

OFFICERS'

Pulse

ISSUE NO. 30 | 30TH DECEMBER TO 5TH JANUARY

Coverage.

The Hindu
PIB
Yojana
Rajya Sabha TV
All India Radio

At a Glance & In Depth.

Polity and Social Issues
Economy
International Relations
Environment
Science and Tech
Culture.

CURRENT AFFAIRS WEEKLY

THE **PULSE** OF UPSC AT
YOUR FINGER TIPS.



News @ a glance

[_Toc535237760](#)

Polity and social issues	3	Debt restructuring norms	18
NHRC & Navodhya Vidyalaya	3	International Relations	19
Voluntary use of Aadhaar	3	India-Bhutan Relations	19
Amendment of Trade Union Act 1926	4	Indo-US 2+2 Dialogue	19
Clause 6 of Assam Accord	4	India-Myanmar-Thailand Trilateral Highway	20
Lok Sabha members suspended	5	Taiwan with china	20
Mohan Reddy Committee	6	Trump on India's role	21
RERAs without judicial powers	6	China's 'Mother of All Bombs'	21
Increasing retirement age of judges	6	Science & Technology	22
Plain packaging	7	Samwad with Students	22
Women MP's push for quota	8	106 th Indian Science Congress	22
President's proclamation for J&K	8	Ultima Thule	22
Paint Your Toilet	9	Kadakhnath chicken	22
Medical council Bill	9	An algorithm to detect rare cells	23
Report on Citizenship Bill	9	ISRO's 2019 agenda	23
Review hearing in open court	9	Artificial Intelligence	24
License to snoop	10	National Mathematics Day	24
Swayangsidha scheme	10	India International Science Festival	25
50 world-class railway stations	11	Prime Minister Fellowship Scheme	25
A Bill to make it tough to ban books	11	Farm machines	25
National Health Authority	12	Assamese Buffalo cloned	25
Sabarimala Purification	12	Detecting Adulteration	26
Economy	14	World's thinnest material	26
Manufacturing PMI slows	14	New therapy for cancer	26
Three-way merger	14	Equatorial Geophysical Research Laboratory	26
Recovery through IBC cases	15	Form of helium in Earth's mantle	27
Easing capital requirements for banks	15	Environment	28
Solution for visually impaired	16	Kashmir stag	28
Printing of Rs. 2,000 notes reduced	16	Cinereous vulture	28
Norms for NBFC	16	REDD+ strategy	29
RBI reserves ratio	17	Kasturirangan report	29
Export Promotion Council for MSME	18	Western Ghat's grasslands under attack	31

Compressed Bio-Gas	31	Azad Hind Government	35
Climate action - Ranking	32	Monuments of National Importance	36
Mine deaths in India	32	Miscellaneous	37
Cyclonic storm "PABUK"	33	Women's wall	37
Issues of Parali (Dry grass) Burning	34	Renaming of Allahabad as Prayagraj	37
Culture	35	Spiritual department for MP	37
Bhima-Koregaon (Battle of Koregaon, 1818)	35	Postal stamps	38
Standardisation of Handicrafts Industry	35	New Delhi World Book Fair	38

News in-depth

General Studies-1	39	Powering South Asian integration	46
Left out abused	39	After the inevitable exit	47
Open defecation continues unabated	40	General Studies 3	50
Breaking the stranglehold	41	Infrastructure and North-East	50
General Studies-2	42	New e-com norms spoil party for big players	51
Lessons from Kerala	42	GST shortfall	52
A liberal move	42	Mind the gap	53
A case of unprincipled criminalisation	43	Of financial debacles and rating agency models	54
Nuclear Games	43	A global slowdown?	55
A new relation in West Asia	44	Hope with concerns in 2019	56
India-Bangladesh	45	Chang'e-4	57

News @ a glance

Polity and social issues

NHRC & Navodhya Vidyalaya

About NHRC:

- NHRC is an apex statutory watchdog of human rights in the country, i.e. the rights related to life, liberty, equality and dignity of the individual guaranteed by Constitution or embodied in the international conventions.
- It was established on October 12, 1993 as per the statutory provisions of Protection of Human Rights Act, 1993.
- It is a multimember body consisting of Chairman, four full time members and four ex-officio members. The four ex-officio members are the Chairpersons of National Commission for Minorities, National Commission for Scheduled Castes, National Commission for Scheduled Tribes and National Commission for Women.
- President appoints Chairman and members of NHRC on recommendation of high-powered committee headed by Prime Minister.
- Its headquarters is located in New Delhi.
- NHRC can either take suo motu cognisance of cases through media reports or complaint filed by victim or any other person on his or her behalf or on basis of reports received from the police department.

About Navodaya Vidyalaya:

- Navodaya Vidyalayas were established with the primary objective of providing good quality modern education to the talented children predominantly from the rural areas, comparable to the best in a residential school system, without regard to their family's socio-economic condition.
- Navodaya Vidyalayas are run by the Navodaya Vidyalaya Samiti (NVS), an autonomous organisation under the Department of School Education and Literacy, Ministry of Human Resource Development, Govt. of India.

- The Chairman of the Samiti is the Hon'ble Minister of Human Resource Development.

Why in news?

- The National Human Rights Commission (NHRC) served notice to the Ministry of Human Resource Development on the reported suicides of 49 students of the residential Jawahar Navodaya Vidyalayas (JNVs) over five years.

NHRC Findings:

- Taking suo motu cognisance of a media report that 49 students had committed suicide on JNV campuses from 2013 to 2017, the NHRC asked the Secretary of the Ministry for a report in six weeks.
- According to the report, half of the 49 students belonged to Dalit or tribal communities, and the majority were boys.

Voluntary use of Aadhaar

Aadhaar and Other Laws (Amendment) Bill 2018:

- The new Bill, Aadhaar and Other Laws (Amendment) Bill 2018, would amend the Telegraph Act and the Prevention of Money Laundering Act (PMLA) to provide for **voluntary sharing** of the 12-digit Aadhaar identification number for obtaining new mobile phone connections and opening of bank accounts.
- This government move comes on the heels of Supreme Court's judgment in September 2018 striking down Section 57 of the Aadhaar Act that made seeding of the biometric ID with SIMs and bank accounts mandatory, stating that it had no legal backing.

Why in news?

- The government has introduced a Bill in the Lok Sabha to amend certain existing laws **to provide legal backing for voluntary seeding of biometric Aadhaar ID** for mobile SIM card and bank account authentication purposes.

Amendment of Trade Union Act 1926

Trade Union Act, 1926:

- The Trade Union Act was enacted in 1926 and it legalizes the trade unions. Any seven workers could form a trade union and seek registration to take part in collective bargaining negotiations. This act allowed unionization in both organized and unorganized sector.

Major issues with Trade Union Act, 1926:

- The Trade Union Act, 1926 provides for only registration of trade unions and there is no provision for recognition of trade unions.
- The recognition is necessary because recognised trade union of an industry or an establishment gets bargaining or negotiating rights with the employer.
- However, the recognition of trade union is governed by guidelines in the 'Code of Discipline' evolved in 1958, voluntarily accepted by employers and employees.

Amendments proposed to Trade Union Act, 1926:

- The Union Cabinet approved amendments to the Trade Union Act, 1926, **paving way for the central government to recognize trade unions.**
- The move is expected to bring in **transparency** in tripartite discussions besides checking on arbitrary nominations and reducing litigations.
- Once the bill is passed in the Parliament, the labour Ministry will issue the new rules and regulations prescribing the manner of recognition of these trade unions.
- The amendment provides for insertion of section 10A in the principal Act to power centre and state governments to recognize trade unions and federation of trade unions at central as well as state level.

Why in news?

- The Union Cabinet has approved amendment to the Trade Unions Act, 1926 to make provisions regarding Recognition of Trade Unions.

Clause 6 of Assam Accord

What is Assam Accord?

- The Assam Accord (1985) was a Memorandum of Settlement (MoS) signed between representatives of the Government of India and the leaders of the

Assam Movement in New Delhi on 15 August 1985.

- The accord brought an end to the Assam Agitation and paved the way for the leaders of the agitation to form a political party and form a government in the state of Assam soon after.
- As per the Accord, those Bangladeshis who came between 1966 and 1971 will be barred from voting for ten years. The Accord also mentions that the international borders will be sealed and all persons who crossed over from Bangladesh after 1971 are to be deported.
- Though the accord brought an end to the agitation, some of the key clauses are yet to be implemented, which has kept some of the issues festering.

About Clause 6:

- Clause 6 of the Assam Accord "envisaged that appropriate constitutional, legislative and administrative safeguards shall be provided to protect, preserve and promote the cultural, social, linguistic identity and heritage of the Assamese people."

The purpose of the Committee:

- Hold discussions with all stakeholders and assess the required quantum of reservation of seats in the Assam Assembly and local bodies for Assamese people.
- Look at measures to protect Assamese and other indigenous languages of Assam, reservation in state government jobs, and other steps to protect, preserve and promote cultural, social, linguistic identity and heritage of Assamese people.
- Suggest constitutional, legislative and administrative safeguards and examine the effectiveness of actions since 1985 to implement the clause.
- Look into issues of the Bodo people, especially the measures mentioned in the **Memorandum of Settlement** signed between the Government of India, Assam government and the Bodo Liberation Tigers Force in 2003.

Who are bodos?

- The Bodos, an ethno-linguistic group believed to be the earliest inhabitants of Assam, are one of the Indo-Mongoloid communities belonging to the Tibeto-Burman branch of the Sino-Tibetan family.
- At the zenith of their thriving civilisation, they ruled vast territories encompassing almost the entirety of northeast India, parts

of Nepal, Bhutan, North Bengal and Bangladesh.

- The Bodos are recognized as a *plains tribe* in the Sixth Schedule of the Indian Constitution.

Their Demand:

- A separate state (*Bodoland*)(*within the Indian Union*) be created by carving out some area of eight districts of the current State of Assam, namely Kokrajhar, Dhubri, Bongaigaon, Barpeta, Nalbari, Kamrup, Darang and Sonitpur districts.

Bodo Accord

- In 2003 – Bodo militants lay down the arms and want to join mainstream and they signed agreement with Government, known as “Bodo Accord”.
- A BTC (*Bodoland Territorial Council*) created under 6th Schedule of the Constitution, has been given legislative powers over 40 subjects.
- BTAD (*Bodoland Territorial Area District*) created in 2003.



Why in news?

- The Union Cabinet approved the setting up of a High-Level Committee for implementation of Clause 6 of the Assam Accord and measures envisaged in the Memorandum of Settlement, 2003 and other issues related to Bodo community.

Lok Sabha members suspended

Speaker's power to suspend members

- Among the tools available to the Speaker for ensuring discipline, is the power to force a member to withdraw from the House (for the remaining part of the day), or to place him under suspension.
- **Rule Number 373 of the Rules of Procedure and Conduct of Business** states that in case the Speaker is of the

Officers IAS Academy, Chennai opinion that the conduct of any member is “grossly disorderly”, he or she may direct that member to “withdraw immediately from the House”. The member is required to “do so forthwith”, and stay away from the “remainder of the day’s sitting”.

- **The Speaker may invoke Rule 374A** in case of “grave disorder occasioned by a member coming into the well of the House or abusing the Rules of the House, persistently and wilfully obstructing its business by shouting slogans or otherwise...”. The member concerned, “on being named by the Speaker, stands automatically suspended from the service of the House for five consecutive sittings or the remainder of the session, whichever is less”.
- While the Speaker is empowered to place a member under suspension, **the authority for revocation of this order is not vested in him/her**. It is for the House, if it so desires, to resolve on a motion to revoke the suspension.

Powers to the Chairman of Rajya Sabha:

- Chairman of the Rajya Sabha is empowered under **Rule Number 255** of its Rule Book to “direct any member whose conduct is in his opinion grossly disorderly to withdraw immediately” from the House. “...Any member so ordered to withdraw shall do so forthwith and shall absent himself during the remainder of the day’s meeting.”
- The Chairman may “name a member who disregards the authority of the Chair or abuses the rules of the Council by persistently and wilfully obstructing” business. In such a situation, **the House may adopt a motion suspending the member** from the service of the House for a period not exceeding the remainder of the session. The House may, however, by another motion, terminate the suspension. Unlike the Speaker, **the Rajya Sabha Chairman does not have the power to suspend a member**.

Why in news?

- Cracking the whip on unruly MPs, Speaker Sumitra Mahajan has suspended 45 Lok Sabha members belonging to the TDP and the AIADMK after they created ruckus in the House and continuously disrupted proceedings for days.

- The action was taken under rule 374A of the Lok Sabha which says they cannot attend the remaining days of the session.

Mohan Reddy Committee

Important recommendations of the committee:

- Stop setting up new colleges from 2020 and review the creation of new capacity every two years after that.
- No additional seats should be approved in traditional engineering areas such as mechanical, electrical, civil and electronics and institutes should be encouraged to convert current capacity in traditional disciplines to emerging new technologies.
- For approving additional seats in existing institutions, the AICTE should only give approvals based on the capacity utilisation of concerned institute.
- Introduce undergraduate engineering programmes exclusively for artificial intelligence, blockchain, robotics, quantum computing, data sciences, cybersecurity and 3D printing and design.

Why in news?

- A government committee headed by IIT-Hyderabad chairman B V R Mohan Reddy has submitted its report and that its suggestions are being considered by AICTE.
- The committee was appointed to come up with a medium and short-term perspective plan for expansion in engineering education.

RERAs without judicial powers

Real Estate (Regulation & Development) Act, 2016:

- States will have to set up the Real Estate Regulatory Authority's (RERA) and the Real Estate Appellate Tribunals.
- Register with RERA: Requirement for developers to now register projects with RERA prior to any advertisement and sale.
- Approval and Sanctions: Developers are also expected to have all sanction plans approved and regulatory clearances in place prior to commencement of sale
- Updates on the Website: The Act stipulates an electronic system, maintained on the website of RERA, where developers are expected to update on a quarterly basis the status of their projects, and submit regular audits and architectural reports

Officers IAS Academy, Chennai

- Action for non-compliance: If there is non-compliance, RERA has the power to order up to three years imprisonment of the promoters of a project
- Separate Escrow Accounts: It requires developers to maintain separate escrow accounts in relation to each project and deposit 70% of the collections in such an account to ensure that funds collected are utilised only for the specific project
- Agents & brokers to register: The Act also requires real estate brokers and agents to register themselves with the regulator

Demand for judicial power by RERA:

- Several Real Estate Regulatory Authorities (RERAs) are pushing for more enforcement power, similar to what is enjoyed by consumer forums, including the authority to issue arrest warrants.
- State RERA representatives say they are becoming toothless, if they are unable to execute their own orders.
- The Consumer Protection Act, 1986, allows consumer forums to assume the powers of a first class judicial magistrate for the trial of offences under the Act (Section 27.2).
- RERAs are asking that the Real Estate (Regulation & Development) Act, 2016 be amended to give them similar powers. Currently, real estate regulators must depend on outside magistrates to implement their orders.

Why in news?

- At the first meeting of a new RERA (Real Estate Regulatory Authority) implementation committee held on Jan 3rd 2019, there was broad consensus that the Real Estate (Regulation & Development) Act, 2016 needed to be amended to further empower them.

Increasing retirement age of judges Law ministry response to the Parliamentary Standing Committee:



- Raising the retirement age of judges would help retain the existing judges, which in turn would help in reducing both vacancy

and pendency of cases in short run, the Parliamentary Standing Committee suggested.

- The Law Ministry said there was no proposal as of now to increase the retirement age of Supreme Court judges from 65 to 67 and of High Court judges from 62 to 65.
- The committee, in its report tabled in Parliament raised concern over the large number of vacancies of judges in High Courts.
- Only six women judges have been appointed in the Supreme Court till date.
- The Law Ministry said there was no proposal to introduce reservation for women in the appointment of judges in the higher judiciary.
- The Committee reiterated its recommendation in its 'Eighty-fourth Report on Demand for Grants' that the strength of women judges should be around 50% of the total strength of judges.
- The Ministry said judges were appointed in the Supreme Court and High Courts as per Articles 125 and 217 of the Constitution, which did not provide for reservation for any caste, class or gender.
- The government has, however, been requesting the Chief Justices of the High Courts that while sending proposals for the appointment of judges, due consideration be given to suitable candidates belonging to the Scheduled Castes, Scheduled Tribes, Other Backward Classes, minorities and women.
- While such requests have been made to ensure a fair representation for different sections of society in the higher judiciary, the Ministry said: "There is no proposal for amendment to Articles 124 and 217 of the Constitution".

Why in news?

- The Law Ministry said there was no proposal as of now to increase the retirement age of Supreme Court judges from 65 to 67 and of High Court judges from 62 to 65.
- The Ministry was responding to the recommendation of a Parliamentary Standing Committee that raising the retirement age of judges would help retain the existing judges.

Plain packaging

What is plain packaging?

- Plain packaging standardises the appearance of the tobacco products. Other than brand and product names displayed in a standard colour and font style, it prohibits the use of logos, colours, brand images or promotional information.
- Besides increasing the effectiveness of health warnings, the idea is to reduce the attractiveness of tobacco products, with no scope for using packaging to advertise and promote consumption.

Is it going against WTO's intellectual property Rules?

- The World Trade Organisation (WTO), in June 2018, ruled favouring plain packaging of Tobacco.
- The tobacco industry owners filed a case in WTO against Australia which was the first country to impose plain packaging of Tobacco in 2012.
- The WTO panel, while rejecting the notion that Australia had unjustifiably infringed tobacco trademarks and violated intellectual property rights, said the plain packaging law led to "improving public health by reducing use of and exposure to tobacco products".

Packaging in India:

- **The Cigarettes and Other Tobacco Products (Prohibition of Advertisement and Regulation of Trade and Commerce, Production, Supply and Distribution) Act, 2003 or COTPA, 2003** is an Act of Parliament of India enacted in 2003 to prohibit advertisement of, and to provide for the regulation of trade and commerce in, and production, supply and distribution of cigarettes and other tobacco products in India.
- The Union health ministry had notified on 24 September 2015, for mandatory display of new **health warnings covering 85% of the principal display area on all tobacco products** from 1 April 2016.
- Plain packaging is still under consideration in India.

Why in news?

