexafluoride	3,200 years	23,900

What is the new finding?

- The new finding is important because small ponds play an huge role in the planet's carbon cycle, i.e., the balance between input and output of greenhouse gases.
- The ponds are also responsible for about 40% of methane emissions from inland waters.
- Findings show that warming fundamentally alters the carbon balance of small ponds over years, thereby reducing their capacity to absorb carbon dioxide and increasing emissions of methane.
- This could ultimately accelerate climate change
- This danger has been greatly overlooked.
- Until now, the Intergovernmental Panel on Climate Change (IPCC) models do not take into account the amplification effects of warming on these aquatic ecosystems.

10.2 Unprepared for Paris

Why in news?

- A week after the budget speech which included the Centre's commitment to promote clean energy, the government has developed cold feet over emission norms for thermal power plants.

What is the need for reduction of emission?

- Coal is a major culprit for climate change. It powers more than 80% of the electricity consumed in the country.
- The Paris agreement hinges on voluntary targets, or the Intended Nationally Determined Commitments (INDCs).
- India's INDCs relies greatly renewable energy.
- But it will still require thermal power plants to generate 60% of its energy requirements in 2030.
- That makes reducing emissions from these coal-fired plants crucial to the country's Paris commitments.
- In the run-up to the Paris climate change meet in 2015, the government stressed on reducing the share of this fossil fuel in the country's energy mix and using it in a climate friendly manner especially reducing the emissions from thermal power stations.
- Over 140 such stations were assigned targets for improving energy efficiency.
- But now the government finds these standards too stringent.
- This raise questions about India's commitment to its Paris targets.

Why the voluntary measures are implemented?

- The lack of coordination between different government agencies that has affected almost every environment-related initiative in the country has dogged the endeavour to reduce the climate footprints of thermal power plants.
- In 2015 the National Thermal Power Corporation opposed the emission norms for thermal plants were being discussed.
- The government set aside the objections of the biggest player in the sector and submitted its INDC document to the United Nations Framework Convention of Climate Change.
- The environment ministry is also gave clearances to new plants without specifying the new standards, well after it had the norms in place.

What is the way ahead?

- The failure of thermal power plants to comply with the emission norms does not show the country's preparedness in good light.
- Most thermal power plants in the country work at efficiencies below 33%.
- There are still three years before India has to comply with its Paris climate targets.
- While there has been much convincing talk on emission targets for these plants, the technological inputs required for the purpose have received very little attention.
- It is time the country braces for the challenge.

10.3 Bharat Stage IV Deadline

What is the issue?

- As a response to precipitous decline in air quality, the government had initiated the Bharat Stage IV (BS-IV) that were supposed to come into effect across the country from April 2017.

- But most players in the automobile sector are now asking the government to relax the deadline.

What are BS norms?

- BS emission standards, introduced in 2000, have been set up to regulate the output of air pollutants from internal combustion engine equipment, including motor vehicles.
- The different norms are brought into force in accordance with the time line and standards set up by the Central Pollution Control Board.
- The BS norms are based on European regulations.
- In 13 major cities, Bharat Stage IV emission standards were put in place in April 2010.
- Typically, the higher the stage, the more stringent the norms. The current norms in India are BS IV in 33 cities and BS III in the remaining country.
- Implementation of the BS V standard that was earlier scheduled for 2019 has now been skipped.
- BS VI, originally proposed to come in by 2024 has been now advanced to 2020, instead.

Why is the shift to BSIV necessary?

- The studies suggest that vehicular pollution is one of the key contributors to the high levels of pollution in Indian cities.
- A recent study on Delhi's pollution showed that 28% of the pollution is due to vehicular emissions.
- The shift to BS IV will require cleaner fuel quality and improvements in engines and exhausts like fitting the vehicles with diesel particulate filter (DPF), selective catalytic reduction (SCR) etc.
- Hence this will reduce the vehicular pollution there by increasing the air quality.

Why the industry's demand is flawed? What is carbon tax?

- Currently the automobile sector wants a relaxation of the deadline again.
- This reflects poorly on the industry's commitment to improving air quality.
- The overall demand for private vehicles is quite rigid in India and, therefore, any increase in cost that affects all producers equally will not significantly impact industry-level sales in the long run.
- The vehicular pollution, significantly worsens the health of all Indians therefore cannot be taken lightly on the cost of economic development.
- Also, being at the frontline of global standards, will improve the ability of Indian automobile sector to compete globally.

What is the way forward?

- The government should remain firm on auto emission norms deadline
 - Given the alarming rise in pollution levels, the government might even consider advancing the BS VI deadline from 2020 to an earlier date.
 - Europe has achieved the result only after facing stiffer timelines.
 - Also, the industry's tendency to lobby for delays can be checked if deadlines are staggered.
 - If the environmental norms are applied in one go, the deadline of BS-IV norms applied to sales of older technology vehicles will make it worthless.
 - But a staggered deadline will allow companies to gradually shift production to better engines and avoid a situation where producers are stuck with unsold inventory.
- A carbon tax is a fee for making users of fossil fuels pay for climate damage their fuel use imposes by releasing carbon dioxide into the atmosphere, and for motivating switches to clean energy
 - India introduced a nationwide carbon tax in 2010, which is currently Rs.400/tonne
 - Is India overdoing the greening of energy?
 - In the aggregate terms, India is now in the third highest emitter of carbon dioxide but not in per capita terms.
 - Firstly, the coal cess that was introduced a few years ago is now at Rs400 per tonne, almost one-fifth the cost of mining coal.
 - This is something like a 20% carbon tax.
 - India has the world's third largest endowment of coal, which can help double our per capita electricity usage at a relatively low cost.
 - Due to the coal bidding scams and the coal cess, India now might have become the most expensive place to produce coal-fired electricity.
 - It is greatly hurting our competitiveness, and will directly undermine industry as it faces an onslaught of imports from China and other trade partners.
 - We also already have a system of renewable purchase obligations (RPOs) on all electricity distribution companies and captive producers.
 - There is often not enough solar or wind energy available for purchase, within state boundaries.
 - Across states, wheeling of solar is not yet possible and the RPOs burden goes up steadily every year.
 - This increases the cost of energy production.

10.4 Issue of Carbon Tax

What is the solution?

- It is not as if India should stay away from global joint efforts at curbing greenhouse gases.
- Green energy, apart from mitigating climate change has great potential for job creation.
- India is uniquely blessed with sunshine almost all the time, and hence solar can contribute hugely to our energy needs.
- But it is not necessary for India, whose per capita consumption of electricity is barely half the world average, to embrace the highest rate of carbon taxes in the world.
- Success in mitigating climate change requires global and absolute cooperation.

10.5 Ways to improve the Solar Sector**Why in news?**

- Madhya Pradesh's Rewa Ultra Mega Solar Project, the world's largest solar park, will now produce the cheapest solar power in the country at just Rs 2.97 per unit.
- This is the first time in the history that the tariff of electricity based out of Solar Power Plants is going to be at sub-3 level.

What are some of the lacunae?

- The National Solar Mission, inaugurated in 2010, is an initiative of the Government of India to promote renewable solar power.
- It has set a target of achieving 20GW by 2022 which was later increased to 100 GW in 2015.
- An important missing aspect in the national policy on renewables is the failure to tap the investment potential of the middle class.
- The grid-connected large-scale installations have received maximum attention, while the rooftop solar sector was largely ignored.

What needs to be done?

- The progress in solar sector must be deepened with policy incentives, for several reasons. The most important being, the need to connect millions of people who are without access to electricity.
- Adding more than 10 GW capacity annually over the next six years will require active participation and investment by both residential and commercial buildings sector.
- This can be kick-started using mass participation by citizens.
- State electricity utilities should be given mandatory time frames to introduce net-metering systems.
- In Germany, where a robust solar expansion has been taking place, illustrates the benefits of policy guarantees for rooftop installations and feed-in tariffs i.e payment made to households or businesses generating their own electricity.
- Also, tariffs paid both for large plants and smaller installations require periodic review.

10.6 Human Animal Conflict - Nagarhole Tigers**Why in news?**

- In one month, seven tigers including a six-month-old cub have died in the Nagarhole-Bandipur reserves in Karnataka.

Where is Nagarhole National Park?

- Nagarhole National Park also known as Rajiv Gandhi National Park, is a national park located in Kodagu and Mysore district in Karnataka.
- This park was declared as a Tiger reserve under Project Tiger in 1999.
- The reserves form an integral part of the Nilgiri biosphere which holds world's single largest tiger population estimated over at 570 tigers.

- It is located to the north-west of Bandipur National Park and the Kabini reservoir separates the two parks.
- Bandipur and Nagarhole hold more than 221 tigers cumulatively.
- In terms of tiger mortality, however, the two reserves have taken a huge hit since 2010, with 68 deaths .
- Forest officials ended up in this speculation because the body of the tigers dead are left with nails, claws and skin untouched. This rule out the role of poachers.
- The post-mortem showed of some dead tigers showed that they have had lost their canines and their stomachs were empty.
- This confirms that the tigers that are unable to hunt in the wild move to the peripheries to hunt slow-moving livestock.