- This year, Thailand and Saudi Arabia will join a growing club of nations introducing plain packaging of tobacco products.
- They are the first in the Asian and Arab regions, respectively, to adopt the tough measure in order to curb tobacco

consumption from September in Thailand, and from May 1 in Saudi Arabia.

- In December 2012, Australia became the first country to introduce plain packaging following the WHO Framework Convention on Tobacco Control (FCTC) guidelines.

Women MP's push for quota

Highlights of the 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.

Status of the bill:

- The Rajya Sabha passed the bill on 2010. However, the Lok Sabha never voted on the bill. The bill lapsed after the dissolution of the 15th Lok Sabha in 2014.

Why in news?

- Women members in Rajya Sabha urged the government to ensure the passage of women reservation bill in Lok Sabha at the earliest.

President's proclamation for J&K

Background of this issue:

- President's rule came into force in Jammu Kashmir from the midnight of December 20, 2018, following the expiry of the six-month-long governor's rule.
- President signed the proclamation paving the way for imposition of central rule in the state, which was placed under the Governor's rule on June 20 after the BJP withdrew support to the PDP government led by Mehbooba Mufti.
- The proclamation was signed after the Union Cabinet headed by Prime Minister Narendra Modi approved the decision on December 17, 2018.

Officers IAS Academy, Chennai

- After the proclamation, the powers of the legislature of the state shall be exercisable by or under the authority of Parliament.
- The Jammu and Kashmir Governor Satya Pal Malik had on November 21, 2018 dissolved the State Assembly with immediate effect after rival alliances staked claim to form the government.

Governor's rule in J&K:

- Since the state has a separate Constitution, in such cases, six months of Governor's rule is compulsory under Article 92 of the Jammu and Kashmir Constitution, under which all the legislative powers are vested with the Governor.
- The state assembly was kept in suspended animation so that political parties could explore the possibility of forming a new government.
- The six-month tenure of the Governor's rule ended on December 18, after which the state will be put under the President's rule till it goes into polls.
- The state went to polls at the end of 2014 and the Assembly's tenure was till October 2020.
- The Governor has decided to hold elections at an appropriate time so that a government with a clear mandate is formed.

Parliamentary approval for the President's rule:

- Article 356 states that President rule can be imposed in any state on grounds of failure of Constitutional Machinery, and failure is of two types:-
 - If President on receipt of report by Governor of a State or otherwise is satisfied that a situation has arisen in which government of that state can't be carried in accordance with provisions of the Constitution then President Rule can be imposed.
 - Article 365 states that every state shall comply with all directions given by Union on matters it empowers to do so. If any state fails to comply with directions of union then President Rule can be imposed.
- Every Proclamation to impose President Rule shall be laid down before each house of Parliament and must get approval within two months from date of issue.

- Provided that if at time of proclamation, Lok Sabha (LS) has been dissolved or dissolution of LS takes place in mean time (i.e. within two months from date of issue) then must get approval of RS within 2 months but such proclamation shall cease to operate after 30 days from first sitting of LS after its reconstitution, if not get approval of new LS in 30 days.
- If approved by both houses of Parliament then President Rule shall continue for 6 months and it can be renewed for maximum of 3 years by approval of Parliament after every 6 months.

Why in news?

- Rajya Sabha on Jan 03, 2019 passed a resolution approving President Rule in Jammu and Kashmir. The proclamation is yet to be approved in Lok Sabha.

Paint Your Toilet

Swachh Sundar Shauchalaya:

- In an effort to promote ownership and sustained usage of toilets and also provide a facelift to the crores of toilets built under the Swachh Bharat Mission, the Ministry of Drinking Water and Sanitation has launched a month-long campaign, "Swachh Sundar Shauchalaya" that commenced on 1st January.
- The campaign comprises a **unique Contest, under which, households are being mobilised to paint and decorate their toilets.**
- It will be led by Gram Panchayats and coordinated by district administrations. The campaign will involve rural communities in the 2.5 lakh Gram Panchayats across the country.
- Individual households, Gram Panchayats and Districts will be awarded on the basis of number of toilets painted and the quality and creativity of their work.

Why in news?

- In order to promote behavioural change in the people who have already constructed the toilets, the Ministry of Drinking Water and Sanitation launched Swachh Sundar Shuchalya/Paint your Toilet contest.

Medical council Bill

Provisions of Indian Medical Council (Amendment) Ordinance, 2018:

- Officers IAS Academy, Chennai
- It amends the Indian Medical Council Act, 1956 which set up the **MCI** (Medical Council of India) that **regulates medical education and practice.**
 - The Ordinance provides for the supersession of the MCI for a period of one year.
 - In the interim period, the central government will constitute a 7-member Board of Governors (BoG).
 - The powers of the Council have been vested in the BoG led by NITI Aayog Member Dr. V.K. Paul.
 - The BoG will continue to perform till an alternative comes into place as per the legal provisions in one year time.
 - A separate Bill (National Medical Commission Bill, 2017) to replace the MCI with the National Medical Commission is pending in Parliament.

Why in news?

- The Lok Sabha passed the Indian Medical Council (Amendment) Bill to allow a panel of eminent professionals to run the scam-tainted Medical Council of India (MCI) so that medical education can be regulated in the best manner.
- The Bill seeks to replace an ordinance issued in September 2018.

Report on Citizenship Bill

Provisions of Citizenship bill:

- "Citizenship Act, 1955" allows an immigrant to apply for citizenship if he/she has lived in India for 12 months immediately before applying.
- Additionally, the applicant should've also resided in India for 11 of the last 14 years before the date of application.
- In 2016, an amendment bill was introduced, for relaxing the 11-year cutoff to 6 years out of 14 for immigrants of the 6 religious faiths.
- It is for enabling "Hindus, Sikhs, Buddhists, Jains, Parsis & Christians" from Bangladesh, Afghanistan and Pakistan to apply for Indian citizenship.

Why in news?

- Joint Parliamentary Committee cleared the provisions of the Citizenship Amendment Bill, 2016.

Review hearing in open court

Why is the situation "exceptional"?

- The **decision of a five-judge Bench led by Chief Justice of India Ranjan Gogoi to have an open court hearing of the review petitions filed against another five-judge Constitution Bench's Sabarimala judgment** is "exceptional", legal experts say.
- Earlier, the open court hearing of the review happened 43 years ago in Keshavananda Bharathi Case in 1973.
- The Kesavananda Bharati judgment was delivered by a 13-judge Bench, the largest Constitution Bench in the history of the Supreme Court on April 24, 1973.
- Through a wafer-thin majority of 7:6, the 13-judge Bench formulated that the Basic Structure of the Indian Constitution cannot be altered by Parliament through amendments.
- The Supreme Court decision in the Central Board of Dawoodi Bohra Community case **held that a Bench of co-equal strength on its own cannot overrule a judgment of a Bench of co-ordinate number of judges.**
- And hence the present bench under CJI will decide whether a higher bench is needed to review the judgement or not.

Why in news?

- SC to hear review petitions on Sabarimala case on January 22 in open court.

License to snoop

MHA (Ministry of Home Affairs) order:

- According to the order, the 10 central probe and snoop agencies are now empowered under the Information Technology (IT) Act for computer interception and analysis.
- The agencies, according to the order, have been authorised "for the purpose of interception, monitoring and decryption of any information generated, transmitted, received or stored in any computer resource under the said Act (section 69 of the IT Act, 2000)".
- The 10 agencies notified under the new order include the Intelligence Bureau, Narcotics Control Bureau, Enforcement Directorate, the Central Board of Direct Taxes (for Income Tax Department), Directorate of Revenue Intelligence, Central Bureau of Investigation, National Investigation Agency, the Research and Analysis Wing, Directorate of Signal Intelligence (in service areas of J-K, North

Officers IAS Academy, Chennai East and Assam) and Delhi Police commissioner

- 2011 Standard of Procedure (SOP)-Each case of computer interception, monitoring and decryption will have to be approved by the competent authority, which is the Union home secretary or the state Home Secretary.

Why in news?

- MHA clarified that the Union Government has not given any "blanket power" to any agency to intercept information from any computer.
- There is no new law, no new rule; the 10 agencies are empowered to intercept under 2011 Standard of Procedure (SOP).

Swayangsiddha scheme

Why in news?

- More than a hundred schools in West Bengal's South 24 Parganas district have installed complaints boxes in their premises under the West Bengal's Swayangsiddha scheme.

About Swayangsiddha scheme:

- In order to curb human trafficking in Bengal, state police has come up with a self-reliance scheme known as **Swayangsiddha**.
- The initiative will encourage youth-led action and partnership which will empower young girls and boys with knowledge and skills to make them less vulnerable to violation and abuse of their rights.
- It will achieve above target through-
 - Raising awareness on human, gender and child rights and strengthening prevention of human trafficking and child marriage using converging approach.
 - Engaging youth from different schools and colleges to combat human trafficking and child marriage.
 - Strengthening response mechanism in collaboration with police and protection committees to build safe community
 - Strengthening access to schemes and entitlements on education, training, livelihood and food security for vulnerable groups.

50 world-class railway stations

Why in news?

- Indian Railways' first two world-class railway stations with state-of-the-art amenities Habibganj in Madhya Pradesh and Gandhinagar in Gujarat will be ready by early 2019.
- Indian Railway Station Development Corporation (IRSDC) also said that 50 world class railway stations modelled on airport-like retail spaces for commuters to wait, will be completed by 2022.

Significance of the project:

- The Habibganj railway station is the first in India to be redeveloped under the PPP (Public-Private Partnership) model. The station is being developed on the lines of Germany's Heidelberg railway station.
- The work is being jointly done by IRSDC and private firm Bansal Pathways Habibganj Private Ltd.
- The redeveloped Gandhinagar station, taken up in the EPC mode, is planned to be commissioned in February next year.

INVESTMENT MODELS:

- EPC Model: Engineering Procurement Construction, private players provides engineering services, ownership, toll collection and maintenance is responsibility of government agency.
- BOT Model : Build operate transfer, Private sector entity builds, operates and maintains infrastructure, then hands it over to government after specific number of years, private players earn revenue.
- HAM: Hybrid Annuity Model, it is a mix of EPC and BOT model, private entity arranges 60% contribution, 40% is put in by NHAI in milestone related tranches.



A Bill to make it tough to ban books

Key proposals of the bill:

- The Bill seeks the omission of Sections 295A and 298 of IPC, which punish acts done to outrage or wound religious feelings.
- These provisions, in effect, act as a blasphemy law and are worded in wide and vague terms.
- The provisions are mostly used to suppress alternate views expressed by writers, thinkers and scholars.
- Notably, Section 153A of IPC already deals with speeches and acts intended to disrupt communal harmony.
- Therefore, Sections 295A and 298 are proposed to be omitted as redundant.
- Further, the wide ambit of obscenity laws acts as a major deterrent to literary freedom in the country.
- Thus, Section 292 IPC, which punishes publication of obscene material, is sought to be omitted wholly.
- The section imposes "social norms of the majority and the orthodoxy" and is "not in consonance with a liberal state."
- This is a classic case of morals being imposed on the citizens through the rigours of criminal law.
- The Courts too have failed to explain why the arousal of sexual feelings due to some book or painting is a criminal act.
- Section 293 IPC, which deals with distribution of obscene material, is also sought to be amended.
- This is to make such distribution an offence only if it is targeted at children below the age of 18 years.
- Also, Sec 67 of the IT Act (Information Technology Act), dealing with online obscenity is proposed to be amended to cover only child pornography.
- The Indecent Representation of Women (Prohibition) Act, 1986 is also sought to be amended.
- The Bill states that indecent representation is any depiction which is derogatory to women, i.e. encouraging misogyny or discrimination.
- The obscenity element is thus proposed to be removed from the definition as given in the Act.
- The Bill further seeks to amend Section 11 of the Customs Act.

- This is to state that the import of a book cannot be banned, barring exceptional circumstances.
- This refers to cases where distribution of the book is likely to lead to a break down in public order despite the State taking all reasonable measures to prevent the same.
- The Bill also amends Sections 95 and 96 of the CrPC, which enables Government to ban and forfeit books.
- A new procedure is proposed, whereby the suspension of shipping in any book can be imposed only for 30 days.
- Within this period, the Government has to get the ban order ratified by the High Court.
- It thus removes the government's right to ban books indefinitely and also puts on it the onus of explaining the rationale for the ban.

Why in news?

- Congress MP Shashi Tharoor recently introduced the "Freedom of Literature Bill" in the Lok Sabha as a private member bill.

National Health Authority

Why in news?

- The Union Cabinet has approved the restructuring of existing National Health Agency as "National Health Authority" for better implementation of Pradhan Mantri - Jan Arogya Yojana (PM-JAY).

Benefits of the move:

- With this approval, the existing society "National Health Agency" has been dissolved and will be replaced by National Health Authority as an attached office to Ministry of Health & Family Welfare.
- The existing multi-tier decision making structure has been replaced with the Governing Board chaired by the Minister of Health & Family Welfare, Government of India which will enable the decision making at a faster pace, required for smooth implementation of the scheme.
- The composition of the Governing Board is broad based with due representations from the Government, domain experts, etc. Besides, the States shall also be represented in the Governing Board on rotational basis.

About PM-JAY:

- PMJAY is government-sponsored health insurance scheme that will provide free coverage of up to Rs 5 lakh per family per

year in any government or empanelled private hospitals all over India.

- It will cover beneficiaries families identified on the basis of Socio Economic Caste Survey (SECC) 2011 in 444 districts of 30 states/Union Territories.
- **National Health Agency (NHA)** is the apex body for implementing this scheme.
- States will be required to form State Health Agency (SHA) to implement scheme and at the district level also, a structure for its implementation will be set up.
- Around 13000 hospitals both public and private in the country have been coordinated for implementation of the scheme.
- There will be **no cap on family size and age** under this scheme.
- The benefit cover under it also includes pre and post-hospitalisation expenses.
- It also takes into consideration all pre-existing medical conditions.

Sabarimala Purification

About the purification issue:

- Closure of the Sabarimala temple's sanctum sanctorum to perform the purification rites, after two women of menstruating age managed to enter the temple, may amount to using the concept of impurity and pollution to violate the women's rights against untouchability.
- The court made it clear that untouchability was not only confined to lower caste.
- Justice Chandrachud in his opinion in Sabarimala verdict expanded untouchability to any practise which amounts to "systematic humiliation, exclusion and subjugation faced by women".
- Performing purification rights after women entry may amount to contempt of court.

Article 129 of Indian Constitution: Supreme Court to be a court of record

- "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."

Contempt of Courts Act of 1971

- In India, contempt of court is of two types: Civil Contempt and Criminal Contempt.

Civil Contempt

- Under Section 2(b) of the Contempt of Courts Act of 1971.

- Civil contempt has been defined as wilful disobedience to any judgment, decree, direction, order, writ or other processes of a court or wilful breach of an undertaking given to a court.

Criminal Contempt

- Under Section 2(c) of the Contempt of Courts Act of 1971.
- criminal contempt has been defined as the publication (whether by words, spoken or written, or by signs, or by visible representation, or otherwise) of any matter or the doing of any other act whatsoever which:

Officers IAS Academy, Chennai

- Scandalises or tends to scandalize, or lowers or tends to lower the authority of, any court, or
- Prejudices, or interferes or tends to interfere with the due course of any judicial proceeding, or
- Interferes or tends to interfere with, or obstructs or tends to obstruct, the administration of justice in any other manner.

Why in news?

- The closing of the Sabarimala temple for purification rituals following the entry of two women of the menstruating age has put the tantri (chief priest) on limelight.

Economy

Manufacturing PMI slows

What is Purchasing Managers' Index (PMI)?

- It is an economic indicator which indicates the business activity, & economic health of the **manufacturing and service sectors**.
- PMI of India is published by Japanese firm Nikkei but compiled and constructed by Markit Economics.
- Unlike the Index of Industrial Production (IIP) which indicates the changes in production volume or output, the PMI is an investor sentiment tracking index and is more dynamic in nature.

How is it calculated?

- They are derived from monthly surveys of about 400 private sector companies.
- Variables used for calculating the PMI are: Output, New Orders, Employment, Input Costs, Output Prices, Backlogs of Work, Export Orders, Quantity of Purchases, Suppliers' Delivery Times, Stocks of Purchases and Stocks of Finished Goods.

How to read PMI?

- While PMI >50 implies expansion of business and economic activity, PMI <50 implies contraction.

Why in news?

- According to the latest PMI data, Indian manufacturing activity declined to 53.2 in December, from November's 54.0 reading.
- Still, it was above the 50 mark, which separates growth from contraction, for the 17th month and manufacturing activity registered its strongest quarterly performance since late 2012.

Three-way merger

Background

- In 2018, the government proposed the amalgamation of state-owned Bank of Baroda (BoB), Dena Bank and Vijaya Bank in a bid to create a stronger and sustainable global-sized lender.
- The decision was taken at a meeting of a ministerial panel (called **Alternative Mechanism**), headed by Finance Minister Arun Jaitley, that oversees merger proposals of state-owned banks. The other members of the panel include Railways

Minister Piyush Goyal and Defence Minister Nirmala Sitharaman.

Why in News?

- The Union Cabinet has approved the scheme for amalgamating Bank of Baroda, Vijaya Bank and Dena Bank, with Bank of Baroda as the transferee bank and Vijaya Bank and Dena Bank as transferor banks.
- Upon commencement of the scheme, the undertakings of the transferor banks will be transferred to the transferee bank, including, all business, assets, rights, titles, claims, licenses, approvals and other privileges and all property, all borrowings, liabilities and obligations.
- The amalgamation will be the first-ever three-way consolidation of banks in India.

Expected Benefits

- The merger helps in financial inclusion and broadening the geographical reach of the banking operation. The amalgamated entity would be the third largest in India, after State Bank of India and HDFC Bank.
- Merger leads to availability of a bigger scale of expertise and that helps in minimising the scope of inefficiency which is more in small banks.
- Merger sees a bigger capital base and higher liquidity and that reduces the government's burden of recapitalising the public sector banks time and again.
- Redundant posts and designations can be abolished which will lead to financial savings.
- It makes RBI have better control over the system and implementation of policies will be easy.

Challenges of merger

- Many banks have a regional audience to cater to and merger destroys the idea of decentralisation.
- Larger banks might be more vulnerable to global economic crises while the smaller ones can survive.
- Merger could only give temporary relief but not real remedies to problems like bad loans and bad governance in public sector banks.
- One of the biggest challenges for the merger is likely to be human resources management. Even though they are public sector banks, each one has different work

culture. The approach and attitude are not to change quickly.

Officers IAS Academy, Chennai
disqualifications not related to default.

Recovery through IBC cases

Insolvency and Bankruptcy Code (IBC)

- The Code creates time-bound processes for insolvency resolution of companies and individuals. These processes will be completed within **180 days**. If insolvency cannot be resolved, the assets of the borrowers may be sold to repay creditors (known as *liquidation*).
- The resolution processes will be conducted by licensed insolvency professionals (IPs). These IPs will be members of insolvency professional agencies (IPAs).
- **Information utilities** (IUs) will be established to collect, collate and disseminate financial information to facilitate insolvency resolution.
- The **National Company Law Tribunal** (NCLT) will adjudicate insolvency resolution for companies. The **Debt Recovery Tribunal** (DRT) will adjudicate insolvency resolution for individuals.
- The Insolvency and Bankruptcy Board of India (IBBI) will be set up to regulate functioning of IPs, IPAs and IUs.
- The Code was amended in 2017 to prohibit (i) wilful defaulters, (ii) promoters or management of the company if it has an outstanding non-performing debt for over a year, and (iii) disqualified directors, among others-- from submitting a resolution plan in case of defaults.
- It was again amended in August 2018
 - To allow home buyers to be treated as financial creditors like banks and financial institutions, so that they can take recourse to the protection conferred under the code
 - The voting threshold for routine decisions taken by the committee of creditors reduced from 75% to 51%. For certain key decisions like approval of a resolution plan this threshold has been reduced to 66%.
 - The amendment also provided relief to MSME sector by allowing the promoter of an MSME to bid for his enterprise undergoing Insolvency Resolution Process provided he is not a wilful defaulter and does not attract other

Why in News?

- Finance Minister Arun Jaitley has said that the government expects a recovery of about Rs. 70,000 crore from the 12 big companies that were identified for bankruptcy proceedings under IBC by March 31, 2019.
- These 12 companies are estimated to account for a quarter of the gross non-performing assets in the system, and so were identified for immediate bankruptcy proceedings.
- Mr. Jaitley explained that the effectiveness of the IBC process was arising out of three factors.
 - The first was that debtors were beginning to pay their dues in anticipation of a potential default in order to avoid the prospect of them being removed from management.
 - The second is that once a creditor's petition has been filed with the NCLT, the debtors have been paying at the pre-admission stage to prevent the declaration of insolvency.
 - Thirdly, many major cases of insolvency have already been resolved or are being moved to liquidation.

Easing capital requirements for banks

What's in the News?

- The Parliament's standing committee on finance, headed by former Union Minister M Veerappa Moily, has tabled its report in the parliament.

Key Recommendations

- The parliamentary panel urged the government to set up a committee to look into issues concerning accountability of the central bank as a regulator.
- The panel said it is apprehensive that the PCA framework may end up bringing more and more PSBs under its ambit and therefore urged both the RBI and the government to constantly monitor the situation of banks under PCA and relax/review the PCA framework.

- It also asked the RBI to evaluate the efficacy of its own guidelines on dealing with frauds.
- Calling the capital adequacy norms of RBI as unrealistic and unwarranted, the parliamentary panel has asked the central bank to ease its rules so that banks can increase lending.
(Indian banks are required to maintain a minimum capital to risk weighted asset ratio (CRAR) at 9%, against the global Basel-III requirement of 8%)
- However, rating agencies have warned against dilution of capital norms for banks. Fitch Ratings said that the capital ratios for many banks were well below global standards and any relaxation could prove detrimental to banks and their ability to absorb unexpected losses.
- The panel also suggested that a three-month overlap may be provided at CEO level to facilitate smooth transition in PSBs. Further, with a view to utilising the expertise of senior bankers, the retirement age of CEOs of PSBs can be raised to 70 years as in the case of their private sector counterparts.

Solution for visually impaired

What's in the News?

- The RBI is scouting for a mobile phone-based solution to help visually impaired people easily identify Indian currency notes.
- The plan is aimed at developing a technology-based solution to achieve the task in a few seconds. The solution could be a device, software or a combination of both, to help not just the visually challenged, but also those who cannot read in poor lighting.
- Currently, Intaglio (raised) printing-based identification marks are present in banknotes of Rs 100 and above for helping the visually challenged identify them.
- There are about 8 million blind or visually impaired people in the country, who are likely to benefit from the initiative of the central bank.
- As on March 31, 2018, about 102 billion pieces of banknotes were in circulation, having a value of Rs 18 trillion. This comprised Rs 10, 20, 50, 100, 200, 500 and 2000 notes, including the new series being issued since November 2016. The new Rs 20 note is expected to be released soon.

Printing of Rs. 2,000 notes reduced

What's in the News?

- The printing of Rs 2,000 banknote, introduced post-demonetisation in November 2016, has been reduced to the minimum by the RBI.
- Soon after the sudden decision to ban old Rs 500/Rs 1,000 currency notes by the government, the RBI had come out with the Rs 2,000 currency note along with a new look Rs 500 note as part of its massive remonetisation exercise.
- The RBI and the government from time to time decides on the quantum of currency to be printed on the basis of money in circulation.
- When the Rs 2,000 note was launched, it was decided that the printing would be scaled down going forward, since the new high currency value note was meant for meeting the remonetisation need.
- According to the RBI data, there were 3,285 million pieces of Rs 2,000 notes in circulation at March-end, 2017. A year after (on March 31, 2018), there was only a marginal increase in the number at 3,363 million pieces.

Norms for NBFC

What is a NBFC?

- Non-banking financial companies (NBFCs) are companies registered under the Companies Act, 1956 which provide banking services without meeting the legal definition of a bank.
- They engage in the business of loans and advances, acquisition of shares, bonds, etc. issued by Government or local authority. They also deal in other marketable securities of a like nature, leasing, hire-purchase, insurance business, chit business.
- However, they cannot accept demand deposits; they do not form part of the payment and settlement system and cannot issue cheques drawn on itself;
- The working and operations of NBFCs are regulated by RBI.
- There are around 10,000 NBFCs, also referred to as shadow banks, registered with the RBI.

Background

- In December 2018, RBI said it intends to strengthen the asset liability management (ALM) norms for NBFCs — on lines similar to that for banks — to avert asset liability mismatches.
- The move comes after the sector faced stress on liquidity following the IL&FS crisis.

Why in News?

- Chiefs of NBFCs have written to the Prime Minister Narendra Modi that such tighter regulations will hamper the growth of the sector.
- They also said those NBFCs having asset base of Rs 500 crore, must be allowed to accept public deposits.
- Since 1997, RBI has endeavoured to limit the operations and growth of NBFCs with the objective of securing depositors' interest. There are only 108 deposit-taking NBFCs.
- Further, it said application from an NBFC to convert to a bank should be treated differently from any other application for a banking licence.
- Since NBFCs are already subject to onsite and offsite inspection and regular submission of returns to RBI, they said, due diligence of NBFC application for a bank licence should be less time consuming.
- The sector sought a liquidity window from the RBI against sale of secured loans by taking appropriate margins on these loans.
- They also said all HFCs should be permitted access to the National Housing Bank's refinance facility.

RBI reserves ratio

What's in the News?

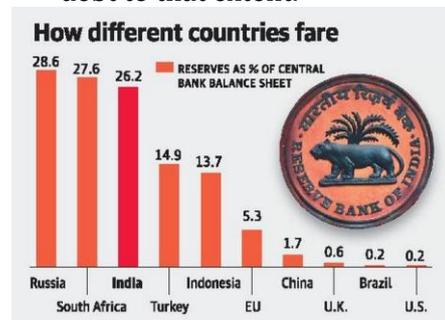
- Consultancy firm Quantum Advisors in an analysis of the balance sheets of the central banks of 10 comparable economies found that the RBI's reserves as a percentage of its balance sheet is among the highest.
- The analysis, which looked at the central banks of the BRICS countries, Fragile Five nations and three developed economies, found that the RBI's reserves — which is about Rs 10.5 lakh crore — form 26.2% its balance sheet. Only two central banks — those of South Africa and Russia — have a reserve ratio higher than this.
- The other two BRICS nations, China and Brazil, have reserve ratios of 1.7% and 0.2%, respectively.

Revaluation of assets

- But the bulk of those reserves are arising out of the revaluation of its assets, i.e over the years as the rupee depreciated against the U.S. dollar, Great Britain Pound, euro etc, gold and foreign assets held by the RBI when translated into the current rupee value, leads to an increase in its asset value.
- For example, 100 billion invested in 2010 at USD/INR of 45, valued today at USD/INR of 70, will show a valuation gain when reported in INR terms.
- All such gains are non-cash, notional and are shown as higher asset values and as revaluation reserves on the liabilities side.
- These gains from the currency exchange movement will be booked and the cash realised only when the assets are sold. As such, the RBI does not have very high free cash reserves that it can give back to the government.

Options with RBI

- The RBI has a few options in front of it if the government does insist on the transfer of reserves. The first is for the central bank to sell its foreign bonds or government bonds.
- But, selling foreign bonds comes with the risk of this being viewed negatively by foreign investors as the RBI's remaining foreign exchange assets might not be enough to handle the next financial crisis. Further, the domestic market is not big or deep enough to absorb such a large amount of government bonds.
- The other option the RBI can opt for is that, instead of selling the government bonds, it could simply waive its rights over those bonds, thus reducing its asset holdings and reducing the government's liabilities.
- This is a better way of doing it, markets don't get disrupted and the government gets a fiscal benefit of lower outstanding debt to that extent.



Source: Quantum Advisors' analysis of annual reports of respective central banks

Export Promotion Council for MSME

What's in the News?

- Ministry of Micro, Small and Medium Enterprises (MSME) has established an Export Promotion Cell with an aim to create a sustainable ecosystem for entire MSME development.

Other initiatives

- As per the Directorate General of Commercial Intelligence and Statistics (DGCIS), the value of exports from the MSME related products is USD 147,390.08 million and share of MSME related products in the country's exports was 48.56% during 2017-18.
- In order to ensure the efficient delivery of the export-related interventions for the MSMEs, Ministry of MSME has also proposed to formulate a governing council that will be chaired by secretary of the MSME ministry.
- An action plan is also proposed to be put in place to achieve the following objectives:
 - Target of USD 100 billion of exports from India by 2020
 - Evaluate readiness of MSMEs to export their products and services
 - Recognize areas where improvements are required in order to be able to export effectively and efficiently
 - Integration of MSMEs into Global Value Chain.

Debt restructuring norms

What is Debt restructuring?

- Debt restructuring refers to the reallocation of resources or change in the terms of loan extension to enable the debtor to pay back the loan to the creditor.
- It is an adjustment made by both the debtor and the creditor to smooth out temporary difficulties in the way of loan repayment.

Why in News?

- The RBI has allowed lenders to restructure loans of stressed micro, small and medium enterprises (MSME), provided the total fund and non-fund-based exposure to such a borrower does not exceed Rs 25 crore.
- The government has been asking for such a package for a long time for the MSME sector which was severely hit due to demonetisation exercise and implementation of the GST.

Norms for restructuring

- To facilitate meaningful restructuring, the restructuring will be applicable to loans that are in default but 'standard' as on January 1, 2019, without an asset classification downgrade.
- A provision of 5% of the total outstanding loan, in addition to the money already set aside to cover potential losses, will have to be made for such borrowers.
- The restructuring has to be implemented by March 31, 2020.

International Relations

India-Bhutan Relations

Background

- Both the countries share cultural heritage from historical past.
- Bhutan was the first country to recognize India's independence in 1947.
- India Bhutan Treaty of Friendship and Cooperation was signed in 1949. This treaty was updated in 2007.
- India Bhutan Trade and Commerce Agreement was signed in 1972. It provided for free trade and commerce between the two countries.
- The two countries have various agreements in sectors of hydropower, security, bureaucracy etc.

Recent Developments

- Prime Minister Narendra Modi has announced a Rs 4,500 crore financial assistance to Bhutan for its 12th five-year plan.
- The new five-year plan of Bhutan began in 2018 and will continue till 2022.
- Bhutan's Prime Minister Dr. Tshering had arrived in New Delhi on December 27, 2018
- It is his first foreign visit after taking charge as Prime Minister of the Bhutan in November 2018.

Why in news?

- Congress president Rahul Gandhi met Bhutan Prime Minister Lotay Tshering here and discussed the political situation in the region.

Indo-US 2+2 Dialogue

About 2+2 Dialogue

- India and the US successfully held the first edition of the twice-deferred two-plus-two talks on September 6 & 7, 2018 in New Delhi.
- U.S. Secretary of State Michael R. Pompeo and Secretary of Defence James N. Mattis led the American delegation, and the Indian team was headed by their counterparts Sushma Swaraj and Nirmala Sitharaman.

Outcomes

- US said both sides should continue to ensure freedom of the seas and work towards peaceful resolutions of territorial and maritime disputes, seen as a reference to China's expansionist behaviour in the South China Sea.

- Both countries called on Pakistan to stop terrorist strikes on 'other countries' and urged for maritime freedom in the Indo-Pacific region.

Defense Deals

- US confirmed strategic importance of India's designation as a Major Defense Partner (MDP) and committed to expand the scope of India's MDP status and take mutually agreed upon steps to strengthen defense ties further and promote better defense and security coordination and cooperation.
- India and the US sealed the landmark Communications Compatibility and Security Agreement (COMCASA) that will lead to a new generation of bilateral military partnership.
- The COMCASA will allow the U.S. to transfer specialised equipment for encrypted communications for U.S.-origin platforms like C-17, C-130 and P-8I aircraft.
- It comes into force immediately and is valid for 10 years.
- India and the U.S. decided to hold first-ever tri service joint exercise on the east coast of India in 2019.

Partners in Indo-pacific

- Both sides committed to work together to create a free, open, and inclusive Indo-Pacific region.
- Mutual respect for sovereignty, territorial integrity, rule of law, good governance, free and fair trade, and freedom of navigation in the region.
- Both the countries reaffirmed their commitment to a united, sovereign, democratic, inclusive, stable, prosperous, and peaceful Afghanistan.

Trade ties

- Both the countries had committed to increase bilateral trade, investment, innovation, and job creation.
- Both sides looked forward to full implementation of the civil nuclear energy partnership and collaboration between Nuclear Power Corporation of India Limited (NPCIL) and Westinghouse Electric Company for the establishment of six nuclear power plants in India.
- The next 2+2 meeting is to be held in the United States in 2019.

Why in news?

- The above information was given by Minister of state (Defence) Dr. Subhash Bhamre in a written reply for a question raised in Rajya Sabha.

India-Myanmar-Thailand Trilateral Highway

Overview

- The 1360 km long India-Myanmar-Thailand Trilateral Highway is an initiative pertaining to India, Myanmar and Thailand.
- The IMT Trilateral Highway is regional highway being constructed under India's Act East policy to boost connectivity in the region.
- The highway is expected to boost trade and commerce in ASEAN-India Free Trade Area, as well as with rest of Southeast Asia.
- A Motor Vehicles Agreement along with protocols for regulating and facilitating movement of cargo and passenger vehicular traffic is under inter-governmental negotiations between India, Myanmar and Thailand.
- Recently Indian government approved construction of 120.74 km Kalewa-Yagyi road section, and construction of 69 bridges along with the approach road on the 149.70 km Tamu-Kyigone-Kalewa (TKK) road section under this project.
- The above mentioned both the projects are being funded by Government of India under grant assistance to the Government of Myanmar.

Look-East Policy

- India's Look East Policy is an effort being made by the Indian government to cultivate and strengthen economic and strategic relations with the nations of Southeast Asia.
- This policy also serves to position India as a counterweight to the strategic influence of China in the region.

Why in news?

- Shri Mansukh L Mandaviya, MoS, Road Transport & Highways gave above information in reply to a question in Lok Sabha.

Taiwan with china

History

- The first known settlers in Taiwan are Austronesian tribal people thought to have come from modern day southern China.
- Following Japan's victory in the First Sino-Japanese War in 1895, China ceded Taiwan to Japan.
- But after World War Two, the Republic of China began ruling Taiwan, after Japan surrendered it back to China.
- In the next few years, the then Kuomintang (KMT) government in China were beaten back by the Communist armies under Mao Zedong and they were fled to Taiwan in 1949.
- This group, referred to as Mainland Chinese, dominated Taiwan's politics for many years, even though they only account for 14% of the population.

Chinese claim

- China claims that there is only "one China" and that Taiwan is a part of it.
- China put forward a formula, known as "one country, two systems", under which both Beijing and Taipei agree that Taiwan belongs to China.
- Under this principle, each of the two regions could continue to have its own governmental system, legal, economic and financial affairs, including trade relations with foreign countries.
- China also stated its right to use "non-peaceful means" against Taiwan if it tried to secede from China.
- China has also successfully pressured global firms to list Taiwan as part of China on their company websites and made world countries to name Taiwan as "Chinese Taipei".

Recent developments

- China has proposed adopting the "one country, two systems" policy, which was implemented in Hong Kong after the British handed the city back to China in 1997.
- But the decrease in civil liberties in Hong Kong sets a negative tone for Taiwan.
- But with low level in relations with Beijing, Taiwan is suffering from stagnant economy.

Why in news?

- President Xi Jinping said Taiwan's unification with the mainland is unavoidable. China would not refuse the option of using military force to bring it.



Trump on India's role

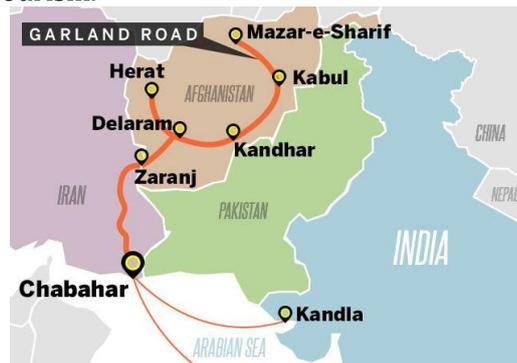
India in Afghanistan

- India was the only South Asian country to recognize the Soviet-backed Democratic Republic of Afghanistan in the 1980s.
- Its relations were diminished during the 1990s Afghan civil war and the Taliban government.
- Now, there exists a high-level political engagement with Afghanistan, which is reflected in the large number of bilateral high-level visits from both sides.
- In 2005, India proposed Afghanistan's membership in the South Asian Association for Regional Cooperation (SAARC).
- In 2016, Afghanistan supported India's boycott of the SAARC summit hosted by Pakistan. This was a major diplomatic victory for India.