What is the reason for the deaths?

- Protection against poachers and habitat manipulation has seen the prey base increase.
- With the increase in the weaker tigers (injured or older tigers and younger males) are pushed to the periphery.
- Coffee and arecanut plantations are prevalent near Nagarhole Tiger Reserve.
- Tigers enter the plantation in search of rabbits and wild boars.
- They get caught in the barbed-wire fence cannot extricate itself from the wire and dies.
- They also get trapped in the snares setup by humans.
- The snare is a loop of wire in the form of a noose.
- When an animal enters the noose, any slight weight on the dangling string makes it tighten. The more the animal struggles, the tighter it gets.
- The recent government order allowing hunting of wild pigs to reduce crop damage may be a prime driver for the increase in the number of snares.

What has been done?

- The forest department resolved to weed out all these traps.
- Elephant camps have been mobilised to aid the search. Over 200 snares were found in the first two days.
- The operations are concentrated around Lakshmana Tirtha River.
- There is no way to find out who has placed the traps.
- Also the forest officials do not want to antagonise locals as they need them for conservation.
- This trend will continue as long as “unscientific” ways of dealing with crop loss continue.
- In the reserve and surrounding areas, the anger among the people is generally against wild boars and elephants.
- Dynamites and Pellet Guns have been used against elephants, while cases of electrocution have also been witnessed. This also should be seriously addressed.
- But the presence of the tiger is largely tolerated.

Why snares have been set up?

- The snares are often set for rabbits and wild boars.
- They are source of food for locals and the estate owners encourage it as a way to deal with the crop loss due to boar raids.
- They result in killing the tigers, and the panicked people who set the trap, dump the body of the tiger and clears the evidence of the snares.

- These lands are considered as sacred groves and the big cat are worshipped.
- They do not want the tiger killed. They only ask for was protection for the people and livestock.
- This sentiment should be harnessed and enough awareness about snares should be made to conserve tigers.

10.7 Ennore Oil Spill

Why in news?

- Two vessels collided off Ennore port and resulted in the oil spill that spread southward beyond Marina beach, about 25km from the accident spot.

What happened?

- A LPG tanker and an oil and chemical tanker collided within the port limits in Ennore on 28th Jan 2017.
- The incident happened about two nautical miles outside the harbour.
- By the time the Coast Guard was informed later in the morning, great damage had already been done.
- In two days, a thick layer of floating oil was found on the shoreline of the Marina beach, which is more than 20km from Ennore port.
- The INCOIS report has mentioned that the spillage has polluted 24.06km of the city's shoreline.

What were the impacts?

- Ecologists assert that there will be long term negative impact of this oil spill on Chennai's marine ecology.
- The biggest source of toxins is through inhalation and crude oil has benzene, which is a carcinogen.
- The sludge is reported to have a heavy concentration of nine heavy materials such

as zinc, lead and arsenic which are non-biodegradable and cannot be removed even by bioremediation.

- This will remain in the ecosystem, poisoning marine life all the way up the food chain and causing irreparable damage to humans as well as to the marine ecosystem.
- Reports indicate that the slick has spread to Cuddalore in the south, will soon reach the Pichavaram mangroves and then northwards to affect the Pulicat mangroves.

What is NOS-DCP?

- The National Oil Spill Disaster Contingency Plan is an action oriented plan and covers such aspects as reporting, communication, alerting, assessment, operations, administration, finances, public relations and arrangements with other contiguous states.
- It also assigns responsibility for various tasks to relevant government departments, identifies trained personnel, equipment, and surface craft, and aircraft and means of access to these resources.
- It was sanctioned in 1993 and adopted in 1996.

What are the objectives of NOS-DCP?

- To establish an effective system for detection and reporting of spills.
- To establish adequate measures for preparedness for oil and chemical pollution.
- To facilitate rapid and effective response to oil pollution.
- To establish adequate measures for crew, responders, and public health and safety, and protection of the marine environment.
- To establish appropriate response techniques to prevent, control, and combat oil and chemical pollution, and dispose-off recovered material in an environmentally sound manner.

- To maintain the evidences for the purpose of identifying the polluter and taking suitable administrative, civil or criminal action against the polluter.
- Obfuscation of facts after an oil spill is counterproductive, since the impact is prolonged and it could erode the confidence of the international community in the country's ability to fulfil its commitments to protect marine life and biodiversity.

Is the NOS-DC Plan effective?

- In 2015, the Coast Guard had revised the NOS-DCP to meet international standards, setting up an Online Oil Spill Advisory system.
- This placed India amongst a select list of countries that have indigenously developed capabilities for prediction of trajectory of oil spills.
- However, a comprehensive plan is yet to be drawn up.
- The first response to the collision was seriously deficient as the port authorities initially denied any significant environmental damage from oil.
- But as the scale of the disaster began to unfold, the failure calls into question the efficacy of the NOS-DCP.
- The entire clean-up was done manually as the available equipment is meant for clearing oil spill in deep seas.
- Failure to safeguard marine turtle and bird habitats is a clear violation of the provisions of the Convention on the Conservation of Migratory Species of Wild Animals.
- The efficacy of chemical dispersants to degrade oil at sea still remains controversial.
- All this underscores the importance of timely advice from agencies such as the INCOIS, which is mandated to forecast the course of an oil spill.

11. INTERNAL SECURITY

11.1 Misusing AADHAR data

What was the issue?

- Recently several disturbing incidents centred on the Aadhaar database have established the scope for widespread data leakage.

What were the disturbing incidents?

What does the incident underscores?

- The Indian Coast Guard has been demanding, for over 20 years now a State contingency plan from States. Despite this, Tamil Nadu has not furnished such a plan.
- The State now needs to tell its people why a local contingency plan has not been put in place.
- There is no disaster-related information, especially details regarding the current status of the spill, or precautions to be taken the public and fishermen.
- An independent inquiry is necessary to determine whether the training and acquisition of equipment to handle such accidents for all agencies is effective or not.
- A technology start-up demonstrated that it could identify faces singled out from CCTV footage of a crowded street.
- This firm is one of the many that offer services such as identity checks, PAN verification, police record checks and employment history generation by linking an individual's data to his 12-digit Aadhaar number.
- Another website filtered, compiled and published Aadhaar data to create a database listing of over 500,000 minors.
- Several telecom salesmen selling Aadhaar data were arrested.
- These events show the feasibility of parallel databases, which duplicate sensitive data.

How these parallel databases are built?

- The biometric identification system is being used extensively for e-KYC processes for multiple purposes.
- At present, anybody can enrol as an agent to verify e-KYC.
- But there is little to prevent such data being collected, stored and re-used for illegal purposes.
- The application programming interface (API) for the Aadhaar e-KYC service is publicly available from the UIDAI.
- Agent enrolment is a simple, quick process; the basic equipment is an inexpensive biometric fingerprint scanner connected to a smartphone.
- KYC user agencies and service agencies access Aadhaar data after taking the individual's consent.
- The individual must input a one-time password – delivered to a registered mobile number – to agree to authentication. The UIDAI only verifies queries with a binary “yes/no”.
- But the agency conducting the e-KYC and verification can collect and store data at its end.

What are the implications?

- Earlier white-hat hackers have demonstrated how iris scans can even be generated from high-resolution photographs.
- Mobile service providers and banks have used private agencies to generate e-KYC data for hundreds of millions of people.
- It is, therefore, possible that many parallel databases tied to Aadhaar already exist, and these Aadhaar numbers, in turn, are tied to other sensitive data.

- The aggressive roll out also means that new databases continue to proliferate.
- What makes matters worse is that there is no specific privacy law or data-privacy law to stop such data being stored or traded.
- These security breaches suggest that any future privacy legislation, or judgments by the judiciary, might only manage to close the door on data breach.

11.2 Border management along the Indo- Myanmar border

Why in news?

- Myanmar was building a border demarcation fencing with India. The construction is currently on hold.

How did the border problem between India and Myanmar emerge?

- The formation of Myanmar as a separate State in 1935 and decolonisation of the sub-continent in 1947 divided ethnic communities living along the Indo-Myanmar border.
- These communities, particularly Nagas, found the newly created boundary to be inconsistent with the traditional limits of the region they inhabited.
- And they felt a deep sense of insecurity as they became ethnic minorities on both sides of the border.

What is FMR?

- The people living in the Eastern districts of Nagaland and in the areas of NSAZ in Myanmar have close family ties and engage in cultural and economic exchanges.
- In some instances, the imaginary border line even cuts across houses, land and villages.
- People living on the Indian side, own land holdings including cultivated lands and forested areas across the border and

are completely dependent on it for their livelihood.

- Also from the Myanmar side, a lot of villagers come to the Indian side to buy basic essentials.
- Therefore the Indian and Myanmar governments established the Free Movement Regime (FMR), which allowed Nagas to travel 16 kilometres across the border on either side without any visa requirements.
- Taking advantage of the FMR, a sizeable number of students from NSAZ also study in schools on the Indian side of the border.

What are the shortcomings of FMR?