Infrastructural aid

- India has played an important role in reconstruction and rehabilitation of Afghanistan, making significant investments in **technical cooperation and capacity building** in the country.
- India helped build **Delaram-Zaranj highway** connecting the Delaram district in Afghanistan to the border of Iran.
- India has constructed Afghan-India Friendship Dam (earlier known as **Salma Dam**) in Herat province.
- India constructed **new parliament building** in Afghanistan.
- India has constructed over 2,500 miles of roads in Afghanistan.
- India is running several programmes for training and capacity building for civil servants and police force in Afghanistan.
- India has also agreed to implement some important new projects such as the Shahtoot Dam and drinking water project for Kabul, road connectivity to Band-e-

Officers IAS Academy, Chennai Amir in Bamyán Province to promote tourism.



Why in news?

- US President Trump said that Russia, India and Pakistan must send troops to fight the Taliban.
- But India replied that it does not send soldiers abroad but for UN-supported peace-keeping operations.
- He also mocked Indian Infrastructure aid to Afghanistan.

China's 'Mother of All Bombs'

About US bomb :

- In 2017, while waging war against militants in Afghanistan, the US military dropped a GBU-43/B Massive Ordnance Air Blast (MOAB) weapon, more commonly known as the "Mother of All Bombs," on the Islamic State.
- It is the world's largest non-nuclear weapon.
- While it has a blast radius that stretches a mile in each direction the bomb leaves no lasting radiation effect because it is non-nuclear.
- Its blast is equivalent to 11 tons of TNT (Trinitrotoluene). By comparison, the nuclear weapon dropped on Hiroshima had a blast yield of 15 tons of TNT.

China's Version

- China has tested its most powerful non-nuclear weapon, which is said to be rival to US's Mother of All Bombs.
- The bomb is five to six metres long (16 to 20 feet), but weighs less than the American version.
- It is said to have huge destruction potential that is claimed to be only next to nuclear weapons.

Why in news?

- China has tested its most powerful non-nuclear weapon dubbed as "Mother of All Bombs".

Science & Technology

Samwad with Students

What's in news?

- Samwad with Students is a platform launched by the Indian Space Research Organisation (ISRO) as part of its outreach programme.
- In the first session, 40 students and 10 teachers had the opportunity to interact with the chairman of ISRO.

Objective

- To constantly engage youngsters across India to capture their scientific temperament.
- The new conversation mission will inspire students from schools and college.

106th Indian Science Congress

What's in news?

- The 106th Indian Science Congress is being held at Jalandhar, Punjab.
- The theme of the 106th science congress is 'Future India: Science and Technology'

About Indian Science Congress

- Indian Science Congress is organised by the Indian Science Congress Association every year
- The objective of the event is to stimulate scientific research effort and raising the scientific temperament in the country and the world.

Rashtriya Kishore Vaigyanik Sammelan (RKVS)

- Rashtriya Kishore Vaigyanik Sammelan (RKVS) is an important part of Indian Science Congress
- It focuses on raising the bar of research and innovation in science in our country.
- It aims to provide a platform to the budding scientists to showcase their research work and projects being developed by them

Time Capsule

- A Time Capsule with items representing today's technology and India's scientific prowess was buried at Lovely Professional University, Jalandhar in the ongoing Indian Science Congress.
- It contains 100 items which include replicas of Mangalyaan, Brahmos Missile and Tejas fighter jet, laptop, landline phone, smartphone, drone, VR glasses, air filter, induction cooktop, class 12 science books, etc.

- The capsule buried at a depth of 10 feet will be opened after 100 years in 2119.
- The Time Capsule has been developed to represent the technology know-how as it stands today and will provide an opportunity for future generations to have a glimpse of today's technology a century later.

Ultima Thule

What's in news?

- NASA's New Horizons spacecraft has clicked images of the distant celestial body Ultima Thule

About Ultima Thule

- Ultima Thule is an icy celestial body. It was first discovered in 2014 via telescope and is farthest and potentially oldest cosmic body ever observed by a spacecraft.
- It completes its own rotation in about 15 hours and is believed to be 20-30km in size.
- Ultima Thule is located in the Kuiper belt in the outermost regions of the Solar System
- It has a reddish color, probably caused by exposure of hydrocarbons to sunlight over billions of years.
- The body was formed as the two spheres or lobes, the bigger one called Ultima and the smaller one called Thule, gravitated towards each other and stuck together.

New Horizons

- New Horizon was launched in 2006 with the objective of making the first reconnaissance of the dwarf planet Pluto and venturing into Kuiper Belt
- New Horizon's core science mission is to map the surfaces of Pluto and Charon, to study Pluto's atmosphere and to take temperature readings.

Kadakhnath chicken

About

- Kadakhnath chicken is one of the rarest poultry breeds of India which is native to Jhabua district of Madhya Pradesh.
- It is popular for its black meat which is of better quality, taste and texture.
- The demand for Kadakhnath chicken is growing because of its medicinal values. It has high protein content and low cholesterol compared to other chicken.
- It is also called as Kali Masi

- In 2018, it received the GI tag.

Why in news?

- Principal scientist of Krishi Vigyan Kendra has suggested the Indian team to add Kadaknath chicken to their diet.

An algorithm to detect rare cells

About the research

- Researchers have developed the Finder of Rare Entities (FiRE), an algorithm to find rare cells from a large pool of cells.
- The algorithm assigns scores to each cell that is computed based on gene expression.
- Cells having scores above a certain threshold are reported as rare cells.
- The new algorithm showed superior sensitivity and specificity compared to existing methods.
- This algorithm uses sketching to assign rarity to each cell. It is a variant of hashing. **Hashing** is used to put cells with similar properties together.
- **Drop-seq** which is a state-of-the-art technique was used to detect cells quickly.
- The existing methods use clustering or statistical techniques that involve rigorous parameter estimations and high computational costs.
- Research is being done to use this algorithm for early detection and clinical management of cancer.

Rare cells

- Cells of biomedical interest are often present in very small numbers (i.e. they are rare), despite their functional significance
- Examples of rare cells are Circulating tumour cells, cancer stem cells, antigen-specific T cells, circulating endothelial cells

Drop-seq

- **Drop-seq or droplet-sequencing** is a technology developed to enable biologists to analyze RNA expression genome-wide in thousands of individual cells at once.
- It is a strategy based on the use of microfluidics for quickly profiling thousands of individual cells simultaneously by encapsulating them in tiny droplets for parallel analysis.

Why in news?

- Delhi based researchers have developed a new algorithm to find rare cells from a very large pool of cells in a matter of seconds

ISRO's 2019 agenda

Overview

- Indian Space Research Organization (ISRO) was established in 1969.
- Aryabhata - First Indian Satellite was launched on April 19, 1975. It was launched from the former Soviet Union. It provided India with the basis of learning satellite technology and designing.
- Since its beginning, ISRO has created a special place for itself in the space technology world through continuous low-cost innovations.
- ISRO has made India proud in various missions such as Mangalyaan, Chandrayaan-1 etc.
- ISRO is planning to send Indians to space through its Gaganyaan mission in 2022.

Mission 2019

- In 2019, ISRO is trying to implant various innovations in its technology.
- 32 missions are said to be planned by ISRO in 2019, an ambitious record-making goal for the greatest number of Indian missions in a year.
- The major mission is of using the fourth stage in a PSLV mission for further experimental platform.
- Usually the last stage of a PSLV rocket after releasing the primary satellite in space becomes dead and categorised as debris.
- Now, ISRO is working on a new technology where life to this "dead" last stage of PSLV, also called PS4 stage, for six months after its launch.
- This will be the most cost-effective way to perform experiments in space as there is no need to launch a separate rocket for the purpose.



PSLV

- Polar Satellite Launch Vehicle (PSLV) is the third generation launch vehicle of India.
- It is the first Indian launch vehicle to be equipped with liquid stages.
- PSLV is a four-staged launch vehicle with first and third stage using solid rocket motors and second and fourth stages using liquid rocket engines.
- During 1994-2017 period, the vehicle has launched 48 Indian satellites and 209 satellites for customers from abroad.
- Besides, the vehicle successfully launched two spacecraft – Chandrayaan-1 in 2008 and Mars Orbiter Spacecraft in 2013 – that travelled to Moon and Mars respectively.

Artificial Intelligence

About AI

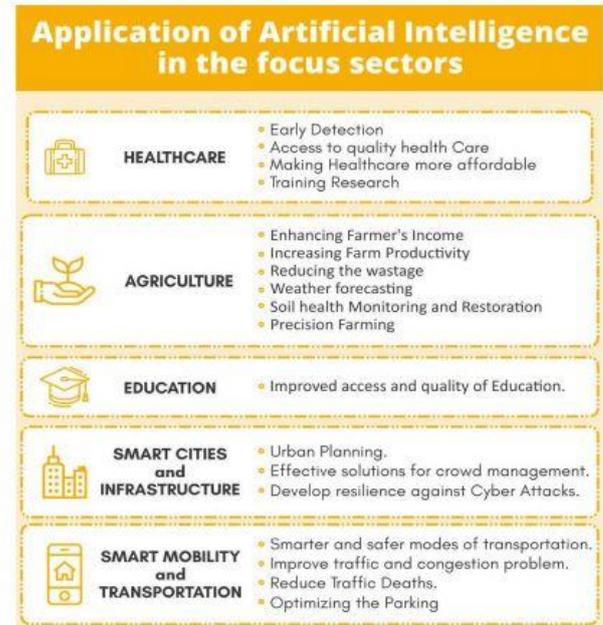
- Artificial Intelligence refers to the ability of machines to perform tasks like thinking, perceiving, learning, problem solving and decision making.
- It enables computer system to carry out task on their own that otherwise requires human intelligence.
- It has the potential to overcome the physical limitations of capital and labour and open up new sources of value and growth.

National Strategy for Artificial Intelligence (AI)

- NITI Aayog has identified five sectors such as healthcare, agriculture, education, smart cities and infrastructure and transportation to focus its efforts towards implementation of AI.
- NITI Ayog estimates that adopting AI means a 15% boost for the gross value added (GVA) for the economy by 2035.
- Develop smarter and safer modes of transportation to address traffic and congestion problems.
- AI could create jobs in the country that would be higher than the number of jobs becoming redundant due to innovation in technology.
- The demand for AI and machine learning specialists in India could rise by 60%.
- The National Strategy for Artificial Intelligence can be linked with National Health Policy in order to provide **better diagnosing facility** to the people.
- **Prediction of weather and monitoring of soil health** are major takeaways for the agricultural sector from AI.

Challenges

- AI must not come at the cost of the privacy of citizens.
- Lack of broad-based expertise in research and application of AI.
- High resource cost.
- Low awareness for adoption of the technology.
- Shortage of skilled manpower



National Mathematics Day

What's in news?

- World Mathematics Day is celebrated on the 22nd of December every year to mark the birth anniversary of Srinivas Ramanujam

Srinivas Ramanujam

- Srinivasa Ramanujan was born on 22nd December, 1887 in Erode district of Tamil Nadu. He died at young age of 32 on 26 April 1920
- He gave theories like the mathematical analysis, number theory, infinite series, continuous fraction etc.
- Along with British Mathematician Godfrey Harold Hardy, Ramanujan had discovered the smallest number represented as sum of two cubes 1729 which is know as Hardy-Ramanujan number.
- Ramanujan Prime and Ramanujan theta discoveries have inspired further research on this mathematical subject.
- 'The Man Who Knew Infinity' (2015) was the latest tribute to the mathematics wizard by the popular cinema.

- It was in 2012 that then Prime Minister Manmohan Singh declared December 22 as National Mathematics Day.

India International Science Festival

What's in news?

- The 4th India International Science Festival was held at Lucknow in October 2018 by the Ministry of Science and Technology and Ministry of Earth Sciences
- The theme for the year was “**Science for Transformation**”
- It is the biggest platform in the country to bring together students, researchers, innovators, artists and general public to celebrate India's achievements in science and technology.
- IISF is a medium to encourage the young minds towards the field of science and to promote the networking of stakeholders working towards the propagation of science.

Prime Minister Fellowship Scheme

Objective

- The scheme aims at improving the quality of research by attracting the best talents across the country.
- It will also address our national priorities and shortage of quality faculty in the premier educational institutions of the country

About the scheme

- 1,000 best students who have completed (or are in the final year of) B. Tech or Integrated M.Tech or M.Sc. in Science and Technology streams from IISc/IITs/NITs/IISERs/IITs under this scheme will be offered direct admission in PhD programme in the IITs/IISc.
- Those students will be offered a fellowship of Rs.70, 000/- per month for the first two years, Rs.75, 000/- per month for the 3rd year, and Rs.80, 000/- per month in the 4th and 5th years.
- Apart from this, a research grant of Rs.2.00 lakh will be provided to each of the Fellows for a period of 5 years

Farm machines

What's in news?

- CSIR-CMERI Centre of Excellence for Farm Machinery (CoEFM), Ludhiana, Punjab have invented new farm machines-

Officers IAS Academy, Chennai precision planter for vegetables and inter row cultivator for wide row crops. (CMERI- Central Mechanical Engineering Research Institute)

Precision planter for vegetables plants

- Planting for proper plant establishment is one of the key components of production system of vegetable crops.
- For optimum plant population with the desired planting geometry, uniform distribution and precision placement of seeds/seedlings are the critical parameters.
- Precision planter for vegetables, plants seeds at appropriate depth. It uses seed metering mechanisms which help in allocation number of seeds required for particular row

Inter-row rotary cultivator

- Weeding and other post-planting intercultural operations are quite labour intensive and use of herbicides is both expensive and undesirable.
- An inter-row rotary cultivator with high ground clearance and adjustable row spacing and operated by tractor is an ideal choice for weeding/intercultural operations.
- Inter row cultivator for wide row crops is used to sow, harvest crops and remove weeds. It is adaptable to small and marginal farmers.

Assamese Buffalo cloned

What's in news?

- The ICAR-Central Institute for Research on Buffalos has cloned the Assamese Buffalo as part of conserving superior breeds of buffalo.
- The cloned buffalo is named as Sach Gaurav.
- It is mainly used for agricultural work and provides high quality milk.
- This process helps in improving biodiversity and preserving endangered species.

Cloning

- Cloning is the process of producing genetically identical individuals of an organism either naturally or artificially.
- It is used by livestock breeders to create identical twins of their best animals.

Detecting Adulteration

What's in news?

- The Food Safety and Standards Authority of India (FSSAI) has released the Detect Adulteration with Rapid Test (DART) kit
- It consists of 41 different food tests which can be done at home
- Commonly adulterated products are milk and milk products, oil, fat, sugars, confectionaries, food grains, spices and condiments

Food Safety and Standards Authority of India (FSSAI)

- The Food Safety and Standards Authority of India (FSSAI) has been established under Food Safety and Standards Act, 2006 which consolidates various acts & orders that have hitherto handled food related issues
- FSSAI has been created for laying down science-based standards for articles of food and to regulate their manufacture, storage, distribution, sale and import to ensure availability of safe and wholesome food for human consumption.

World's thinnest material

What's in news?

- Researchers from IIT-Gandhi Nagar have developed the world's thinnest material – nano sheets using magnesium and boron compounds
- They have synthesized a two-dimensional material just 1 nanometer (nm) thick and made of magnesium diboride (MgB₂) – a compound of magnesium and boron.
- It can be 100,000-times thinner than a sheet of paper
- Graphene, for example, is 200 times stronger than steel even though it is just one atom thick.
- This material can find a range of applications, from next-generation batteries to UV-absorbing films

New therapy for cancer

Why in news?

- Doctors from All India institute of Medical Sciences (AIIMS) have developed a therapy for treating cancer affecting the abdominal lining like colon cancer or colorectal cancer.

About

- It involves administering heated chemotherapy drugs directly into abdomen

during surgery. Usually drugs are given through veins post-surgery.

- This technology is known as **hyperthermic intraperitoneal chemotherapy (HIPEC)** has been in use in western countries.
- In India, it was first used on 35 year old cancer patient suffering from peritoneal cancer at AIIMS.
- The country's 1st new type of chemotherapy delivery system for cancer of abdominal cavity has been done at AIIMS.

Equatorial Geophysical Research Laboratory

What's in news?

- The Equatorial Geophysical Research Laboratory (EGRL), Tirunelveli houses MF Radar antennas which are part of atmospheric radar that helps study the winds at heights between 70 km and 100 km above the Earth.
- It is a regional centre of the Indian Institute of Geomagnetism (IIG), Mumbai.
- It is multi-disciplinary centre with instruments to measure the Earth's magnetic field variations and various atmospheric parameters.
- The centre also has instruments to monitor secondary cosmic rays.

Why Tirunelveli?

- Tirunelveli is in close proximity to both the geomagnetic and geographic equator.
- When experimental activities at the centre first commenced in 1991, the geomagnetic equator passed right through the city.
- When winds blow, electric currents are expected to be produced in the electrically charged upper layers of the atmosphere across the geomagnetic field.
- Scientists call this current '**Equatorial Electrojet**' and probing this helps scientists understand the Sun–Earth connection.
- Lower atmospheric disturbances like severe weather events can have their signatures in the upper atmosphere

Secondary cosmic ray

- When the cosmic rays — from supernovae, colliding galaxies and spinning black holes — enter the Earth's atmosphere, they lose their energies through collisions with our atmospheric molecules and produce a

cascade of subatomic particles known as secondary cosmic rays.

Magnetometers in Antarctica

- IIG operates magnetometers in the Indian stations in Antarctica, namely, Maitri and Bharati.
- The importance of monitoring the geomagnetic field over Antarctica is that it is the polar region where the magnetic fluxes are dense and where the Sun's particle effects are first felt on Earth
- Whenever the Sun's activity becomes violent — for example, during a solar flare or during episodes of coronal mass ejections — the Earth's magnetic field would readily encounter energetic particles.
- Such intense overhead currents are responsible for ground-induced currents that can create havoc for the underground telecommunication lines and electrical power grids
- IIG also operates induction coil magnetometers to sense the extreme low-frequency signals produced by global thunderstorm/lightning activity.
- Antarctic continent is free from local or regional lightning activity. The Indian Antarctic stations are thus ideal sites to monitor global fluctuations in lightning activity

Significance

- The hidden teleconnections between the polar and equatorial regions are understood by monitoring the electromagnetic signatures simultaneously from Indian continental landmass and the Antarctic.
- It helps to understand space weather that affects the man-made satellites orbiting the Earth and the instruments on board used for a variety of purposes.

Form of helium in Earth's mantle

What's in news?

Officers IAS Academy, Chennai

- Researchers has come up with a striking possibility that the mantle helium must exist as the compound FeO_2He , which is stable and solid at temperatures between 3000K and 5000K and at pressure between 135 and 300 GPa.
- If this result is validated by experiments then the location of ancient helium is confirmed.

About the research

- Researchers used the crystal search algorithm CALYPSO which they developed to look for compounds containing helium.
- The team tested energy of each compound containing helium and those with energy lower than that of free helium was considered favoured and checked with algorithm.

Helium

- Helium is the second most abundant element in the universe.
- It is a noble gas and the second lightest element after hydrogen.
- It is hardly found in gaseous state on Earth as it so light and can escape easily. However it has been found in volcanic lava plumes in Iceland and Hawaii originating from mantle.
- This is ancient helium which is present since the time Earth was formed and believed to be trapped in compounds deep within Earth.
- Helium finds application as **coolant, respiratory ailment treatments, scuba divers breathing tanks** etc.

CALYPSO

- CALYPSO (**Crystal structure Analysis by Particle Swarm Optimization**) is an efficient structure prediction method.
- The approach requires only chemical compositions for a given compound to predict stable or metastable structures at given external conditions

Environment

Kashmir stag

Why in news?

- Recently it is found that Kashmir Stag has begun using an old migratory route, has given fresh hope to conservationists.

About the Kashmir stag:

- The Kashmir stag, also called hangul, is a subspecies of elk native to India.
- It is found in dense riverine forests in the high valleys and mountains of the Kashmir Valley and northern Chamba district in Himachal Pradesh.
- In Kashmir, it's found in the Dachigam National Park where it receives protection but elsewhere it is more at risk.
- Earlier believed to be a subspecies of red deer, a number of mitochondrial DNA genetic studies have revealed that the hangul is part of the Asian clade of the elk.
- It is the **state animal of Jammu and Kashmir**.
- In Kashmir, it's found in the Dachigam National Park (at elevations of 3,035 meters), Rajparian Wildlife Sanctuary, Overa Aru, Sind Valley, and in the forests of Kishtwar & Bhaderwah.

Dachigam National Park:



- The Dachigam National Park (DNP) is located at Umaria district in **Jammu and Kashmir (J&K)**.
- The main animal species that Dachigam is known for is the hangul (or the Kashmir stag). Other species include Musk deer, Leopard, Himalayan serow, Himalayan grey langur, Leopard cat, Himalayan black bear, etc.
- IUCN status of Kashmir stag: **Critically Endangered**.
- It has been listed under **Schedule-I of the Wildlife (Protection) Act, 1972** and J&K Wildlife (Protection) Act, 1978.

Cinereous vulture

Why in news?

- Bird watchers and researchers recently sighted Cinereous vulture in Hazaribagh in Jharkhand.
- During the winter, the Cinereous vulture migrates from the mountainous regions of Europe and Asia to warmer places, including India.

Facts about cinereous vulture:



- Cinereous vulture (*Aegypius monachus*) draws its name from "monachus", which means hooded (like a monk) in Latin.
- It is also known as the black vulture, monk vulture, or Eurasian black vulture.
- It is classified as **Near Threatened** under the IUCN Red List.

Similar incidents:

- In a rare occurrence, two Himalayan griffons (*Gyps Himalayensis*), categorized as Old World Vulture, were sighted at the colony of long-billed vultures (*Gyps Indicus*) conservation project situated at Pala Rapu cliff in the forests of Nandigoan village in Penchikalpet mandal, **Telangana**. The discovery brought cheer among ornithologists and biologists.
- Forest officials opine that the arrival of the birds could be associated with winter migration to the south, as the birds are known to be long distance fliers.
- The significance of the sighting, the experts opined that Pala Rapu can become a winter migration destination for the birds from the north.

The Himalayan vulture:



research on the potential of forests to mitigate climate change.

India's REDD+ strategy:

- The Himalayan vulture or Himalayan griffon vulture is an Old World vulture in the family Accipitridae.
- It is one of the two largest Old World vultures and true raptors.
- Himalayan griffons do not breed in the first three years, and hence juvenile birds of the species do not remain in breeding grounds to avoid competition.
- The species has been listed as **Near Threatened** by the IUCN.
- It is also found in Kazakhstan, China, Afghanistan, Bhutan, Thailand, Burma, Singapore and Cambodia.

- Complying with the UNFCCC decisions on REDD+, India has prepared its National REDD+ Strategy.
- The Strategy builds upon existing national circumstances which have been updated in line with India's National Action Plan on Climate Change, Green India Mission and India's Nationally Determined Contribution (NDC) to UNFCCC.
- The strategy report has been prepared by **Indian Council of Forestry Research & Education (ICFRE), Dehradun.**

REDD+ strategy

Why in news?

- A new study by Delhi-based **non-profit Centre for Science and Environment (CSE)** has revealed that Reducing Emissions from Deforestation and Forest Degradation (REDD+), the programme initiated by the United Nations in **2005** to mitigate climate change through enhanced forest management in developing countries, has largely failed to achieve its objectives.

Background:

- Since its formalisation in 2006, REDD+ had emerged as the most prominent global mechanism to integrate the role of forests in climate change.
- It was touted as a **win-win situation** for biodiversity conservation, carbon sequestration and local livelihoods.
- More than 300 REDD+ initiatives have taken off since 2006. The mechanism has been enshrined in the Paris Agreement of 2015, and its implementation is transitioning from smaller, isolated projects to larger, jurisdictional programmes with support from bilateral and multilateral agencies.

Highlights Of The Study:

- Large-scale finance for REDD+ has been a major issue as carbon markets have not materialised and international funding commitments for REDD+ have been much lower than expected.
- REDD+ implementation costs have been high and benefits for local communities from REDD+ projects have been minimal.
- There is need to rethink the REDD+ mechanism based on these experiences and the findings emerging from new

About REDD+:

- In simple terms, REDD+ means "**Reducing Emissions from Deforestation and forest Degradation**", conservation of forest carbon stocks, sustainable management of forests, and enhancement of forest carbon stocks in developing countries.
- REDD+ is a mechanism developed by Parties to the United Nations Framework Convention on Climate Change (UNFCCC).
- It **creates a financial value for the carbon stored in forests** by offering incentives for developing countries to reduce emissions from forested lands and invest in low-carbon paths to sustainable development.
- **Developing countries would receive results-based payments for results-based actions.**
- REDD+ goes beyond simply deforestation and forest degradation and includes the role of conservation, sustainable management of forests and enhancement of forest carbon stocks.

Kasturirangan report

Why in news?

- The Committee on Government Assurances in the Rajya Sabha has urged the Ministry of Environment, Forest and Climate Change to constitute a committee to address the issues and grievances of local people in Western Ghats. The Committee on Government Assurances has submitted a report in this regard.

Background:

- The Committee on Government Assurances had examined issues regarding the **categorisation of the Western Ghats** as ESA as per the recommendations of two

committees led by Madhav Gadgil and K. Kasturirangan.

- The Committee on Government Assurances examined 62 assurances during its deliberations with various State governments and other organisations, and had visited Pune, Mumbai, Chennai and Bengaluru, before preparing its report.

Important observations made by the committee:

- Over 56,000 square kilometres of **ecologically sensitive areas (ESA)** in the Western Ghats could not be earmarked as **'no-go' zones** due to State governments' 'insensitivity'.
- The recent monsoon floods in Kerala and parts of Karnataka should serve as alarm bells for the administrations in the States of Goa, Gujarat, Maharashtra, Kerala, Tamil Nadu and Karnataka, which have failed to mark ESA in the Western Ghats.
- The committee is of the view that implementation of the recommendations of the Kasturirangan report is only possible with active support of local population.
- It also requires consultation with the State government at micro level to achieve the objectives of saving the Western Ghats.

Gadgil Committee:

- Environment Ministry had set up the Western Ghats Ecology Expert Panel under Gadgil in March, 2010.
- The panel was asked to make an assessment of the ecology and biodiversity of the Western Ghats and suggest measures to conserve, protect and rejuvenate the entire range that stretches to over 1500 km along the coast, with its footprints in Gujarat, Maharashtra, Goa, Karnataka, Kerala, and Tamil Nadu.
- It defined the boundaries of the Western Ghats for the purposes of ecological management.
- It proposed that this entire area be designated as ecologically sensitive area (ESA). Within this area, smaller regions were to be identified as **ecologically sensitive zones (ESZ)** I, II or III based on their existing condition and nature of threat.
- It proposed to divide the area into about 2,200 grids, of which 75 per cent would fall under ESZ I or II or under already existing protected areas such as wildlife sanctuaries or natural parks.

Officers IAS Academy, Chennai

- The committee **proposed a Western Ghats Ecology Authority** to regulate these activities in the area.
- None of the six concerned states agreed with the recommendations of the Gadgil Committee, which submitted its report in August 2011.

Kasturirangan Committee:

- In August 2012, then Environment Minister constituted a High-Level Working Group on Western Ghats under Kasturirangan to **"examine" the Gadgil Committee report** in a "holistic and multidisciplinary fashion in the light of responses received" from states, central ministries and others.
- Instead of the total area of Western Ghats, only 37% (i.e. 60,000 sq. km.) of the total area be brought under ESA under Kasturirangan report.
- A **complete ban on mining, quarrying and sand mining in ESA.**
- Distinguished between cultural (58% occupied in the Western Ghats by it like human settlements, agricultural fields and plantations) and natural landscape (90% of it should come under ESA according to the committee).
- Current mining areas in the ESA should be phased out within the next five years, or at the time of expiry of mining lease, whichever is earlier.
- **No thermal power be allowed and hydropower projects are allowed only after detailed study.**
- **Red industries** i.e. which are highly polluting be strictly banned in these areas.
- Kasturirangan report on the Western Ghats has made several pro-farmer recommendations, including the exclusion of inhabited regions and plantations from the purview of **ecologically sensitive areas (ESAs).**

What is ESA?

- ESAs are defined as those areas 'that are **ecologically and economically important, but vulnerable even to mild disturbances, and hence demand careful management**'.
- There are three important categories of attributes that need to be considered in defining the ecological salience/significance/sensitivity of an area: **(a) abiotic attributes, (b) biotic attributes and (c) anthropological or socio-cultural attributes.**

- Section 3 of the Environment (Protection) Act 1986 (EPA) gives power to the Central Government i.e. the Union Ministry of Environment and Forests to take all measures that it feels are necessary for protecting and improving the quality of the environment and to prevent and control environmental pollution.
- To meet this objective, the Central Government can restrict areas in which any industries, operations or processes or class of industries, operations or processes shall not be carried out or shall be carried out subject to certain safeguards. Thus the government came up with the concept of Eco Sensitive Zones.

Western Ghat's grasslands under attack

Why in news?

- Western Ghats lost almost one-fourth high-altitude grasslands due to invasion of exotic trees confirms a study published on January 2, 2019 in the international journal Biological Conservation.

Highlights of the study:

- Most of this loss occurred on the mountain tops of the Nilgiri, Palani and Anamalai hill ranges, which comprise more than half of the Ghats' shola-grassland ecosystems.
- The satellite images revealed that 60% of the shola-grassland landscape has changed and almost 40% of native high-elevation grasslands have disappeared.
- The losses are primarily due to the expansion of exotic trees (pine, acacia and eucalyptus)
- Shola-grassland ecosystems in Tamil Nadu showed the highest rates of invasion of exotic trees
- Even though no plantations were established between 2003 and 2017, invasion by existing trees increased areas under exotic plantations by 27% in the Palanis and 17% in the Nilgiris.

About Shola Grassland:

- Shola forests are tropical Montane forests found in the valleys separated by rolling grasslands only in the higher elevations.
- The shola forests are patches of forests that occur only in the valleys and never grow on the mountain tops. This is such a unique landscape formation that is native only to the southern Western Ghats.

- The Shola forests are found in altitudes above 2000 meters of sea-level. Although they are found from altitudes higher than 1600 meters.
- Rivers originate in the sholas: Tunga Bhadra, Nethravathi, Cauvery etc.
- Shola forests are a native only to the Southern Western Ghats. They are found only in the high-altitude mountains of the states Karnataka, Kerala and Tamilnadu.
- Nowhere else in the world exist such a kind of forests.
- The endangered Nilgiri Tahr (an Asian goat-antelope) is endemic to the shola-grassland.

Compressed Bio-Gas

Why in news?

- Government is promoting the use of Compressed BioGas (CBG) as an alternative green transport fuel, which is purified and compressed biogas, produced through a process of **anaerobic decomposition** from various waste/ biomass sources including Municipal solid waste.

Key Facts:

- Towards promoting CBG, Oil PSUs have launched 'Sustainable Alternative Towards Affordable Transportation' i.e. '**SATAT**' initiative. (**Ministry of Petroleum & Natural Gas**)
- Under this initiative, Public Sector Oil Marketing Companies (OMCs) and GAIL have invited Expression of interest (EOI) to procure CBG from potential entrepreneurs for establishment of 5000 CBG plants across the country.
- To increase indigenous production of ethanol, the Government has taken many steps:
 1. Re-introduction of administered price mechanism,
 2. opening of alternate route for ethanol production,
 3. Regular Interaction with States, Industries Development and Regulation (IDR) Act Amendment, Interest Subvention scheme namely – "Scheme for augmenting and enhancing ethanol production capacity",
 4. National Policy on Biofuels – 2018,
 5. Fixation of differential price of ethanol from C heavy molasses, B

heavy molasses/partial sugarcane juice and 100% sugarcane juice.

- The first 2G ethanol bio-refinery to be set up by Hindustan Petroleum Corporation Limited in Bathinda, Punjab
- The Government has notified National Policy on Biofuels-2018 under which Department of Agriculture, Cooperation & Farmers Welfare under Ministry of Agriculture & Farmers Welfare has been entrusted with the task of production of plant materials through Nurseries and plantations for biofuels in coordination with other Ministries.

Advantages:

- It causes lesser corrosion and wear to the body of engine
- It is environmentally benign due to lower emissions of carbon and particulate matter per equivalent distance travelled; and being lighter than air
- It is safer in case there is a spill.

Climate action - Ranking

Why in news?

- Morocco has been named the second-best performing country after Sweden in the Climate Change Performance Index (CCPI).

Key facts:

- The **Climate Change Performance Index (CCPI)** is an **annual publication by Germanwatch**, New Climate Institute and Climate Action Network Europe shows that only **few countries have started working towards limiting global warming below 2°C or even at 1.5°C**.
- CCPI aim is to put political and social pressure on those countries that have, until now, failed to take ambitious action on climate protection, and to highlight those countries with best practice climate policies.
- It evaluates the climate protection performance of 60 countries, responsible for over 90% of global energy-related CO2 emissions.
- India ranks 11th in this year's CCPI, improving its standing by three places compared to the previous edition.
- The North African country significantly increased the share of renewables over the past five years and increased new renewable energy capacity.
- **Sweden is in top position**, followed by Morocco and Lithuania in the CCPI 2019.

- The bottom five in the list are Saudi Arabia, U.S., Iran, South Korea and Taiwan. With the connection of the world's largest solar plant to the grid, Morocco is on track for achieving its target of 42% installed renewable energy capacities by 2020.

Mine deaths in India

Introduction:

- At a time when multiple agencies are involved in the rescue of 15 miners trapped in a **rat hole mine in Meghalaya**, data tabled in the Lok Sabha revealed that 377 workers involved in mining of coal, minerals and oil were killed in accidents between 2015 and 2017.
- Of the 377 deaths, 129 occurred in 2017 alone. As many as 145 died in 2016, while the figure was 103 in 2015.

Key facts:

- Coal mines have accounted for the highest number of casualties due to accidents in mines. Of the 377, more than half, 210, were killed in coal mines.
- These figures were provided by the Labour and Employment Ministry on December 31, 2018.
- Jharkhand, which recorded 69 deaths (11 in 2015, 46 in 2016 and 12 in 2017) in the three years, has accounted for the highest death of coal mine workers in accidents inside mines.
- Goda in Jharkhand witnessed one of the biggest open cast mine accidents when 23 workers died in December 2016.

What is rat hole mining?

- It involves digging of very small tunnels, usually only 3-4 feet high, which workers (often children) enter and extract coal.
- The rat-hole mining is broadly of two types - **side-cutting and box-cutting**.
- In side-cutting procedure, narrow tunnels are dug on the hill slopes and workers go inside until they find the coal seam.
- The coal seam in hills of Meghalaya is very thin, less than 2 m in most cases.
- In the box-cutting type, a rectangular opening is made, varying from 10 to 100 sq m.
- Through this, a vertical pit, 100 to 400 feet deep, is dug.
- Once the coal seam is found, rat-hole-sized tunnels are dug horizontally through which workers can extract the coal.

Why is it very prevalent?

- In Jharkhand, the **coal layer is extremely thick, where open-cast mining can be done.**
- But no other method would be economically viable in Meghalaya, where the coal seam is extremely thin.
- Removal of rocks from the hilly terrain and putting up pillars inside the mine to prevent collapse would be costlier.
- So despite a ban, rat-hole mining remains the prevalent procedure for coal mining in Meghalaya.
- Rat-hole mining is the locally developed technique and the most commonly used one.
- It is not regulated by any law, and coal extraction has been made by unscrupulous elements in a most illegal and unscientific manner.
- Meghalaya's annual coal production of nearly 6 million tonnes is mostly said to have come through rat-hole mining.