- The FMR has been misused by locals to smuggle contraband in their head loads, which are not subject to inspection.
- Militant groups have been using the porous border for moving cadres and arms.
- Along with other active Indian insurgent groups, the NSCN-Khaplang (NSCN-K), which had unilaterally abrogated the ceasefire with the Government of India (GoI) in 2015, maintains its camps and training bases in NSAZ in Myanmar.
- All these groups carry out illegal activities including launching strikes against Indian security forces and returning to their safe havens in Myanmar.
- China has also been reportedly aiding some of these groups.
- Policing such a large area marked by harsh terrain and dense forest is difficult.

What is the impact of the fence construction along the border?

- The ongoing activity of fence construction along the Indo- Myanmar has triggered apprehensions among the people living on either side of the border.

- The affected people mainly are Konyak, Khiamnungan and Yimchunger Nagas who inhabit the areas of Eastern Nagaland in India and the Naga Self Administered Zone (NSAZ) in Myanmar.
- It would deprive them of the produce from their land and forest resources.
- From the security perspective, possible anti-establishment sentiments could destroy the peace along the Indo Myanmar border.

How to manage the border between India and Myanmar?

- Suitable measures need to be initiated in order to establish trust and confidence amongst the affected populace.
- Tripartite talks involving the local stakeholders via state government, the Myanmar government and the GoI could be organised to address extant concerns.
- Socio-economic initiatives on either side of the border aimed at benefiting the local inhabitants by alleviating poverty and bringing greater development in the region should be worked out.
- A mutually acceptable arrangement addressing the security concerns of both the countries with minimum discomfort to the local inhabitants would be best way to address the border problem.
- The GoI on its part should provide an assurance that no construction of border fence will be undertaken on the Indian side without taking the affected population into confidence.

How the borders should be managed?

- In case national security concerns dictate the necessity of constructing a fence along the India-Myanmar border, options such as selective fencing, better use of technology, and regulated flow of cross-border movement, among other initiatives, can be examined.

- Regulated borders with greater emphasis on developing people-to-people contact and cross-border trade initiatives are likely to yield greater security benefits.
- It is however essential to take into confidence the affected populace and the local stakeholders prior to the finalisation and implementation of such plans.

11.3 Handling Dissents in Security Forces

Why in news?

- Four different videos of constable of the BSF's 29th battalion surfaced online in which he talks about working conditions and complains about the food that is allegedly being served.

How BSF responded?

- Generally, the security forces around the world don't like dissent.
- The BSF has directed its "special snoop teams" to check on the morale of its personnel.
- Representatives of an intelligence network have been directed to report instantly about the morale of the force as well as cases of indiscipline.
- Efforts are made to counter wrong propaganda on social media.
- It also said that instances of complaints being voiced via the social media are strictly being dealt with.
- Similarly an internal vigilance under Inspector General level officer has been setup and along with vigilance officers up to battalion levels to counter corruption in the force.
- The BSF also claimed that the force has robust grievance redressal system within its establishment from the lowest field unit up to the director general (DG) level.

Are these measures enough?

- Setting up an internal vigilance panel shows good intent.
- But a panel headed by one of their own, questions their credibility in dealing the corruption cases.
- Also the snoop teams formed on their own might be misused to censure more individual soldiers resorting to social media.
- If the claim of grievance redressal system is true, then the jawans would not have taken to social media to air their grievances and there would be no need to refurbish the complaint mechanism.
- By "disciplining" complaining soldiers and denying that there is a problem, the BSF is doing a great disservice.
- The key to addressing such issues is to address directly set up systems and procedures to ensure that the jawans get what is their due.
- Formal and informal level interactions with jawans have to be enhanced.
- Supplementing these processes, supervisory officers, whenever they visit posts or locations should hold meetings to address the personnel under their command where the individual can report.

11.4 ISIS in India

What is the issue?

- Two suspected Islamic State associates were arrested recently from Gujarat.
- Also one of the 21 persons who went missing from Kerala last year and were believed to have joined the IS, was reported to have been killed in a drone strike in Afghanistan.
- Anti-terror officials have recently arrested young people from different parts of the country — in Kerala, Tamil Nadu, Telangana, West Bengal and Rajasthan.

- These incidents once again raises the question whether IS is finding support in India.
- The IS is not recruiting people through local communities as in the case of other terror organisations.

How prevalent is IS in India?

- The number of Indians to have joined the ranks of the IS is very small.
- In 2015, the number of Indians who have joined the IS was 23, compared to 760 from the U.K. and 150 from the U.S.
- As Indian Islam is syncretic in nature, it is extremely difficult for groups such as the IS to become popular among Muslims, as it did in parts of Iraq and Syria.
- But lone- wolf attacks inspired by the IS world view could pose security risks.
- Nor they are recruiting through madrasas as in Pakistan and Afghanistan.
- The IS reaches out through online propaganda.
- Currently, as the IS is under attack in its core territories and is desperate to expand its reach beyond West Asia.
- Therefore it has carried out major terrorist attacks in India's neighbourhood — in Afghanistan, Bangladesh and Pakistan, including the bombing at the Sehwan Sufi shrine.

What is the IS' MO?

- Ever since the organisation declared a 'Caliphate' in 2014, it has attracted thousands of fighters from around the world.
- The IS thrives on support from young foreign jihadists.
- It used two tactics viz urging sympathisers either to travel to Iraq or Syria to join the war, or carry out terror attacks in their own countries after declaring allegiance to the 'Caliph'.
- It is important to not let these isolated arrests be blown out of proportion to target the larger Muslim population, which right-wing elements often try to do.
- At the same time, India should continue its high-level intelligence and counter-terror operations.
- The state and Muslim religious leaders should co-ordinate in countering radicalisation and having in place specific de-radicalisation programmes.

What India should do to prevent it?

PRELIM BITS

12. Art and Culture

Qila e Mubarak

- The Red fort was previously also known as 'Qila-e- Mubarak' or the Blessed Fort as the fort was residence to the royal family.
- British East India Company rule demolished 80% of the Qila (fort) during Sepoy Mutiny of 1857. The left portions were preserved and repaired by George Curzon.
- There is another historical monument named QilaMubarak in the city of Bathinda in Punjab.
- It has been in existence from 90-110 AD in its current place and is the oldest surviving fort in India.
- Razia Sultan was incarcerated on her defeat and dethroned here.
- Raja Dab, along with emperor Kanishka, is believed to have built the fort.
- DaraShikoh, son of fifth Mughal initiated a new order in Sufism called as the "Qadiri order".
- Though he was a favorite of Shah Jahan, he was defeated by Aurangzeb during the Battle of Samugarh.
- He had promoted the peace between the followers of Hinduism and Islam and wrote a book called Majma-ul Bahrain or the mingling of the two oceans which found commonalities between Islam and Hinduism.
- He himself translated 50 Upanishads from Sanskrit to Persian language.

Dead Sea Scrolls

- The Dead Sea Scrolls are a collection of ancient manuscripts that include the earliest existing copies of books from the Hebrew Bible, date from the 3rd century BC to the 1st century AD.
- Around 900 scrolls were discovered between 1947 and 1956 in the Qumran caves above the Dead Sea.
- Archaeologists have uncovered a new cave that once housed Dead Sea Scrolls.
- The cave discovered west of Qumran in the occupied West Bank contained no manuscripts, but there is ample evidence of their earlier presence.

13. History

Dalhousie to DaraShikoh

- The New Delhi Municipal Council has renamed Dalhousie Road as DaraShikoh Road.
- As per rules, only names given to public facilities before the Independence can be changed.
- Lord Dalhousie, known for Doctrine of lapse, served as governor general of India from 1848-56. He is known for his reforms such as formation of separate public works department for the first time, construction of Ganges canal, first railway line, construction of electric telegraph and postal reforms etc.,

14. Geography

South Talpatti Island

- South Talpatti or New Moore, was a small uninhabited offshore sandbar island in the Bay of Bengal, off the coast of the Ganges-Brahmaputra delta region and few kilometers from the mouth of the Hariabhanga River.

- It emerged in the Bay of Bengal in the aftermath of the Bhola cyclone in 1970 and disappeared later due to sea level rise, changes in monsoonal rain patterns which altered river flows and land subsidence.
- Both India and Bangladesh claimed sovereignty over it because of speculation over the existence of oil and natural gas in the region.
- According to Permanent Court of Arbitration's verdict in 2014, the island will be under the jurisdiction of India, even though it is currently beneath the sea level.

Hatiya Island

- Hatiya Island is an island in the northern Bay of Bengal, Bangladesh, at the mouth of the Meghna river.
- The Island falls under Noakhali District of Bangladesh. Other major offshore islands of this region are Bhola Island (which is the largest) and Manpura Island.
- In 2015, Bangladesh government decided to relocate some Rohingya Muslims to Hatiya Island after the recommendation of Myanmar state-appointed body headed by Kofi Annan.

New rail line in Andaman and Nicobar Islands

- A 240 - KM broad-gauge railway line connecting Port Blair with Diglipur in the Andaman and Nicobar Islands.
- It is the first in the country that will bring the archipelago on the rail map.
- The project will connect the Union Territory's capital city in the south with the largest town on the north Andaman island.
- It will be of strategic importance to the defense forces because Diglipur is just 300 km by sea from the southern coast of Myanmar
- Among the major tourist attractions in Diglipur are the Ross and Smith islands.