Impacts:

- **Ecology:** Rat-hole mining in Meghalaya had caused the water in the Kopili river (flows through Meghalaya and Assam) to turn acidic.
- The entire roadsides in and around mining areas are used for piling of coal.
- This is getting to be a major source of air, water and soil pollution.
- Off road movement of trucks and other vehicles in the area causes further damage to the ecology of the area.
- **Risk to lives:** Due to rat-hole mining, during the rainy season, water flood into the mining areas resulting in death of many.
- If water has seeped into the cave, the worker can enter only after the water is pumped out.

Shortcomings:

- **Ban:** The National Green Tribunal (NGT) has banned rat-hole mining in 2014, and retained the ban in 2015.
- The ban was on grounds of the practice being unscientific and unsafe for workers.
- The NGT order bans not only rat-hole mining but all "unscientific and illegal mining".
- But orders of the Tribunal have been violated without exception.
- The State Government has failed to check illegal mining effectively.

- It has also not framed the mining policy, mining plan and the guidelines as directed under the orders of the Tribunal.
- The state has in place the Meghalaya Mines and Mineral Policy, 2012; but the NGT finds it inadequate.
- Protection - Constitution's 6th Schedule intends to protect the community's ownership over its land and autonomy and consent over its nature of use.
- Coal mining currently underway in Meghalaya was a corruption of this Constitutional Provision.
- Private individuals with interests in earning monetary benefits from minerals vested under the land are engaging in coal mining.
- They are attempting to legitimize this act by claiming immunity through tribal autonomy over land ownership.

Cyclonic storm "PABUK"

Why in news?

- The India Meteorological Department (IMD) has stated that cyclone Pabuk will move north-westwards and cross the Andaman Islands late on 6th Jan as a cyclonic storm with wind speed up to 90 kmph.
- IMD has sounded a yellow alert for the cyclone Pabuk. The Pabuk cyclone would cause heavy rain over the Andaman Islands.

About Pabuk:

- Cyclone Pabuk originated over the Gulf of Thailand and neighbourhood. The IMD predicts that Pabuk would move west-north-westwards and emerge into the Andaman Sea.
- Then it would move north-westwards and cross the Andaman Islands. Then recurve north eastwards towards Myanmar coast and weaken gradually.

Cyclone warnings:

- The four stages of cyclone warnings in India are:
- The First Stage warning **Pre-Cyclone Watch**, issued 72 hours in advance. It contains an early warning about the development of a cyclonic disturbance in the north Indian Ocean, its likely intensification into a tropical cyclone and the coastal belt likely to experience adverse weather.

- The second stage warning is **Cyclone Alert**, is issued at least 48 hrs in advance of the expected commencement of adverse weather over the coastal areas.
- It contains information about the location and intensity of the storm likely direction of its movement, intensification, coastal districts likely to experience adverse weather and advice to fishermen, the general public, media and disaster managers.
- **Stage of warning Colour code:**
 1. Cyclone Alert -Yellow.
 2. Cyclone Warning - Orange.
 3. Post-landfall outlook - Red.
- The Third Stage warning is **Cyclone Warning**, issued at least 24 hours in advance of the expected commencement of adverse weather over the coastal areas and the landfall point is forecasted at this stage.
- The Fourth Stage of warning is **Post Landfall Outlook** and it gives likely direction of movement of the cyclone after its landfall and adverse weather likely to be experienced in the interior areas.
- Even though there is no cyclonic situation for Odisha, seven districts of Odisha have been put on alert and the weather in Odisha would be cloudy and dry.

Issues of Parali (Dry grass) Burning

Why in news?

- Through the various efforts under the **Central Sector Scheme on 'Promotion of Agricultural Mechanization for In-Situ Management of Crop Residue** in the **states of Punjab, Haryana, Uttar Pradesh & NCT of Delhi'** the satellite data indicates that paddy residue burning events have reduced by 29.5 percent, 24.5 percent and 11.0 percent in the States of Haryana, Uttar Pradesh and Punjab, respectively when compared with the paddy residue burning events in the year 2017.

Key facts:

- The Ministry of Power had brought out a policy for biomass utilization for power generation through co-firing in pulverized coal fired boilers in November 2017.
- As per the policy, all fluidized bed and pulverized coal units (coal based thermal power plants) except those having ball and tube mill, of power generating utilities, public or private, located in India, shall endeavour to use 5-10% blend of biomass pellets made, primarily of agro residue along with coal after assessing the technical feasibility viz. safety aspects etc.
- In line with the policy Central Electricity Authority (CEA) had issued an advisory to all concerned State Governments, power Plants utilities, power equipment manufacturers and other stakeholders to promote use of biomass pellets.

Culture

Bhima-Koregaon (Battle of Koregaon, 1818)

About Bhima Koregaon

- On January 1, 1818, a few hundred Mahar soldiers of the East India Company, led by the British, defeated the massive Peshwa army, led by Peshwa Bajirao II, in Koregaon.
- This battle has, since, attained legendary stature in Dalit history.
- The battle came to be seen as a victory of the Mahars against the injustices perpetuated by the Brahminical Peshwas.
- Vijay Sthamb (victory pillar) was erected by the East India Company in memory of those who fought the battle and includes the names of the Mahar soldiers who unknowingly brought an end to the Peshwa rule in 1818.
- Every year thousands of Ambedkarites gather in Bhima Koregaon on January 1 to pay their respect at the Vijay Sthamb (victory pillar).

Why in news?

- The 201st anniversary of Bhima Koregaon battle passed off peacefully. In 2018, the 200th anniversary witnessed violent protests.

Standardisation of Handicrafts Industry

What's in news?

- To create awareness and celebrate success of GI registered crafts, commemorative postage-stamp on five crafts namely Kutch Embroidery, Karnataka Bronzeware, Maddalam of Palkkad, Sikki Grass Product of Bihar and Blue Pottery of Jaipur was released on 31.12.2018

Background

- Handicraft is an unorganized and diversified sector with an estimated 70 lakh artisans practicing 32 broad crafts categories throughout the country.
- 35 crafts have been identified as endangered crafts and 92 crafts have been registered under Geographical Indication Act.

- To organize and standardize the Indian Handicrafts, Government has registered approximately 22.85 lakhs artisans under **Pahchan** initiative

Pahchan initiative

- The Pahchan initiative was launched to **register and provide Aadhar based Identity Cards to the Handicrafts Artisans** for better access to the benefits of the schemes.
- Pehchan cards scheme was launched as part of the Pehchan initiative of Union Textile ministry to register and provide Identity (ID) cards to handicraft artisans and link them to a national database.
- It is a new upgraded ID card for artisans that will be linked with their Aadhar numbers and bank accounts so that they can receive direct cash transfer benefit
- Handmade Bazaar portal has been established. Any handicraft artisan registered under Pachchan can utilize this portal for marketing their products.
- Direct marketing portal for handicraft artisans has been launched to provide direct market access facility to genuine handicraft artisans including tribal artisans working in the far-flung areas.

Azad Hind Government

What's in news?

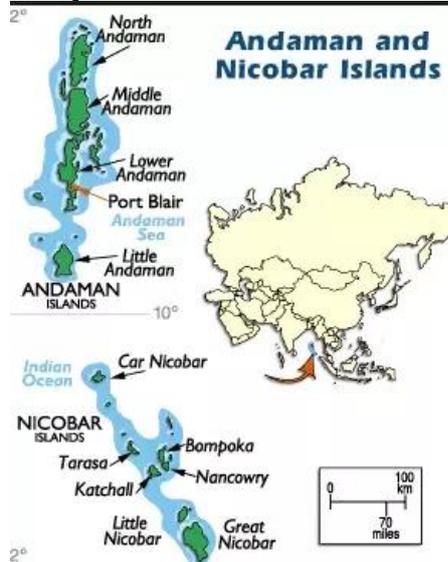
- A commemorative postal stamp, Rs-75 coin, and First Day Cover has been released to mark the 75th anniversary of Netaji hoisting the tricolor in Andaman.
- The Ross Island was renamed Netaji Subhas Chandra Bose Dweep, the Neil Island as Shaheed Dweep and the Havelock Island as Swaraj Dweep
- Netaji had suggested that Andaman and Nicobar Islands be renamed as Shahid and Swaraj Dweep respectively.
- During the World War II, the Japanese had captured the Andaman and Nicobar Islands, and Netaji came here, as the Azad Hind Fauz led by him was an ally of the Japanese force.

Azad Hind Government

- The Azad Hind Government, founded on 21st October, 1943 in occupied Singapore, was inspired by Netaji Subhash Chandra Bose who was the leader of Azad Hind

Government and also the Head of State of this Provisional Indian Government-in-exile.

- It was supported by the Empire of Japan, Nazi Germany, Italian Social Republic, and their allies.
- Japan gave it nominal authority of the Andaman and Nicobar Islands in 1943 and the occupation of parts of Manipur and Nagaland.
- Netaji laid down the foundation for equal opportunity for women in armed forces, through the formation of Rani Jhansi Regiment.
- Netaji Subhas Chandra Bose was convinced that armed struggle was the only way to achieve independence for India.
- The government of Azad Hind had its own currency, court, civil code and postage stamps



Monuments of National Importance

What's in news?

- The Archeological Survey of India (ASI) has designated 6 monuments as monuments of national importance in 2018.
 - Old High Court Building in Nagpur, Maharashtra,
 - Haveli of Agha Khan and Hathi Khana
 - Neemrana Baori in Rajasthan's Alwar district
 - Group of Temples at Ranipur Jharail in Odisha's Bolangir district
 - Vishnu Temple in Kotali, Pithoragarh district, Uttarkhand,

What is Ancient Monument?

- As per the Archaeological Sites and Remains Act, 1958, Ancient Monument means any structure, erection or monument, or any tumulus or place of interment, or any cave, rock-sculpture, inscription or monolith which is of historical, archaeological or artistic interest and which has been in existence for not less than 100 years

Criteria for Monuments of National Importance

- The monument or archaeological site is not less than 100 years old.
- It has special historical, archaeological or artistic interest, making it worthy of declaration as of national importance.
- It qualifies under specified provisions of definition of the Ancient Monuments and Archaeological Sites and Remains Act, 1958.
- The interested public does not have major objections to such declaration.
- The authenticity and integrity of the ancient monument or archaeological site and remains have not been damaged.
- It is free from major encumbrances.

Miscellaneous

Women's wall

Why in news?

- On 1st January 2019, around 30 lakh women stood shoulder to shoulder to form Vanitha Mathil, "women's wall" that ran across the length of Kerala.
- The wall stretched from Kasaragod in the north to Thiruvananthapuram in the south for about 620 Kms.

About Vanitha Mathil:

- The event was organised by the Government of Kerala with the support of several political, religious and social groups.
- The participants at the Women's Wall resolved to uphold the values of Kerala's renaissance, ensure gender justice, and counter moves to turn the state into a lunatic asylum.
- The event was also a counter demonstration against the agitations preventing women of menstruating age from entering the Sabarimala shrine in violation of the Supreme Court's ruling.
- During the event, participants took a pledge to protect the values of social reformation movement, to support the idea of gender equality as conceived by the Constitution and to oppose any efforts to turn Kerala into "a lunatic asylum".

Renaming of Allahabad as Prayagraj

Why in news?

- The Union Ministry has approved the proposal of the Uttar Pradesh Government to rename Allahabad as Prayagraj.

Why the name change was proposed?

- The government of Uttar Pradesh has said that it is restoring the original name of the city.
- The government states that the city was rechristened during the reign of Mughal Emperor Akbar.
- The city of Allahabad was originally known as Prayag in ancient times. Between 1574 and 1583, the 16th-century Mughal emperor Akbar founded a fort near the confluence of the Ganga and the Yamuna, known as Sangam, as he was impressed with its strategic position.
- Hence, Akbar named the fort and its neighbourhood as Ilahabad, which meant

the "Abode of God", inspired by the religion he had founded, **Din-i-Illahi**.

- In the later years, Akbar's grandson Shah Jahan renamed the entire city as Allahabad. However, the area near the Sangam, which is the site of the Kumbh Mela, continued to be called Prayag.

Procedure for changing Names:

- The proposals of the states would be scrutinised by the Union Home Ministry according to the existing guidelines in consultations with agencies concerned.
- The Ministry approves the proposal after taking no objections from the Ministry of Railways, Department of Posts and Survey of India, which confirms that there is no such city, town or village in their records with a name similar to the proposed one.
- Then an executive order is passed on the renaming of cities.

Spiritual department for MP

Why in news?

- Madhya Pradesh Government is going to create an **Adhyatmik Vibhag (spiritual department)** by merging several existing departments.
- The proposed Adhyatmik Vibhag (Spiritual Department) going to be formed by merging Dharmik Nyas Evam Dharmasv Department (Religious Trust and Endowment Department), Anand Vibhag (Happiness Department) in addition to the Directorate of Religious Trust and Endowment, Madhya Pradesh Teerth Evam Mela Pradhikaran and Rajya Anand Sansthan.

Anand Vibhag (Happiness Department):

- **Madhya Pradesh** had become the **first state** in the country **to create Happiness Department**.
- The government had also announced the setting up of the Happiness Institute.
- Before announcing the creation of Happiness Department, the state government had undertaken an in-depth study of the measures taken to assess the status of happiness among the citizens by the United Nations as well as the Government of Bhutan and America's International Management Institute.

Postal stamps

Why in news?

- A postal stamp dedicated to **Nabin Chandra Das, inventor of Rosogolla** was launched recently on Bagbazar-O-Rosogolla Utsob marking the 150th year of its invention.

Bagbazar-O-Rasogolla Utsob:

- Bagbazar O Rosogolla Utsob, a three-day Rosogolla Utsav is being held at Bagbazar, Kolkata as a tribute to Nabin Chandra Das, inventor of Rosogolla.
- The statue of Nabin Chandra Das was also unveiled during the inaugural programme.
- **West Bengal** has been awarded the **Geographical Indication (GI)** for “**Banglar Rasogolla**” (Bengal rasogolla).
- The decision for the Banglar Rosogolla has been made under the **GI Act** that authenticates products to either geographical locations or to communities or societies.

Geographical Indications of Goods (Registration and Protection) Act, 1999:

- GI Act is an **Act of the Parliament of India** for protection of geographical indications in India.
- India, as a member of the World Trade Organization (WTO), enacted the Act to comply with the Agreement on Trade-Related Aspects of Intellectual Property Rights.
- The GI tag ensures that none other than those registered as authorized users (or at least those residing inside the geographic territory) are allowed to use the popular product name.

What is a Geographical indication?

- A geographical indication (GI) is a **name or sign used on products which corresponds to a specific geographical location or origin** (e.g. a town, region, or country).

- In order to function as a GI, a sign must identify a product as originating in a given place. In addition, the **qualities, characteristics or reputation of the product** should be essentially due to the place of origin. Since the qualities depend on the geographical place of production, there is a clear **link between the product and its original place of production**.
- The use of a geographical indication may act as a certification that the product possesses certain qualities, is made according to traditional methods, or enjoys a certain reputation, due to its geographical origin.
- Geographical indications are typically used for agricultural products, foodstuffs, wine and spirit drinks, handicrafts, and industrial products.

New Delhi World Book Fair

Why in news?

- New Delhi World Book Fair is a platform for displaying our rich treasure of knowledge through books. It is not just an opportunity for a reader but it also provides a huge platform to the publishers who exhibit their numerous books at the event.
- Organised by National Book Trust, in association with ITPO.
- The **theme** of the 27th edition of the New Delhi World Book Fair is “**Readers with special needs**”.

ITPO (India Trade Promotion Organisation)

- It is the nodal agency of the Government of India under aegis of **Ministry of Commerce and Industry** for promoting country's external trade.
- It is Mini-Ratna Category-1 Central Public Sector Enterprise (CPSE) with 100% shareholding of Government. It is headquartered at Pragati Maidan, New Delhi.

News in-depth

General Studies-1

Left out abused

Introduction:

- Mapping and Review Exercise of Child Care Institutions (CCI) is a pan India report on safety of child care institutes prepared by the Ministry of Women and Child Development (MoWCD). The report was made public by the Ministry of Women and Child Development.

About the report:

- Mapping and Review Exercise of Child Care Institutions is a pan India report on safety of child care institutes prepared by the Ministry of Women and Child Development (MoWCD).
- The survey conducted between December 2015 and March 2017 highlighted poor safety and security measures, inadequate monitoring of these facilities, and a lack of effort to trace parents of missing children sent to these homes.
- The detailed report shows that only 46.7% of the total homes had adequate number of caregivers per child and only 28.7% centres were able to tend to inmates showing signs of hunger or illness and 65.9% of homes were able to actively supervise children under trauma.
- The report also says that the lack of infrastructure facilities is “glaring” and finds that more than 1,000 homes did not have a dormitory for children, raising questions about sleeping arrangements made for them.
- The report finds that even though there are several mechanisms for monitoring, regular inspections of these shelters were not being carried out.



The shocking neglect of the child care institutes:

- A home meant to protect girls rescued from exploitation itself turned into a den of predation.
- The shocking rot in the management of such shelters has now been reported by a Central government committee. It studied 9,589 Child Care Institutions and Homes, mostly run by NGOs that come under the Juvenile Justice (Care and Protection of Children) Act.
- Most of the inmates are orphaned, abandoned, sexually abused, trafficked or victims of disasters and conflict.
- Among them are 7,422 children in conflict with the law, and 3,70,227 in need of care and protection, including 1,70,375 girls.
- They often have to live in facilities without proper toilets, secure compounds or the opportunity to vent their grievances as provided for under law underscores the painful reality that they remain virtually invisible.
- As per the recently disclosed study, only 32% of Child Care Institutions or Homes were registered under the JJ Act as of 2016, while an equal number were unregistered, and the rest were either empanelled under other schemes or awaiting registration.
- The panel found child care standards were poor in many institutions without proper bedding, food, nutrition and sanitation.
- Some States obviously have too few homes, giving authorities little incentive to take up cases of children in distress. Tamil Nadu,

Maharashtra and Kerala together account for 43.5% of all shelters.

- A few States do not have even one home of every category, such as child care, observation and adoption.