Char Dham Highway Project

- The Char Dham highway development project is an initiative to improve connectivity to the Char Dham pilgrimage centres in the Himalayas i.e Gangotri, Yamunotri, Kedarnath and Badrinath.
- This objective is to provide roads with paved shoulders, provision for landslide mitigation and other road safety measures, which will provide all weather road connectivity for pilgrims and for movement of defence forces.
- But generally the Char Dham pilgrimage centre includes four pilgrimage sites in India i.e Badrinath, Dwarka, Puri and Rameswaran but the Gangotri, Yamunotri, Kedarnath and Badrinath in Uttarakhand state were known as Chota Char Dham.

Nilambur teak gets GI tag

- Nilambur teak is internationally known for its superior quality and elegant appearance.
- Nilambur in Kerala is also known as "Mecca of Teak". Its teak will soon be added to the list of Geographical Indication (GI) tag.
- Nilambur also has a Teak Museum.
- The teak plantation in Nilambur, the world's first teak plantation was done around the year 1842 -1844.
- Other Kerala products in GI tag are Pokkali rice, Vazhakulam Pineapple, Wayanadan rice varieties (Jeerakasala and Gandhakasala), Tirur Betel vine, Central Travancore Jaggery and Chengalikodan Nendran - a banana variety.

Zealandia

- It's a new geological continent which was once a part of Australia.
- It broke off from Antarctica about 100 million years ago, and then from Australia about 80 million years ago.

- It meets all the criteria that are satisfied by the existing seven continents i.e it is elevated above the area that surrounds it, has its own distinctive geology, the area that it takes up is well defined and has a crust thicker & lighter continental crust than the regular ocean floor with dark volcanic rocks.
- The new continent is 94% under water and made up of three major landmasses: New Zealand's north and south islands, and New Caledonia to the north
- A piece of seafloor called the Cato Trough still separates Zealandia and Australia.
- It does not require the formation of a reservoir thus eliminating the methane and carbon dioxide emissions generally caused by the decomposition of organic matter in the reservoir of a conventional hydro-electric dam.

Science City

- Haryana is about to be set up a Science City in Sonapat.
 - The Haryana government has also requested the ministry to consider this as a project of the National Capital Region (NCR) as there is no Science City in NCR and the vicinity.
 - Thematic galleries on climate change, biodiversity, cutting-edge science and technology, nanoscience, biotechnology and robotics will be created.
 - It will also have a fun science gallery explaining various aspects of science and technology, interactive demonstrations, Laser Show, 3D/4D/5D science-show facilities, virtual reality exhibits, simulator, space theatre etc.
- Arun-3**
- The Cabinet Committee on Economic Affairs has approved the investment for generation component of Arun-3 Hydro Electric Project (900 MW).
 - The project is located on Arun River in Sankhuwasabha District of Eastern Nepal.
 - The Run-of-River scheme envisages a high concrete gravity dam and a Head Race Tunnel (HRT) with underground Power House containing four generating units on Left Bank.
 - It would generate employment for 3000 persons from both India and Nepal, will provide surplus power to India strengthening power availability in the country and will also strengthening economic linkages with Nepal.

NyokumYullo Festival

- It is festival celebrated by the Nyishi tribe in the State of Arunachal Pradesh.
- It is celebrated by the people from all class and walk of life for better productivity, prosperity and happiness of all human beings on earth.

Run-of-the-river hydroelectricity (ROR)

- ROR is a type of hydroelectric generation plant whereby little or no water storage is provided.
- Substantial flooding of the upper part of the river is not required for run-of-river projects as a large reservoir is not required. As a result, people living at or near the river don't need to be relocated and natural habitats and productive farmlands are not wiped out.

15. Polity

e-Cabinet

- Arunachal Pradesh became the first state in the northeast to implement e-Cabinet solution for the state cabinet members.
- Using this system, the cabinet members can access the cabinet notes before the meeting, prepare for cabinet meetings, conduct them and review minutes, entirely without paper.

- The entire business of the Cabinet can be conducted using the e-Cabinet solution.
- It is implemented by the department of Information Technology and Communication.
- The average length of the cabinet meetings will go down from 4-5 hours to just 30-90 minutes and the government can also eliminate the need to print and deliver thousands of pages of documents.

Composite floor testing

- If there is absolute majority i.e more than 50% of the seats won by a single political party then there is no questions in who forms the government.
- In situations where the majority can be questioned (e.g when there is a coalition government), the chief minister appointed by the governor can be asked to prove his majority in the lower house.
- The chief minister has to move a vote of confidence and win a majority among those present and voting. This is called Floor Testing.
- If there is more than one person staking claim to form the government and the majority is not clear the governor may call for a special session to see who has the majority. This type is called Composite Floor Testing.
- The majority is then counted based on those present and voting, including the opposition.
- The Speaker does not cast his vote on the first instance. He can vote in case of a tie.
- The Constitution does not spell out the manner in which the governor must satisfy himself about the claim of majority support in the Assembly by the ruling dispensation.
- It is the Supreme Court's innovation - Normal floor testing in SR Bommai case and Composite floor testing in the Jagadambika Pal case.

Appointments Committee

- The Appointments Committee of the Cabinet (ACC) is composed of the Prime Minister of India and the Minister of Home Affairs.
- It decides appointments to several top posts under the Government of India.
- Originally the Minister in-charge of the concerned Ministry was also the part of the committee but now has been excluded from the committee.

Armed Forces Tribunal (AFT)

- AFT is a military tribunal in India established under the Armed Forces Tribunal Act, 2007.
- It has the power for the adjudication of disputes with respect to commission, appointments, enrolments and conditions of service in respect of persons subject to the Army Act, 1950, The Navy Act, 1957 and the Air Force Act, 1950, thus leaving paramilitary forces, even the Assam Rifles and Coast Guard, outside the tribunal's purview.
- The Judicial Members are retired High Court Judges and Administrative Members are retired Members of the Armed Forces who have held rank of Major General for a period of three years or more or Judge Advocate General (JAG), who have held the appointment for at least one year.
- The post of JAG in India is held by a major general who is the legal and judicial chief of the Army.

Ministry of Development of North Eastern Region

- The Ministry of Development of North Eastern Region is responsible for the matters relating to the planning, execution and monitoring of development schemes and projects in the North Eastern Region.
- It was established in 2001.

- It includes 8 states i.e Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim & Tripura.
- Constitutional Provisions about NER include
- Part IX – The Panchayats : Article 243M & Article 243ZC not to applicable to Certain Areas
- Part X – The Scheduled And Tribal Areas : Article 244 for administration of Scheduled Areas and Tribal Areas & Article 244A for the formation of an autonomous State comprising certain tribal areas in Assam and creation of local Legislature or Council of Ministers or both therefore
- Part XXI – Temporary, Transitional And Special Provisions : Article 371 A, B, C, F, G, H i.e special provision for NE States Except Meghalaya and Tripura.
- Sixth Schedule : For the Administration of Tribal Areas in the States of Assam, Meghalaya, Tripura and Mizoram

16. Social Issues

Third gender category in school exams

- Bihar allowed students to appear for the Board exams under the third-gender category.
- It is the first time such a measure is taken, since the Supreme Court recognised transgender people as a third gender in 2014.
- New Rule for Government staff in Assam State
- The Assam State government has announced a new legislation to deduct the salary of government employees who failed to take care of their elderly parents.
- If the Employees working in the government, state PSUs and companies failed to take care of their parents, then a certain portion of the salary of such employees would be deducted to be given to their respective parents.

India rejects report of U.S. faith panel

- India rejected criticism from the U.S. Commission on International Religious Freedom (USCIRF) report on challenges faced by religious minorities.
- In its report titled “Constitutional and Legal Challenges Faced by Religious Minorities in India”, it says that religious minorities in the country continued to face vigilantism and constitutional challenges.
- USCIRF is an independent, bipartisan U.S. federal government commission dedicated to defending the universal right to freedom of religion or belief abroad.
- USCIRF Commissioners are appointed by the President and the Congressional leadership of both political parties.

Pink Shirt Day

- Fighting against racism, bullying, hate crimes and discrimination, Sikhs across the United Kingdom and Canada observed ‘Pink Shirt Day’ coming out in pink shirts and turbans to give message of kindness and tolerance.
- This Pink Shirt Day movement basically started from Nova Scotia where two school children were bullied for wearing pink shirts on day one of their school.
- Since then, pink shirt has become a symbol against racism, bullying and discrimination.
- As Sikhs too have been facing these issues and have been victims of hate crimes due to turbans and beard, we decided to observe Pink Shirt Day for cause of Sikhs too.

17. Governance

e-Gov Awards

- The award is instituted by the computer society of India (CSI) and Nihilent Technologies.

- It helps recognize the efforts of e-Governance practitioners from across central and state departments and projects in district administration units.
- This year, Rajasthan and Telangana won the award under the state category and the award of Recognition went to Odisha and Nagaland.

DARPGSEVA

- The Department of Administrative Reforms and Public Grievances (DARPG), Ministry of Personnel, Public Grievances and Pensions has started its Twitter Seva.
- The Twitter Handle is 'DARPGSEVA'. The Twitter Seva aims to address issues relating to the DARPG like Public Grievances and Administrative Reforms etc.
- It promotes citizen-centric governance with emphasis on grievance redressal.
- Application of geo-spatial technology in Education sector
- Under Rashtriya Uchchar Shiksha Abhiyan (RUSA), the National Remote Sensing Centre (NRSC) of Indian Space Research Organisation (ISRO) has developed a portal called "Bhuvan RUSA".
- In this portal, geo-tagging of institution by a mobile application and associated details captured by the educational institutions are uploaded.
- The key stakeholders in Bhuvan RUSA are Department of Higher Education, Ministry of Human Resource Development; National Remote Sensing Centre (NRSC) of Indian Space Research Organization (ISRO); State Governments and institutions of the States/ UTs funded under RUSA.
- RUSA is the centrally sponsored scheme aims at providing strategic funding to higher educational institutions throughout the country.

18. Government Schemes

Central sector schemes and Centrally Sponsored Scheme

- Central sector schemes are 100% funded by the Union government and implemented by the Central Government machinery.
- Central sector schemes are mainly formulated on subjects from the Union List. They account for 11% of the Central Government's expenditure.
- In Centrally Sponsored Scheme (CSS) a certain percentage of the funding is borne by the States and the implementation is by the State Governments.
- Centrally Sponsored Schemes are formulated in subjects from the State List to encourage States to prioritise in areas that require more attention. They account for 10% of Central governments expenditure.

Credit Linked Subsidy Scheme (CLSS)

- Beneficiaries of Economically Weaker section (EWS) and Low Income Group (LIG) seeking housing loans from Banks, Housing Finance Companies and other such institutions would be eligible for an interest subsidy at the rate of 6.5 % for a tenure of 20 years.
- This Scheme is being implemented through two central nodal agencies – National Housing Bank (NHB) and Housing Urban Development Corp (HUDCO).
- The CLSS is aimed at increasing the institutional credit flow to the housing needs of the urban poor as a demand side intervention.

Schemes for minority women

- Ministry of Minority affairs implements three specific schemes for women.
- "Nai – Roshni" for leadership development of Minority women with an aim to empower and instill confidence in women by providing

knowledge, tool and techniques through selected Non-Governmental Organizations (NGOs).

- Begum Hazrat Mahal National Scholarship for Meritorious Girls belonging to Minorities implemented through Maulana Azad Education Foundation.
- Mahila Samridhi Yojana - Skill development training in women friendly trades is provided along with stipend and formation of self help group during the training period followed by infusion of micro credit for income generation.

Rashtriya Yuva Sashaktikaran Karyakram (RYSK)

- It is a flagship programme of the Department for empowerment of the youth, Ministry of youth affairs and sports to enable youth to realise their potential.
- It is the new umbrella scheme which consolidates Nehru Yuva Kendra Sangathan (NYKS), National Youth Corps (NYC), National Programme for Youth & Adolescent Development (NPYAD) and National Discipline Scheme (NDS), National Young Leaders Programme (NYLP).

Pradhan Mantri Gramin Digital Saksharta Abhiyan (PMGDISHA)

- It is the new scheme launched by the Ministry of Electronics and IT to make rural households digitally literate.
- This scheme is initiated under Digital India Programme and expected to be one of the largest digital literacy programs in the world.
- It would empower the citizens by providing them access to information, knowledge and skills for operating computers / digital access devices.
- Pandit Deendayal Upadhyay Unnat Krishi Shiksha Scheme

➤ Pandit Deendayal Upadhyay Unnat Krishi Shiksha Scheme was launched in the year 2016 to promote agricultural education.

- Under the scheme 100 centres being opened with a fund of Rs.5.35 crore.
- “Attracting and retaining youth in Agriculture (ARYA)” is a project sanctioned by the Indian Council of Agriculture (ICAR) and is being implemented at KrishiVigyan Kendra (KVK).
- The main objective of the project was to provide complete knowledge and skill on processing, value addition and marketing of coconut and banana products through capacity building programmes involving research and development organizations.

Hunar Haat

- Hunar Haat (Skill Haat) is an exhibition of handicrafts, embroidery etc made by the artisans from the Minority Communities organized by the Ministry of Minority Affairs.
- They will be provided free of cost stall, the arrangements for their transport and their daily expenses.
- Two such Haats has been conducted so far and the Ministry has been working to establish “Hunar Hub” in all the states where programmes such as “Hunar Haat” and other cultural events will be organized.

Middle Income Group Scheme

- It provides legal services to the middle income group citizens i.e. citizens whose gross income is not exceeding Rs.60,000/- p.m. or Rs. 7,50,00/- per annum.
- It was introduced by Supreme Court of India.
- The Scheme will be applicable for case intended to be filed in Supreme Court.
- A Society (Governing Body) will be created with Chief Justice of India as patron-in-chief, the Attorney General as ex-officio vice-president, the Solicitor General as honorary Secretary and other senior advocates as members.

19. Government initiatives

Defence Procurement Organisation

- The government plans to set up a Defence Procurement Organisation (DPO).
- The Defence Procurement Process continues to be lengthy and complicated.
- DPO will simplify the defence purchase procedure by integrating procurement processes.
- The new agency will be established based on the recommendation of government appointed committee headed by Dr. Pritam Singh.
- The DPO will be under the Union Defence Ministry.

Nuclear Power Generation

- Proposals for setting up of Ten indigenous Pressurised Heavy Water Reactors two Light Water Reactors each with foreign cooperation have been and finalised.
- Presently two Central Public Sector Enterprises viz. Nuclear Power Corporation of India Limited (NPCIL) and Bharatiya Nabhikiya Vidyut Nigam Limited (BHAVINI) are involved in nuclear power generation.
- The Government has amended the Atomic Energy Act, 1962 to facilitate establishment of Joint Venture Companies (JVC) by NPCIL with other Central PSUs to set up nuclear power plants.
- Government does not propose to allow private sector to enter into the nuclear power sector.

Model Contract Farming law

- Contract Farming involves production of selected crops by farmers under a buy back agreement with an agency engaged in trading or processing.
- At present, the model APMC act has a provision to allow contract farming and

includes one or more commodities and only limited to marketing.

- The proposed model contract farming law in this year budget could cover all the agricultural commodities and cover farming right from distribution of seeds to marketing of final produce.
- The new model law will subsume contract farming from the purview of APMC act to ensure that APMC will not become arbitrators on contract farming.

Mission XI Million

- It is the biggest school sports outreach programme in the country launched in New Delhi.
- It aims to take football to at least 11 million boys and girls around the country
- The programme is to make football as the sport of choice in India, to encourage children gain healthy habits and learn important life lessons in teamwork and sportsman spirit.

Operation Clean Money

- The Income Tax Department (ITD) -had initiated 'Operation Clean Money' for the e-verification of large cash deposits made during the period from 9th November to 30th December, 2016.
- Email and SMS were sent to around 18 lakh taxpayers for submitting online response on the e-filing portal.
- The explanation of cash deposit submitted by the taxpayer is being analysed in the context of nature of business and business profile in the earlier returns of the taxpayer.
- Help to Farmers by Indian Meteorological Department (IMD)
- Gramin Krishi Mausam Seva (GKMS) scheme is implemented by India Meteorological Department under Ministry of Earth Science in collaboration with State Agricultural

- Universities /Indian Council of Agricultural Research etc.
- It is issuing crop and location specific weather based agro advisories for the benefit of farming community
 - The Agro-meteorological Advisory Services (AAS) under the Gramin Krishi MausamSeva (GKMS) is operated to prepare biweekly weather based bulletins.
 - The information is transmitted through multimedia channels and also through SMS to help farmers plan farm operations accordingly.
 - Farmers are using the GKMS service products for critical farm operations like
 - Management of sowing (During delayed onset of rains);
 - Changing crop variety (During delay in rainfall);
 - Spraying Pesticides for disease control (During rainfall);
 - Managing Irrigation (During Heavy rainfall Forecast).
 - Maritime India Summit was organized by the Ministry of Shipping for the first time in Mumbai last year to attract investment in the shipping sector from all around the world.
 - South Asia Drought Monitoring System (SADMS)
 - It is a comprehensive drought monitoring system developed by the International Water Management Institute (IWMI).
 - The system will provide information about locations under drought in map format and also information about drought's effect on agriculture.
 - It combines satellite images of vegetation with weather data, soil moisture levels and crop yield information and helps predict the severity of impending dry spells and duration of it.
 - The International Water Management Institute (IWMI) is a non-profit, scientific research organization head-quartered in Colombo, Sri Lanka, with regional offices across Asia and Africa.