Way forward:

- Reform of this depressing system, as the Ministry of Women and Child Development seeks, can be achieved only through systematic scrutiny by State governments.
- This could be done by appointing special officers whose task it would be to ensure that all institutions register under the JJ Act, account for funds received by each, and enforce mandatory child protection policies during adoption.
- The priority should be to bring about uniformity of standards and procedures, evolving common norms for infrastructure, human resources, financial practices and external audits.
- The Ministry's study lays bare the disconnect between civil society and the welfare system for children, and the poor engagement of elected representatives with such a vital function.
- The imperative now is to turn the findings of the Ministry's committee into a blueprint for action. Credentialed NGOs should take a greater interest in this effort, holding the authorities to account.

Open defecation continues unabated

Introduction:

- Swachh Bharat Abhiyan (SBA) or Swachh Bharat Mission (SBM) is a nation-wide campaign in India for the period 2014 to 2019 that aims to clean up the streets, roads and infrastructure of India's cities, towns, and rural areas.
- The campaign's official name is in Hindi and translates to "Clean India Mission" in English.
- The objectives of Swachh Bharat include eliminating open defecation through the construction of household-owned and community-owned toilets and establishing an accountable mechanism of monitoring toilet use.
- Run by the Government of India, the mission aims to achieve an "open-defecation free" (ODF) India by 2 October 2019, the 150th anniversary of the birth of Mahatma Gandhi.

- With targeted date nearing, has SBM really achieved its goal, is a question that needs to be analysed.

Parliamentary Panel report on Swachh Bharath Mission:

- Many toilets constructed under the Swachh Bharat Mission have already become defunct and unusable, **according to the Parliamentary Standing Committee on Rural Development.**
- It slammed the Ministry of Drinking Water and Sanitation for not bothering to find out the scope of the problem, despite an earlier recommendation to conduct a survey.
- Dysfunctional toilets are those which were constructed under earlier rural sanitation programme, especially during Total Sanitation Campaign, with incentive of ₹500 to ₹3,200.
- Funds from the Finance Ministry's **Swachh Bharat Kosh, which channels private and corporate money to the mission (SBM)**, were being used to retrofit these defunct toilets constructed under earlier schemes.
- The toilets already constructed under SBM have become defunct and non-usable due to various reasons pertaining to the quality of construction and scarcity of water.

Observations regarding the Open Defecation:

- New research on the impact of the Swachh Bharat Mission in the rural parts of four northern States shows that while open defecation has fallen and toilet ownership has increased, the percentage of people who owned toilets but continued to defecate in the open has remained unchanged between 2014 and 2018.
- This indicates that the Mission has been more successful at toilet construction than at driving behaviour change, according to the authors of the study, **being released by the research institute for compassionate economics (r.i.c.e.) and the Accountability Initiative of the Centre for Policy Research.**
- Approximately 44% of people over two years old in rural Bihar, Madhya Pradesh, Rajasthan and Uttar Pradesh still defecate in the open.
- According to the Mission, Madhya Pradesh and Rajasthan are already open defecation free or ODF states.

- Bihar has achieved 98.97% coverage of toilets for every household, while Uttar Pradesh has achieved 100%, according to government data, although the state has yet to be declared ODF.
- Almost 60% of households covered by the survey which did not have a toilet in 2014 had one by 2018, said the study.

Way forward:

- Since Open Defecation Free villages and cities cannot be achieved without all the households and individuals conforming to the desired behaviour of toilet use, community action and generation of peer pressure on the outliers are the key.
- Therefore, behaviour change communication should focus on triggering entire communities. Community based monitoring and vigilance committees are essential to create peer pressure.
- Availability of water is an important factor for sustaining sanitation facilities created.

Breaking the stranglehold

Introduction:

- On the year 2017, 52 trafficked labourers had been rescued from a ginger farm in Karnataka where they had been made to work inhuman hours with little pay.
- Though this issue occupied the limelight in news and social media, what the issue really missed is India is still witnessing the secret shame: the bonded labour.
- The Global Slavery Index 2016 estimated there to be 1.8 crore Indians in modern slavery, including bondedness, while the International Labour Organisation said there were 1.17 crore bonded labourers in 2014.
- Most of the Bonded Labour comprises of socially & economically weaker sections like SC's, ST's, Poor etc.

Issues related to bonded labour:

- There has been no government-led nationwide survey on the number of bonded labour since 1978, despite each district having been given ₹4.5 lakh for conducting such surveys.
- Instead, the government relies on rescue and rehabilitation numbers: Since 1976, over 3.13 lakh people have been rescued, with Karnataka topping the list (nearly 66,300 people).
- This does not reflect the extent of the prevalence of bonded labour, as most

Officers IAS Academy, Chennai labourers are not aware of the Act and turn to the authorities only when it becomes overtly violent.

- Moreover, National Crime Records Bureau data show that not all cases are reported by the police.
- Between 2014 and 2016, they recorded just 1,338 victims, with 290 police cases filed, a stark difference from 5,676 rescues reported by six States in this period.

Bonded Labour System (Abolition) Act, 1976:

- Bonded Labour System has been abolished by law throughout the country with effect from 25th October, 1975 under the Bonded Labour System (Abolition) Ordinance which was replaced by the Bonded Labour System (Abolition) Act, 1976.
- Under the Act, it is the **responsibility of State governments** to identify, release and rehabilitate the bonded labour.
- The Act provides for the **economic and social rehabilitation** of the freed bonded labourers.
- In order to assist the State Governments in the task of rehabilitation of identified and released bonded labourers, a Centrally Sponsored Plan Scheme for Rehabilitation of Bonded Labour was in operation since May, 1978.
- The Government has revamped the Centrally Sponsored Plan Scheme for Rehabilitation of Bonded Labourers with effect from 17th May, 2016. The revamped scheme is known as the '**Central Sector Scheme for Rehabilitation of Bonded Labourers, 2016**'

Scheme for Rehabilitation of Bonded Labourers, 2016:

- The revised scheme is a Central Sector Scheme i.e. the State Government is not required to pay any matching contribution for the purpose of rehabilitation assistance.
- Rs 4.50 lakh will be provided per district for survey of bonded labourers.
- Release of rehabilitation assistance is linked to conviction of accused.
- Creation of Bonded Labour Rehabilitation Fund at district level by each state.
- Financial assistance to adult male beneficiary, special category beneficiaries (such as children including orphans or those rescued from organized & forced begging rings and women) & involving extreme cases of deprivation and marginalisation (such as trans-genders, or woman or children rescued from ostensible sexual exploitation such as brothels or trafficking, or in cases of differently abled persons).

Conclusion:

- The Ministry of Labour says, “The root of the problem lies in the social customs and economic compulsions,” before listing a “multi-pronged” strategy which focusses solely on rescue and rehabilitation processes.

- However, a preventive measure, which must start with a survey, is missing. Creating financial access for vulnerable communities/vulnerable districts could help.
- Further, regulatory attention must focus on trafficking rings and sectors.

General Studies-2

Lessons from Kerala

Introduction:

- On October 2018 at Astana, Kazakhstan the world leaders declared their commitment to the “Primary Health Care (PHC)”.
- This declaration was a reaffirmation to the predecessor declaration in Alma Ata in 1978.

Global Conference on Primary Healthcare:

- In 1978, a pivotal conference was held in Almaty, Kazakhstan, bringing together health experts and world leaders to commit to health for all.
- Endorsed at that conference, the declaration formed the foundation for the last 40 years of global primary health care efforts.
- The Global Conference on Primary Health Care in Astana, Kazakhstan in October 2018 endorsed a new declaration emphasizing the critical role of primary health care around the world.
- The declaration aims to refocus efforts on primary health care to ensure that everyone everywhere is able to enjoy the highest possible attainable standard of health.
- The Astana Declaration would “aim to meet all people’s health needs across the life course through comprehensive preventive, promotive, curative, rehabilitative services and palliative care”.

The Kerala experience:

- **Kerala focuses on Human Resource:** In the revamped primary care, Kerala tried to provide primary care services but with mixed results. These services cannot be provided without adequate human resources.
- It is nearly impossible to provide these services with the current Indian norm of one primary care team for a population of 30,000. Kerala tried to reduce the target population to 10,000.
- Even the reduced target turned out to be too high to be effective. Kerala’s experience

suggests that providing comprehensive primary care would require at least one team for 5,000 populations. This would mean a six-fold increase in cost of manpower alone.

- **Need for more allocation of funds:** Since supply of more human resources would generate demand for services, there would be a corresponding increase in the cost of drugs, consumables, equipment and space.
- So, a commitment to provide comprehensive primary care even in the limited sense in which it is understood in India would be meaningful only if there is also a commitment to substantially increase the allocation of funds.
- It is sobering to remember that most successful primary care interventions allocate not more than 2,500 beneficiaries per team.
- **Specialised training:** Providing the entire set of services, even if limited to diagnosis and referral, is beyond the capacity of medical and nursing graduates without specialised training.

Way forward:

- The primary care system will be effective only when the providers assume responsibility for the health of the population.
- Kerala model of allocating few target beneficiaries to the health professionals and recruitment of specialised professionals will go a long way in achieving great heights in PHC.

A liberal move

Introduction:

- Among the first decisions taken by Ashok Gehlot’s government after assuming power in Rajasthan was to scrap minimum educational requirements for candidates contesting local body elections.
- This is a progressive move and will restore the right to contest, at least in theory, to a large section of the population in the State,

where the literacy rate, according to the 2011 Census, was 52% for women and 79% for men.

Key provisions of the Rajasthan Panchayat Raj bill:

- Contestant for Zila Parishad or Panchayat Samiti elections should have the minimum qualification of secondary education i.e. Class 10 from the state board or any approved institution or board.
- Contestant for the Sarpanch elections must have passed Class VIII from any school in case of general category.
- In case of the scheduled area of Panchayat, the contestant should have passed Class 5 from a school to become a Sarpanch.
- The provision of mandatory functional toilet in the house of a contestant also added in the parent act by amending section 19.

Positive aspects of the present move:

- The bill was ill-considered from the very beginning. It was, however, an act of paternalism that militated against the basic assumptions of a liberal democracy.
- It penalised the people for failure to meet certain social indicators, when in fact it is the state's responsibility to provide the infrastructure and incentives for school and adult education.
- And it defeated the very purpose of the panchayati raj institutions, to include citizens in multi-tier local governance from all sections of society. These requirements had the effect of excluding the marginalised.

Conclusion:

- In a liberal democracy, governments must desist from putting bars on who may contest, except in exceptional circumstances, such as when a candidate is in breach of particular laws.
- To mandate paternalistically what makes a person a 'good' candidate goes against the spirit of the attempt to deepen democracy by taking self-government to the grassroots.

A case of unprincipled criminalisation

Introduction:

- Some experts opine that the content of the Muslim Women (Protection of Rights on

Officers IAS Academy, Chennai Marriage) Bill, 2018 (Triple Talaq Bill) reflects a sectarian overtone that even attempted to mislead the public by distorting the Supreme Court judgment in Shayara Bano's case (2017).

A Case of Disproportionate punishment?

- First of all, in the judgment in **Shayara Bano case, the majority on the Bench had invalidated the practice by terming it as unconstitutional.**
- The simple and plain effect of the verdict is that the pronouncement of triple talaq is a nullity having no legal effect at all on a subsisting marriage, and despite the husband's gesture, the matrimonial bond would remain intact, without being dissolved, in the eye of the law.
- Therefore, the Bill proposes to criminalise an act which does not exist in the eye of the law.
- Thus, experts opine that the disproportionate **punishment of imprisonment for three years** for a civil wrong without even a civil consequence due to the Supreme Court's judgment is antithetical to the very idea of principled criminalisation.
- Secondly, the majority verdict in Shayara Bano did not direct the government or Parliament to criminalise triple talaq or "to give effect to the order", as implied in the Bill. Experts opine that there was no need to do so either, as the judgment got effectuated on its own.
- Thirdly, criminalisation of triple talaq, can only motivate a "clever" husband to resort to other methods of divorce which do not fall within the ambit of the Bill or to simply desert his wife. Thus, the Bill does not serve the Muslim woman's interest.

Conclusion:

- Marriage, divorce all comes under the ambit of civil cases. The provision of criminal punishment to a civil wrong will not serve the purpose.

Nuclear Games

INS Arihant

- INS Arihant is India's first indigenously-designed, developed and manufactured nuclear-powered ballistic missile submarine.
- INS Arihant is a nuclear submarine capable of carrying nuclear tipped ballistic missiles.

Thus, it belongs to class referred to as Ship Submersible Ballistic Nuclear (SSBN).

- It weighs 6000 tonnes and is 112 metre long. It is powered by 83 MW pressurised light water nuclear reactor with enriched uranium fuel.
- Ship Submersible Ballistic Nuclear are designed to prowl the deep ocean waters and carry nuclear weapons. They provide a nation with an assured second-strike capability

Second Strike capability

- The theory is that if country A initiates a nuclear attack on country B in a first strike, country B must be in a position, even after absorbing the nuclear strike, to retaliate with a massive nuclear attack on the enemy country.
- This is called second strike capability.
- In the event that country A manages to destroy the land and air-based nukes of country B, country B will still have its third leg in the shape of sea-based nuclear-tipped missiles, called SLBMs or submarine-launched ballistic missiles, for use against country A because the sea-based missiles, launched from nuclear-powered submarines, would have remained undetected and hence safe from enemy attack.

Nuclear triad capability of India

- India is sixth Nation in the world (after US, Russia, France, China and UK) to possess Nuclear Triad.
- It means that India is capable of delivering nuclear weapons by aircraft, land based ballistic missiles and submarine launched missiles.
- In the nuclear triad, the naval leg is mostly used for retaliation purpose after the first attack, since it remains undetected.

Is nuclear triad needed?

- In case of using conventional warfare, the destruction is mostly minimised and limited only to the countries which are involved in war.
- But in case of nuclear warfare, the demolition levels spreads to other regions which are also not involved, which blocks the nations to indulge in this kind of warfare.
- The United Nations will also make effective steps to stop the declaration of war between countries with the help of other world countries.

- With Indian scenario, Pakistan is still a long way away from having the naval leg of the triad, India's land and air-based nukes are enough as a deterrent.
- China is far ahead of India in many respects. It has more warheads and more nuclear-powered submarines.
- Both India and China have repeatedly declared adherence to the no-first-use doctrine. So, there is no justification for acquiring the naval leg of the triad.

Way forward

- The acquisition of expensive conventional platforms, as well as the ever-expanding nuclear programme is seen as a major threat to world peace.
- Along with the Non-Aligned Movement (NAM), India is a strong advocate for a time-bound disarmament commitment from nuclear-weapon-states (NWS).
- India has been in the forefront of the campaign for total nuclear disarmament.
- It should not at least escalate a nuclear arms race in its own region.

A new relation in West Asia

Enemy's Enemy

- Israel and Saudi Arabia had started building their relationship, with Iran as a common enemy between them.
- Israel and Saudi Arabia were the two countries that opposed to the 2015 international agreement limiting Iran's nuclear programme, Joint Comprehensive Plan of Action (JCPOA)
- Saudi Arabia is engaged in a fierce competition with Iran for influence in the Persian Gulf and West Asian region.
- Iran is a potential challenger to Israel's nuclear monopoly in West Asia and uses its influence to reduce Israeli dominance of the region.

Benefits harvested

- Saudi Arabia is likely to induce other Arab states to open for Israel investments which brings substantial economic benefits to Israel.
- The Israeli government estimates that improved relations with the Saudi regime will help resolve the Israeli-Palestinian conflict to Israel's satisfaction.
- Israel and Saudi Arabia have a common interest in preventing the democratization of Arab countries.

- Authoritarian governments in the Arab world allow Israel to be the only democracy in West Asia.

The controversial murder

- Jamal Khashoggi was a journalist who was once a Saudi government insider, but had gone to U.S. in 2017.
- He'd become an outspoken critic of the Saudi Arabia's powerful Crown Prince Mohammed bin Salman.
- Khashoggi was recently found murdered.
- The controversy is particularly damaging for Saudi Arabian Crown Prince Mohammed bin Salman, who spent millions to project himself as a social and economic reformer who could lead Saudi Arabia into the 21st century.
- The Saudi Arabian prince, who many believe ordered the killing, has been the focus of intense criticism and he cannot, therefore, afford to take greater political risks at this moment by continuing the talk with Israel.

Recent developments

- In Syria, Iranian and Russian support for President Bashar al-Assad has largely defeated the rebel group groups backed by Saudi Arabia.
- Saudi Arabia is trying desperately to contain rising Iranian influence and the militaristic adventurism.
- There are also external forces at play. Saudi Arabia has support from the Trump administration while Israel, which sees Iran as a mortal threat, is in a sense "backing" the Saudi effort to contain Iran.

Way forward

- Common enemy as Iran and their close security relationship with the U.S. will eventually prompt Saudi Arabia and Israel to resume their relationship.
- True progress in the political process between Israel and the Palestinians may expand the basis of common interests.
- It may allow Israel to demand greater support from Saudi Arabia to promote political initiatives and assist in building the Palestinian state.
- After the Khashoggi murder case is solved, the relationship between Israel and Saudi Arabia will be resumed and may be taken to another level.

India-Bangladesh Historical Ties

- India was the first country to recognize Bangladesh as a separate and independent state and established diplomatic relations with the country immediately after its independence in December 1971.
- The relationship between India and Bangladesh is anchored in history, culture, language and shared values of secularism, democracy, and countless other commonalities between the two countries.
- Both the countries share common border of over 4,000 km with each other.

Economy relations

- Bangladesh is India's largest trading partner in South Asia with an annual turnover of around \$9 billion.
- Both countries are looking at strengthening economic cooperation through joint investments and cooperation under the 'Blue Economy' programme.
- Blue economy refers to marine-based sustainable economic development with reducing environmental risks and ecological problems.
- They help each other in exploration of hydrocarbons, marine resources, deep-sea fishing, preservation of marine ecology and disaster management.
- Bangladesh government has proposed to create Special Economic Zone for India in Bangladesh for better trade.
- To enable more Bangladeshi exports to flow into India, duty free entry was granted in 2011 under the South Asian Free Trade Area.
- This has led to an increase in exports from Bangladesh from around \$350 million to the current level of around \$900 million.
- Indian investment in Bangladesh has reached \$3 billion.

Other sectors

- Bangladesh has provided cyber connectivity between the international gateway at Cox's Bazar to Agartala for faster Internet connectivity in India's north-eastern states.
- India has planned to export around 1100 MW of power to meet the energy deficit in Bangladesh. Power projects of more than 3600 MW are under implementation by Indian companies in Bangladesh.