SARTTAC

20. International Events and Institutes

National Maritime Conference 2017

- The National Maritime Foundation (NMF) is conducting its Annual Maritime Power Conference-2017 with the theme 'The Blue Economy: Concept, Constituents and Development'.
- The National Maritime Foundation, in New Delhi, India is a non-governmental, non-political maritime think-tank under the societies act and established in 2005.
- The Foundation conducts independent academic research and provides policy-relevant recommendations to advance the nation's maritime goals.
- South Asia Training and Technical Assistance Center (SARTTAC) is an initiative of the Government of India and the International Monetary Fund (IMF) and established in New Delhi.
- SARTTAC is a collaborative venture between the IMF, the member countries, and development partners.
- Its strategic goal is to help its member countries strengthen their institutional and human capacity to design and implement macroeconomic and financial policies that promote growth and reduce poverty.
- SARTTAC's six South Asian member countries are Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka.

- It the newest addition to the IMF's global network of fourteen regional centers.

Moscow Conference

- It is the conference of six nations i.e India, Russia, Pakistan, Iran, Afghanistan and China that recently held in Moscow.
- The central theme of the conference was the stability and future of war-ravaged Afghanistan.
- Afghanistan made a strong pitch for the United States to be included as one of its most important partners.
- With U.S. troop levels down to their lowest of about 8,400 at the end of President Obama's tenure, Afghanistan's government has been hoping increased assistance from U.S.

World Government Summit

- The World Government Summit organised by UAE-based international organization that serves as a platform for global dialogue attempting to revolutionize how governments operate and how policies are made.
- It acts as a knowledge exchange hub between governments, futurism, technology and innovation.
- It aims to bring government, business and civil society together.
- The 2017 Summit announced Japan as the Annual Guest of Honor this year.

21. National Institute in news

National Institute of Disaster Management (NIDM)

- NIDM is an institute for training and capacity development programs for managing natural disasters in India, on a national as well as regional basis.
- It was constituted under an Act of Parliament in 1995 & was re-designated to give the

present name of NIDM by the Disaster Management Act 2005.

- NIDM also serves as international SAARC Disaster Management Centre (SDMC) and works as focus for its operation and planning.

National Scheduled Castes Finance and Development Corporation (NSFDC)

- NSFDC is an institution under Ministry of Social Justice & Empowerment for financing, facilitating and mobilizing funds for the economic empowerment of persons belonging to the Scheduled Castes families living below Double the Poverty Line.
- It provides concessional finance for setting up of self-employment projects and skill-training grants to unemployed SC persons living below Double the Poverty Line.
- NSFDC finances income generation schemes for the target group through the State Channelising Agencies (SCAs) nominated by respective State/UT Governments.

The National Regulatory Authority (NRA)

- NRA of India comprises of the Central Drugs Standard Control Organisation (CDSCO), State Drug Regulatory Authorities, Pharmaco-vigilance Programme of India (PvPI) and Adverse Events Following Immunization (AEFI) structures at the Central and States levels.
- A fully functional NRA is a pre-requisite for WHO pre-qualification of vaccines.
- WHO Pre-qualification Programme facilitates access to vaccines that meet the unified standards of quality, safety and efficacy as well as programme needs.
- The vaccine manufacturers can only apply for WHO vaccine pre-qualification if the NRA meets the standards of the WHO NRA published indicators i.e. WHO Global benchmarking Tool on functional regulatory system for vaccines.

- WHO has completed the assessment of the status of the Indian vaccine regulatory system.
- The country's NRA being declared "functional" with a maturity level of 4, i.e., the highest level as per currently evolved definitions in respect of 5 functions, and maturity level 3 in respect of 4 functions.
- In factories with up to 40 workers, penalty and recovery norms will be relaxed.
- An appellate officer for employers so they don't have to come to Delhi to file appeal against order

- Recently, to bring in more employees from public and private sector into the ambit of Employees' Provident Fund Organization (EPFO), an Employees' Enrolment Campaign, 2017 has been launched.

22. Economy

Employee's Provident Fund

- Employee's Provident Fund (EPF) is a retirement benefit scheme that is available to all salaried employees.
- Any company with over 20 employees is required by law to register with the EPFO.
- Both employees and employers contribute 12 per cent each of a worker's salary.
- This fund is maintained and overseen by the Employees Provident Fund Organization of India (EPFO) which is under ministry of labour and employment.
- The EPFO is tasked to assist the Central Board of Trustees (CBT), a statutory body formed by the Employees' Provident Fund Act, 1952.
- The CBT consists of representatives of Governments (Centre and State), Employers and Employees.
- The labour ministry has proposed amending the Employees Provident Funds Act, 1952 with provisions like
 - Establishments with at least 10 workers might have to pay provident fund, with the employer contributing nine per cent of a worker's salary.
 - Government will have the power to reduce contribution of employers in factories with 10-20 workers from 12% to 9% towards EPFO.

Bharat QR

- It is the first common quick response (QR) code developed jointly by the four prominent card payment companies in the country — Master Card, Visa, American Express and the National Payments Corporation of India (NPCI) that runs RuPay cards.
- It has been formed on the instructions of the Reserve Bank of India (RBI).
- A QR code essentially is a label that can be read or scanned by a machine to access account details of a merchant to make online payments.
- Apart from working as a common interface for the card platforms, Bharat QR will also facilitate acceptance using the Unified Payments Interface (UPI), and Aadhaar-enabled payments.

Helicopter Money

- Helicopter Money/Helicopter Drop is a hypothetical, unconventional tool of monetary policy that involves printing large sums of money and distributing it to the public in order to stimulate the economy.
- It was first mentioned by noted economist Milton Friedman.
- Helicopter drop is now used for unconventional measures to jump start the economy during deflationary periods.

Urban Reform Incentive Fund

- The Urban Reform Incentive Fund (URIF) in India aims to provide States with incentives to undertake essential urban sector reforms.
- The Ministry of Urban Development has proposed to increase Reform Incentive Fund from Rs 500 crore during 2017-18 to over Rs 3,000 crore per year over the next three years.
- The reforms to be undertaken by the States to receive incentives under URIF improve the responsiveness of local real estate markets, increase resource mobilization in Urban Local Bodies (ULBs), provide rigorous accounting of the management of public funds.
- The incentives given to the states will be on a grant basis.
- URIF receive funds from International Bank for Reconstruction and Development (IBRD) and Government of India.

Transit Oriented Development (TOD)

- Urban Development Ministry has come out with a multi-pronged policy framework called Transit Oriented Development.
- The policy will enable people to live within the walking or cycling distance from transit corridors like the Metros, Monorail and Bus Rapid Transit (BRT) corridors which helps them in connecting with different public transport.
- It aims to address the challenges like haphazard urban growth and sprawl, mobility, rapidly rising private vehicles on roads, pollution, housing choices among others.
- It is being incentivized by the Ministry of Urban Development under two initiatives 'Metro Policy' and 'Green Urban Mobility Scheme'.
- Thus city densification along the corridors, promotion of Non-motorized Transport,

multi-modal integration, effective first and last mile connectivity through feeder services are the features of TOD.

Restructuring of CBEC

- Central Board of Excise and Customs (CBEC) administers service tax, Customs duty and excise duty.
- Goods and Services Tax which is expected to be rolled out from July will subsume service tax and excise duty, to be jointly administered with states.
- Thus with the limited administration role to CBEC, it aims to restructure itself by adding a new Customs divisions on dispute resolution, capacity building and compliance.
- CBEC is also working on setting up a National Targeting Centre to intercept consignments and do risk profiling.

23. Environment

Pangolin

- Pangolins are nocturnal mammals, often called "scaly anteaters," are covered in tough, overlapping scales.
- These burrowing mammals eat ants and termites using an extraordinarily long tongue, and are able to quickly roll themselves up into a tight ball when threatened.
- There are eight different pangolin species can be found across Asia and sub-Saharan Africa.
- They are the most trafficked mammal in the world.



- They are hunted for the bush meat and their scales made of keratin used in traditional medicines.
- Recently, UN's Convention on International Trade in Endangered Species, known as CITES, placed the eight species of pangolin on the convention's "Appendix I".
- Thus adding pangolins under "Appendix I" will prohibits any cross-border movement in the animals or their body parts for commercial purposes.

Pilot Whales

- Oceanic dolphins are a widely distributed family of dolphins that live in the sea of the order Cetaceans.
- Cetaceans consist of the whales, dolphins, and porpoises.
- Oceanic dolphins include several big species whose common names contain "whale" rather than "dolphin", such as the killer whale and the pilot whales.
- Pilot whales grow to about 7.5m and are common around New Zealand's waters.
- They were named "pilot whales" because the group of these animals are often "piloted" by a leader.

Stranding of Pilot whales

- Recently around 600 pilot whales were stranded in Farewell Spit.
- Farewell Spit is narrow sand spit at the northern end of the Golden Bay, South Island of New Zealand.
- It has been the site of previous mass strandings and sometimes is described as a whale trap.
- A splinter of sand that arches like a hook into the Tasman Sea, seems to confuse whales and the spit's long coastline and gently sloping beaches seem to make it difficult for whales to navigate away from once they get close.



Passerine

- A passerine is any bird of the order Passeri formes, which includes more than half of all bird species.
- A notable feature of passerines compared to other orders of Aves is the arrangement of their toes, three pointing forward and one back, which facilitates perching.
- It includes sparrows and similar small birds.

Tully Monster

- Tullimonstrumgregarium, commonly known as the Tully Monster, is an extinct soft-bodied that lived in shallow tropical coastal waters of muddy estuaries during the Pennsylvanian geological period i.e about 300 million years ago.
- It has been found only in the Mazon Creek fossil beds of Illinois, United States.
- Its classification has been the subject of continual controversy, and interpretations of the fossil likened it to molluscs, arthropods, conodonts, worms, and even possibly vertebrates.
- A new study found that it cannot be classified as a vertebrate.

Nyctibatrachus

- Indian Scientists have discovered seven new frog species belonging to the genus Nyctibatrachus, commonly known as Night Frogs in the Western Ghats.

- Four out of seven of the new species are miniature-sized frogs and they are among the smallest known frogs in the world.
- Unlike other frogs in the genus that are predominantly stream dwelling, the new miniature frogs were found under damp forest leaf litter or marsh vegetation.
- One-third of the Western Ghats frogs are already threatened with extinction. Out of the seven new species, five are facing considerable anthropogenic threats and require immediate conservation prioritization.
- While domestic consumption of turtle meat in West Bengal and Bangladesh continues, it is the international export to south-east Asian countries and China that rake in profits for smugglers.
- Before, it was primarily Star Tortoises. But now, the numbers of species such as Spotted Pond Turtle are on the rise. Both the species are Vulnerable according to IUCN.

Co-existence of Predators

- Usually, big cats and wild canids live in different locations to avoid each other.
- But in four relatively small reserves in Western Ghats region researchers have found that Tigers, leopards, and dholes (Asian wild dog) co-exist, despite competing for much of the same prey i.e sambar deer, chital, and pigs.
- Each species has remarkably different adaptations to prey on different prey sizes, use different habitat types and be active at different times.
- Because of small and isolated nature of these high prey densities in these reserves, such adaptations are helpful for conservationists trying to save all three
- Dhole is listed as Endangered by the IUCN.
- Spotted Pond Turtle are different from five species of sea turtles are known to inhabit Indian coastal waters and islands viz Olive Ridley, Green turtle, Hawksbill turtle, Loggerhead turtle and the Leather back turtles.
- Except the Loggerhead, the remaining four species of sea turtle nest along the Indian coast.

CITES

Tortoise and Freshwater Turtles

- Freshwater Turtles form an important part of the riverine system, acting as scavengers in cleaning up water bodies and generally being indicators of river health.
- Gangetic Plains accounted for 46% of all seizures of Tortoise and Freshwater Turtles (TFT), with Lucknow and Kanpur being major hubs, given the diversity of TFT population along the river.
- CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is a multilateral treaty to protect endangered plants and animals.
- It is also known as the Washington Convention.
- Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten the survival of the species in the wild.
- It accords varying degrees of protection to more than 35,000 species of animals and plants.
- Participation is voluntary, and countries that have agreed to be bound by the Convention are known as Parties.
- Although CITES is legally binding on the Parties, it does not take the place of national laws. Rather it provides a framework respected by each Party, which must adopt their own domestic legislation to implement CITES at the national level.

- Recently, Pangolin and Barbary macaques, the only wild primate north of the Sahara, were given “Appendix I” protection.

The Blue Carbon Initiative

- The Blue Carbon Initiative is a global program working to mitigate climate change through the restoration and sustainable use of coastal and marine ecosystems.
- The Initiative is coordinated by Conservation International (CI), the International Union for Conservation of Nature (IUCN), and the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific, and Cultural Organization (IOC-UNESCO).
- Blue carbon is the carbon stored in coastal and marine ecosystems.
- The Blue Carbon Initiative currently focuses on carbon in coastal ecosystems - mangroves, tidal marshes and seagrasses, which are found on every continent except Antarctica.

Arc

- ‘Arc’ is a Green Building Performance Monitoring Platform developed by the US Green Building Council (USGBC)
- The Indira Gandhi International Airport (IGIA), Delhi has adopted first-of-its-kind ‘Arc’ for Terminal 3.
- It is already operational and the adoption of “Arc” is in line with the continued focus on Environment Sustainability and is aligned to make Delhi a Smart airport.

24. Science and Technology

Space

Northwest Africa 7635

- It is a meteorite discovered in Algeria, Africa in 2012.
- It has given insight into volcanic activity on Mars.

- The largest Volcano in the solar system, Olympus Mons, is found on Mars.
- But by analysing the chemical composition NA7635, scientists learnt that Mars had a single volcano that continuously erupted for 2 billion years.
- Martian volcanoes can grow to such enormous proportions because unlike Earth, Mars doesn’t have plate tectonics that constantly shuffle the surface.
- So the magma for the volcano in Mars gets hot magma from its interiors for billions of years continuously.

Exo-Atmospheric Interceptor Missile

- An indigenously developed exo-atmospheric interceptor missile, named Prithvi Defence Vehicle (PVD) Interceptor Missile, successfully destroyed an incoming target missile mimicking an enemy ballistic missile at a height of over 50 km.
- It is launched from Dr. Abdul Kalam Island and it demonstrates the capability of India’s Ballistic Missile Shield.
- Only 4 countries have this similar capability viz U.S, Russia, China & Israel.

Thor experiment

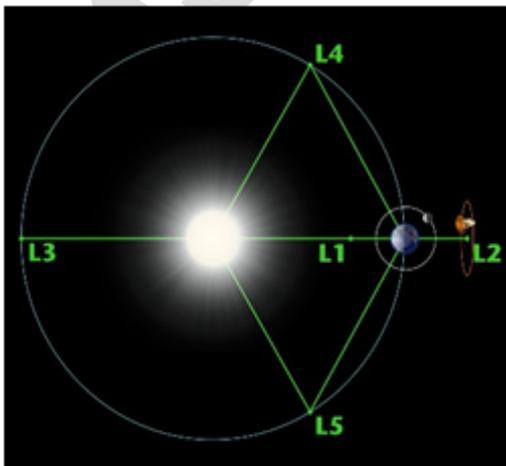
- Between 10 and 100 kilometres in the atmosphere, the interaction between charged particles produces a variety of dazzling electric phenomena like blue jets and red sprites.
- The Thor experiment investigates the electrical activity from thunderstorms by looking at them with a thundercloud imaging system from the vantage point of the International Space Station.
- The key aims of the study include understanding how these discharges influence water vapour levels, cloud formation, and eventually changes in climate.

Mars City

- The UAE has unveiled plans to build the first city on Mars by 2117.
- The country looks to transport people to the Red Planet over the next few decades.
- It announced the 100-year national project on which it would collaborate with specialised international organisations and scientific institutes.
- It will also try to find faster transportation methods for travelling to and from Mars.
- The plan will involve scientific research programmes to nurture national cadres specialised in space sciences at universities in the UAE.

Lagrange Points: Parking Places in Space

- A Lagrange point is a location in space where the combined gravitational forces of two large bodies, such as Earth and the sun or Earth and the moon, equal the centrifugal force felt by a much smaller third body.
- The interaction of the forces creates a point of equilibrium where a spacecraft may be “parked” to make observations.
- There are five Lagrange points around major bodies such as a planet or a star. Three of them lie along the line connecting the two large bodies.



Lagrange Points

- The first point, L1, lies between Earth and the sun and gets an uninterrupted view of the sun and free from the occurrence of eclipses. India's Aditya Satellite is placed at L1 point.
- L2 with the Earth, moon and sun behind it, a spacecraft can get a clear view of deep space and it has a protection for radiation field from sun. The James Webb Space Telescope will move into L2 point in 2018.
- The third Lagrange point, L3, lies behind the sun, opposite Earth's orbit. For now, science has not found a use for this spot.
- Points L4 and L5 are stable and lie along Earth's orbit at 60 degrees ahead of and behind Earth and dust and asteroids tend to accumulate in these regions due to its stability.
- Asteroids that surround the L4 and L5 points are called Trojans and Earth's only known Trojan asteroid, 2010 TK7 is found in the region.

Benefits of Lagrange points

- The Spacecraft at this point would be more sensitive to the tiny infrared signals from asteroids.
- The location would allow for natural cooling and would need any additional coolant to stay cool. The James Webb Space Telescope will take advantage of the thermal environment at the sun-Earth L2 point to help keep cool.
- L1 and L2 also have enormous bandwidth over conventional Ka-band radio and the communication speeds are very high.

Andromeda

- The Andromeda Galaxy also known as Messier 31, is a spiral galaxy approximately 2.5 million light-years from Earth.
- It is the nearest major galaxy to the Milky.

- It received its name from the area of the sky in which it appears i.e the constellation of Andromeda.
- It is the largest galaxy of the Local Group, which also contains the Milky Way, the Triangulum Galaxy, and other smaller galaxies.
- It is visible to the naked eye on moonless nights.
- The mission may also ascertain why the Sun occasionally emits high-energy particles that are a danger to unprotected astronauts and spacecraft.
- NASA has designed an 11.4 centimetres carbon-composite shield designed to withstand temperatures of 1,370°C outside the spacecraft.

MAMMOTH-1

TRAPPIST-1

- A year before scientists announced the discovery of three planets orbiting the dwarf star.
- Recently the team found four more through intense searches using several ground-based telescopes including Spitzer Space Telescope.
- This is by far the largest collection of Earth-like planets in the habitable 'Goldilocks' zone of a star — neither too close nor too far from a star, which raises the possibility of liquid water being present on the surface.
- Unlike earlier discoveries of exoplanets, all seven planets could possibly have liquid water.
- Three of the planets have the greatest chance.
- Since the initial discovery of three planets was made using the Chile-based Transiting Planets and Planetesimals Small Telescope, the exoplanet system is called TRAPPIST-1.

Solar Probe Plus mission

- NASA plans to send its first robotic spacecraft to the Sun which is about 149 million kilometres from the Earth.
- The mission is to study why the surface of the Sun, called the photosphere, is not as hot as its atmosphere, called the corona.
- The surface temperature of the Sun is only about 5,500°C but the atmosphere above it is an over two million degrees Celsius.

- A nebula is an interstellar cloud of dust, hydrogen, helium and other ionized gases.
- Astronomers have spotted an enormous, glowing blob of gas i.e Enormous Lyman-Alpha Nebula (ELAN) named Mammoth-1.
- It is in the middle of a region with an extraordinary concentration of galaxies called a "protocluster,".
- It has no obvious source of power for the light it is emitting.
- It is the brightest and among the largest of these rare objects.

Defense

Ekuverin

- It is the joint military exercise conducted between India and Maldives.
- It is being conducted every year alternatively in India and Maldives. The latest exercise was conducted in Maldives in Dec 2016.
- The Objectives are to enhance defence cooperation and interoperability between the army of both countries with emphasis on Counter Insurgency and Counter Terrorist operations under UN mandate.

Barak 8 Missile

- The Barak 8 Missile (Surface to Air) system is jointly developed by India and Israel and it is the upgraded version of Barak Missile system.

- Barak 8 Missile consists of Long Range Surface-to-Air Missile (LR-SAM) and Medium Range Surface-to-Air Missile (MR-SAM).
- LR-SAM is the Ship Launch Version and Project MR-SAM is the Land Launch Version of Barak 8 Missile system.
- The MR-SAM detects the enemy aircraft over 100 km and destroys them at range up to 70 km.
- LR-SAM is capable to penetrate in deep water/land to intercept all types of aerial targets like Subsonic & Supersonic Missiles, Fighter Aircraft, Maritime Patrolling Aircraft (MPA), Helicopter and Sea Skimming Missiles.
- The three aircraft would be based at Bhatinda, facing the Western border.

Kamov 226T

- Hindustan Aeronautics Limited and Russian defence firms have finalized the Joint Venture agreement for collaboration in the production of light weight multi-role 'Kamov 226T' helicopters in India
- The Kamov 226T is a twin-engine light but multi-role chopper offers services for both military and civilian purposes.
- The helicopters will replace India's ageing fleet of Cheetah and Chetak.
- The military version of 226T is capable of working in extreme and difficult weather conditions. This includes hot climate, marine areas and high mountains.
- The Kamov 226T can be used effectively for reconnaissance, targeting and monitoring of transportation.
- The helicopter has a maximum speed of 250 km/hour and a cruise speed of 220 km/hour.
- The maximum takeoff weight of the helicopter is 3,600 kg.
- The Rocket Force is a special contingent to handle range of missiles in China's military's arsenal.
- China's newly-formed Rocket Force has conducted an exercise with advanced DF-16 medium-range ballistic missile capable of carrying 3 nuclear warheads.
- The ballistic missile has a range of over 1,000 km and could target a number of countries in the neighborhood, including India.
- The missile can carry up to three nuclear warheads at a combined weight of one ton, and strike within five feet of a programmed target.

Rocket Force

Netra

- The IAF has formally inducted the first indigenously built Airborne Early Warning and Control System (AEW&C) named Netra developed by the Defence Research and Development Organisation (DRDO).
- These airborne warning systems are capable of long range surveillance.
- Netra is based on Embraer aircraft and three systems are to be developed. This system gives a 240-degree coverage of airspace.
- The Indian Navy's second ocean going sailboat Indian Naval Sailing Vessel Tarini was recently inducted.
- It is stated to be the platform for First Indian All Women Circumnavigation of the Globe expedition of the Indian Navy.
- Indian Navy will be operating four sailing vessels capable of open ocean deployments, that is, Tarangini, Sudarshini, Mhadei and Tarini, all four of which have been built in shipyards at Goa.

INSV Tarini

INS Betwa

- INS Betwa is a Brahmaputra-class-guided missile frigate was commissioned in the Indian Navy in 2004.
- The ship is named after the Betwa River in Madhya Pradesh.
- INS Betwa has participated in Operation Cactus in 1988 when India tried to restore the democratically elected government in Maldivia and participated in Operation Sukoon for evacuating stranded Indian nationals from Lebanon during the Israel-Lebanon conflict in 2006.
- It was capsized in December 2016.
- It is not being resurrected and would be operational by April 2018, the Navy said on Wednesday.

MR-SAM

- India has approved a deal to develop jointly a medium range surface-to-air missile (MR-SAM) system for the Army in a Rs. 17,000-crore deal with Israel.
- This is the latest in a series of other variants of SAM systems for the Navy and the Air Force being jointly developed with Israeli.
- The deal is to be executed by the Defence Research and Development Organisation (DRDO) and Israel Aircraft Industries (IAI).
- The deal is for five regiments of the missile, which consists of 40 units and 200 missiles. It has a range of 50-70 km.
- The systems will be manufactured in India and would have an 80% indigenous content.
- The DRDO would play a crucial role in developing the target homing system.
- The two countries are also in an advanced stage of negotiations for the purchase of two more long-range Phalcon Airborne Warning And Control System (AWACS).

25. Science

Shifting from FM to Digital Radio

- Norway will become the first country in the world to begin shutting down its entire FM (Frequency Modulation) radio network and replacing it with digital radio.
- Digital Audio Broadcasting works by coding sound into digital signals, breaking them up, and then decoding and assembling them at the destination using digital radio receivers.
- In DAB, there is minimal loss of audio quality, and sound is reproduced in near CD-like quality. On the other hand, AM/FM suffers with loss of quality from interference caused by signals bouncing off buildings, towers and natural structures like mountains.
- Since Norway has many mountains, valleys and fjords, shifting to digital radio will give a steady signal in any topography.
- Though DAB has the potential to provide better sound quality than FM, filling up the DAB bandwidth which may divide the bit-rate i.e. the rate of data transfer among the broadcasts will result in drop in quality.

Thermal conductivity:

- Thermal conductivity is the property of a material to conduct heat and it depends on the prevailing temperature.
- Thermal conductivity is measured in watts per meter kelvin (W/m.K).
- It is high among the metals than non-metals and gases. Diamond has the highest thermal conductivity while Silica aerogel has the lowest.
- The thermal conductivity of any conductor is attributed to its electron which transfers heat between different configurations.

Graphene

- Graphene is a two-dimensional material which is an allotrope of carbon.

- It is about 200 times stronger than the strongest steel, efficiently conducts heat and electricity and is nearly transparent.
- It is diamagnetic i.e repelled by a magnetic field.
- In contrast, paramagnetic and ferromagnetic materials are attracted by a magnetic field.

ADHD

- Attention deficit hyperactivity disorder (ADHD) is a mental disorder of the neuro developmental type.
- It is characterized by problems paying attention, excessive activity, difficulty controlling behavior which is not appropriate for a person's age.
- These symptoms begin by age six to twelve, are present for more than six months.
- The factors can contribute include Genes, Cigarette smoking, alcohol use, or drug use during pregnancy, Exposure to environmental toxins during pregnancy etc.
- Though there is no cure for ADHD, currently available treatments can help reduce symptoms and improve functioning.

West Nile Virus (WNV) Forecast

- West Nile fever is a mosquito-borne infection by the West Nile virus.
- Most of those infected have no symptoms, but about one in five will develop a fever with other symptoms. Less than one per

cent develops a serious, sometimes fatal, neurologic illness.

- Scientists have for the first time developed a forecasting model to accurately predict the timing and intensity of West Nile Virus (WNV) outbreaks like weather forecasting.
- These WNV forecasts use a computer model to accurately forecast mosquito infection rates prior to the week of mosquito peak infection.
- With weeks of advance notice, officials could better plan for spraying mosquito breeding grounds, alert the public, and determine if parks and camping grounds should be closed.

26. Index

Intellectual property index

- The index is published by US Chamber of Commerce.
- The index evaluates the intellectual property (IP) environment and grades countries on patents, trademarks, copyright, trade secrets, enforcement, and international treaties.
- This year the index evaluates 45 countries and India with a score of 8.75 out of 35 occupies 43rd place followed by Pakistan (44th) and Venezuela (45th).
- The US, UK, Germany, Japan and Sweden were ranked the top five countries in the IP Index.