Border issues

- The border is used as a route for smuggling livestock, food items, medicines and drugs from India to Bangladesh. Moreover, illegal

immigrants from Bangladesh cross the border to India in search of improving their lives.

- The government has decided to use smart fencing system to stop the illegal activities throughout the border.
- The migrant's problem has been in a large scale since the independence of Bangladesh from 1971, which has created tension in the north eastern states.
- Migration of Rohingyas from Myanmar through Bangladesh to India has become a major problem in recent times.

Teesta problem

- Teesta river which is also a tributary of the Jamuna River (Brahmaputra), flowing through India and Bangladesh.
- India and Bangladesh have disputes with regards to sharing of Teesta River water (currently, Bangladesh's share of Teesta water (37.5%) is lower than that of India's (42.5%))
- Several districts of West Bengal are dependent on the waters of Teesta and is the sole water source for the North of West Bengal.

Regional cooperation

- Both the countries are in the following regional groupings:
 1. BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation)
 2. BBIN (Bangladesh, Bhutan, India, Nepal) Initiative.
 3. SAARC (South Asian Association for Regional Cooperation)

Challenges ahead

- With the publication of the draft National Register of Citizens in Assam, the bilateral ties must be taken care in high profile as migrants are mostly from Bangladesh during the cut off year of 1971.
- While Bangladesh is dependent on India for trade, it is mostly depending on China for defense procurement.
- National Investigation Agency sources said fake currency was now being smuggled into the border with Bangladesh has gaps at some points and immigrants cross into India on foot through the breaks in the fence.
- Insurgency has been playing the role in straining relations of India with Bangladesh. Northeast India has been facing insurgency since 1956 due to

feelings of ethnic separatism among its inhabitants.

Way forward

- India has provided about \$500 million Line of credit for procurement of defense-related goods from India.
- Early resolution of the Teesta issue is necessary.
- Greater connectivity networks must be created which will be pivotal for the better relation between the countries.
- A greater level of people-to-people contact should be encouraged.
- Connectivity should be given top most priority.
- India-Bangladesh relations can be brought into three **'T's- Tackling Terrorism, Trade & Transit, Teesta Treaty.**
- Since Bangladesh is one of the important pillars in India's Act east policy, better relations are required for the development of foreign policy.

Powering South Asian integration

Introduction:

- Union Ministry of Power issued (Guidelines for Import/Export (Cross Border) of Electricity, 2018) a seemingly anodyne memo that set the rules for the flow of electricity across South Asian borders.

Guidelines for Import/Export (Cross Border) of Electricity, 2018:

- Facilitate import/ export of electricity between India and neighbouring countries;
- Evolve a dynamic and robust electricity infrastructure for import/ export of electricity;
- Promote transparency, consistency and predictability in regulatory mechanism pertaining to import/ export of electricity in the country;
- Reliable grid operation and transmission of electricity for import/ export.

A course correction:

- The revision is a response to two years of intense backroom pressure from neighbours, particularly Bhutan and Nepal, to drop trade barriers put up in 2016.
- The new guidelines meet most of their demands that were timed to coincide with the recent visit of Bhutan's new Prime Minister.
- India has thus signalled that it is serious about working with neighbours on the issues that should undergird 21st-century

South Asian regionalism, such as electricity trade.

- This course correction is a return to a trajectory of incremental, hard-earned progress developed over the decades.
- Ideas of tying South Asian Association for Regional Cooperation (SAARC) countries together with cross-border energy flows that punctuated the early 2000s began to gain steam with substantial power trade agreements between India and Bhutan (2006) and Bangladesh (2010).
- These were driven by India's need for affordable power to fuel quickened growth in a recently liberalized economy.

SAARC Framework Agreement:

- The apotheosis came in **2014** with the signing of the SAARC Framework Agreement for Energy Cooperation and the **India-Nepal Power Trade Agreement** in quick succession.
- The new government in New Delhi was keen on regional cooperation, and these agreements imposed few restrictions on trade.
- Instead, they laid the contours of an institutional structure that would allow private sector participation and facilitate market rationality in electricity commerce.
- The Union Ministry of Power released guidelines that imposed a slew of major restrictions on who could engage in cross-border electricity trade.
- There was a strong undercurrent of defensiveness in the guidelines of 2016.

Concerns:

- It seemed to be a reaction to perceptions of increased Chinese investment and influence in the energy sectors of South Asian neighbours.
- Earlier concerns that India was enabling the incursion of foreign influence into neighbouring power sectors seem to have been replaced by an understanding that India's buyer's monopoly in the region actually give it ultimate leverage.
- The South Asian grid system would mainly be located within the purview of Bangladesh, Bhutan, India, Nepal and therefore requires greater integration of energy deficient countries of Pakistan and Afghanistan and also for the ability of Sri Lanka to harness tidal and wind power to become part of a larger South Asian electricity grid system.

Way forward:

- The new guidelines are a tentative first step towards the creation of a true regional market in which generators across the subcontinent compete to deliver low-cost, green energy to consumers.
- Since this would soften the hard borders of South Asia, it is essentially a political vision.
- The new guidelines are a significant step in this direction because, for the first time, they allow tripartite trading arrangements, where power generated in a country is routed over the territory of a neighbour to be consumed in a third.
- This is a crucial move towards the evolution of complex, multi-country market arrangements.
- Such markets require the construction of regional institutions that absorb the politics and manage the technicalities of electricity trade.
- As volumes increase and experience in regional trade grows, South Asian nations might feel the need to build joint, independent regional institutions that proffer clear and stable rules of the road.
- The political vision to create this, which is felt in the new guidelines, must be maintained.

After the inevitable exit

Introduction:

- Despite the White House's spirited denial of reports that it has issued no orders for the pullout of U.S. troops, the course seems set for a thinning of American presence in Afghanistan.
- President Donald Trump had promised this during his campaign, and several advisers have said since then that he is keen to bring back most, if not all, troops before his re-election bid in 2020.

Background:

- Afghanistan was experiencing political, social and security instability, with extremists taking advantage of the turmoil in the country.
- The United States and its allies launched a military operation in Afghanistan in 2001, just after the 9/11 terror attacks. The mission in Afghanistan ended in 2014.
- On January 1, 2015, NATO announced its new mission in the country, called **Resolute Support**, to train and assist the Afghan security forces.

- Despite Washington's efforts, the Asian state is still being hit by multiple attacks against its civilians and military targets.
- President of United States unveiled his new "regional strategy" for Afghanistan, it was in large part a reiteration of the above speech in terms of strategic objectives. By now 2016 has become the worst year of the conflict.

Shift in policy:

- To begin with, it is time to recognize that the U.S.'s South Asia Strategy for Afghanistan, as announced by Mr. Trump in August 2017, has been discarded.
- Mr. Trump had defined the strategy with three features: that U.S. troops would remain involved in the country until "conditions", not a timeline, mandated their return; that the U.S. would put Pakistan on notice for its support to the Taliban and a political settlement with the Taliban would only follow "after an effective military effort"; and that the policy would hinge on further developing the strategic partnership with India
- Sixteen months later, it is easy to see that each element of the U.S.'s policy on the ground has shifted, if not been entirely reversed.
- The departure from the avowed U.S. position on an "Afghan-owned, Afghan-led" process has clearly ruffled feathers in Kabul.
- Putting the seal on the clear drift in the U.S. Afghanistan and South Asia policy from the past was the exit of Defence Secretary James Mattis, author of the South Asia policy.
- Mr. Mattis had pushed most strenuously to keep India in the Afghan game by swinging a waiver for India on Chabahar and Iran oil purchases.
- It remains to be seen whether Mr. Trump will continue those waivers past May this year.

Present Scenario in Afghanistan:

- The internal situation in Afghanistan is aggravated now by the **uncertainty of the democratic process.**
- Parliamentary elections were held in October 2018 after being delayed by more than two years, but even their preliminary results haven't yet been declared, casting doubt on the government's ability to conduct elections.

- Presidential elections have been postponed till July, despite the constitutional clause that they were to be completed by April 22, 2019.
- Meanwhile, Mr. Ghani has been unable to keep his commitment to hold a Loya Jirga (grand council of representatives) to turn Chief Executive Abdullah Abdullah's post in the NUG into an executive Prime Ministership.

US withdrawal vis-à-vis-India:

- For India, these developments may appear discouraging, but a more pragmatic view is necessary to deal with all possible outcomes.
- The U.S.'s eventual pullout as Afghanistan's peacekeeper is inevitable, and it would make more sense to prepare for it than to deny it will happen.
- New Delhi was caught off guard in 2010 when Mr. Obama planned the drawdown and discouraged India from a stake in projects there in an effort to placate Pakistan.
- Trump's administration has no doubt been much more welcoming of Indian investment in Afghanistan, but that itself is symptomatic of his desire to pare down "Pax Americana" in every part of the world.
- The removal or reduction of the U.S. presence from most theatres of action has created space for regional players: leaving Syria to Iran and its allies; Yemen to Saudi Arabia; Afghanistan to players like Russia, Pakistan and Iran; and Pakistan to China.

Some other hard truths must be faced:

- India cannot replace Pakistan's position geographically, nor can it ever offer the U.S. or any other force what Pakistan has offered in the past, including bases and permission for U.S. forces to bomb its own territory.
- Pakistan's problem is that it sees its relations with Afghanistan through the prism of its relations with India. It seeks a veto on Afghanistan's relations with India which the Afghans will not accept.
- Changing this dynamic requires getting rid of the military's stranglehold on Pakistan's India and Afghan policies.
- The decision to abandon the SAARC in favour of groupings like BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation), BBIN (Bangladesh, Bhutan, India, Nepal)

and IORA (Indian Ocean Rim Association) may have provided some short-term returns in “isolating Pakistan”, but it has had the effect of cutting Afghanistan loose from Indian leadership of South Asia as well.

Way Forward:

- India’s best course with Afghanistan remains its own regional strategy, not becoming a part of any other country’s strategy.
- Close bilateral consultations like this week’s visit to Delhi of National Security

Officers IAS Academy, Chennai Advisor Hamdullah Mohib, are the basis of India’s ability to help Afghanistan according to its needs, not India’s ambitions, and the reason for the immense popularity and goodwill India continues to enjoy in Afghanistan.

- Finally, it is necessary to recognise the cyclical nature of interventions in Afghanistan, which has been called the “graveyard of empires” for forcing all world powers to retreat at some point or the other.

General Studies 3

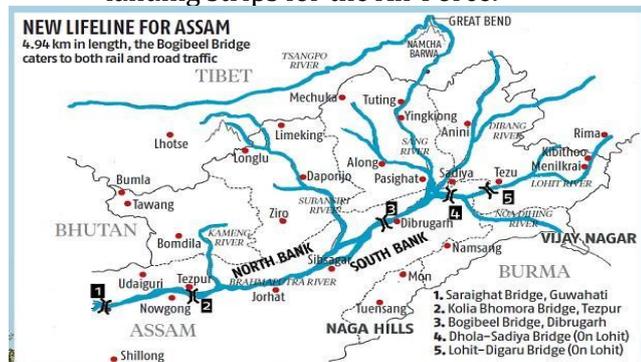
Infrastructure and North-East

Introduction

- Prime Minister Narendra Modi has inaugurated the Bogibeel bridge connecting Dibrugarh in Assam to Pasighat in Arunachal Pradesh over the river Brahmaputra.
- With a length of 4.94 km long this is now the longest rail-cum-road bridge in India.

Significance of the bridge

- The 4.9-km bridge will cut down the train-travel time between Tinsukia in Assam to Naharlagun town of Arunachal Pradesh by more than 10 hours.
- The bridge will reduce the distance to Northeast region by 165 km, saving fuel worth Rs 10 lakh per day in the region.
- People from Dhemaji, Jonai and North Lakhimpur who had to earlier travel the whole day to cross the Brahmaputra to reach Dibrugarh, will now cross the river within minutes.
- The construction of the bridge will be a major boost to improve logistical issues for the armed forces along the border in Arunachal Pradesh as India shares a nearly 4,000 km border with China. The three road lanes of the bridge can act as three landing strips for the Air Force.



- The inauguration of the bridge can be seen in line with the government's vision towards the holistic development of North East region (NER) via **3Cs- Connectivity, Communication and Commerce.**

Other initiatives for NER

North Eastern Region Community Resource Management Project (NERCORMP)

- Its objective is to improve the livelihood of vulnerable groups in a sustainable manner.

- Joint initiative of the North eastern Council, Ministry of DoNEAR and International fund for Agricultural Development (IFAD).

NITI Forum for North East

- It is tasked to identify various constraints on the way of accelerated, inclusive and sustainable economic growth in NER of the country and to recommend suitable interventions for addressing identified constraints.
- This forum will be co-chaired by the Vice-Chairman of NITI Aayog and MDoNER

North East Special Infrastructure Development Scheme

- It aims to fill the gaps in creation of infrastructure in physical (water supply, power connectivity, etc) and social sectors projects (education and health).

Act East Policy

- North east is seen as the gateway to Southeast Asia. GoI is keen to create all the infrastructure in the north east and strengthening the connectivity between north east and ASEAN countries in trade, culture, people to people contact and infrastructure.
- Some of the major initiatives include the Kaladan Multi Modal transit transport Project, the Rih-Tedim Road Project and Border Haats.

Role of north east council

- The North-Eastern Council (NEC) is a nodal agency for economic and social development of the north-east. The NEC members include governors and chief ministers of these eight states. It is implementing body of DONER ministry.
- It monitors whatever the projects are sanctioned by DONER ministry are properly implemented.

National Bamboo Mission

- To increase the coverage of area under bamboo in potential areas, with improved varieties to enhance yields;
- To promote marketing of bamboo and bamboo-based handicrafts;

Digital North East Vision 2022

- Envisioned as an integral part of Digital India programme to leverage power of Information Technology to leapfrog the overall development of North East region and realize its full potential.

Destination North East

- Organized every year to boost business and tourism.

Conclusion

- NER has the potential to develop into various niche markets. For example, Bamboo handicrafts, Citrus fruits from NER have huge markets in South East Asian countries. This potential can be tapped by providing adequate government support.
- These initiatives are a prerequisite to connecting people in NER with the mainland who were earlier left out.

New e-com norms spoil party for big players

Background

- In December 2018, the Department of Industrial Policy & Promotion issued a clarification to the existing rules pertaining to Foreign Direct Investment (FDI) in e-commerce companies.
 - From February 1, 2019, vendors that have **any stake** owned by an e-commerce company cannot sell their products on that e-commerce company's portal.
 - Any vendor who purchases **25% or more** of its inventory from an e-commerce group company will be considered to be controlled by that e-commerce company, and thereby barred from selling on its portal.
 - The e-commerce firm will not be allowed to influence the price of a product sold on its portal by giving incentives to particular vendors.
 - No seller can sell its products **exclusively** on any marketplace platform, and all vendors on the e-commerce platform should be provided services in a fair and non-discriminatory manner. Services include fulfilment, logistics, warehousing, advertisement, payments, and financing among others.

Context for these changes

- E-commerce companies can operate under two different models in India.
 - **Marketplace based model** where the e-commerce firm simply acts as a platform that connects buyers and sellers. FDI is allowed in e-

Officers IAS Academy, Chennai commerce companies in this model.

- **Inventory based model** where the inventory of goods sold on the portal is owned or controlled by the e-commerce company and is sold to the consumers directly. FDI is not allowed under this model.
- The tightening of the e-commerce rules must be seen in the context of alleged misuse of this marketplace model by many an e-commerce firm. These firms are alleged to use a circuitous mechanism to get around the restrictions in a marketplace model.
- Large e-commerce companies such as Amazon and Flipkart, while not owning inventory themselves, have been providing a platform for their group companies such as CloudTail and WS Retail respectively.
- This kind of a relationship with vendors is the primary reason for price unfairness in the e-commerce marketplace. It may seem beneficial for end customers. Yet, it has managed to destroy the competitive ecosystem.

Who benefits?

- The thrust of the DIPP policy is directed at protecting small vendors on e-commerce websites. It seeks to ensure small players selling on the portals are not discriminated against in favour of vendors in which e-commerce companies have a stake.
- Traders running traditional brick-and-mortar stores, who now find it difficult to compete with the large e-commerce retailers with deep pockets, could gain.

Who will be affected?

- These clarifications will have a major impact on the major e-commerce players like Amazon and Flipkart since most of them primarily source goods from sellers who are primarily relevant to such e-commerce players. Now, they will not be able to sell them on their platforms if they hold equity in the company manufacturing them.
- The provision may hurt start-ups as well since many of these will be barred from selling due to minor equity stakes being held by the e-commerce companies.

Conclusion

- The new rules may be interpreted as negative for attracting FDI. Further, there

could be considerable noise as to how these will hurt job creation in the country.

- Nevertheless, the fact that many unreported job losses too have happened with the advent of these marketplace cannot also be wished away.
- To the extent that these rules are intended to set right a wrong, these are welcome.

NPA ratios improve, but are still high: Das

Introduction

- RBI has released its biannual Financial Stability Report (FSR). The report indicates that the banking sector is on course to recovery.

Highlights of the report

- The gross non-performing asset ratio (GNPA) of commercial banks improved to 10.8% in September from 11.5% in March and is set to improve further to 10.3%. This was the first half yearly decline in the ratio since September 2015.
- GNPA of state-run banks improved to 14.8% in September 2018 from 15.2% in March 2018, while private sector banks' gross NPAs fell to 3.8% in September 2018 from 4% in March 2018.
- The credit growth of banks improved in September 2018, driven largely by private sector banks.
- The restrictions imposed on 11 public sector banks under the prompt corrective action (PCA) framework has helped in reducing contagion losses on the banking system in case these lenders fail.

Some concerns remain

- State-owned banks continue to have higher levels of bad loans than private banks and are projected to show slower improvements over the second half of the fiscal.
- One reason is that PSBs have a disproportionately higher share of bad loans from among large borrowers, who accounted for almost 55% of loans advanced by all banks as of September.
- Another concern is the capital adequacy ratio (CAR) of state-run banks declined from 11.7% to 11.3%.
- While the report noted that the banking sector is on course to recovery, it stressed that public sector banks need governance reforms.

- The non banking finance companies (NBFCs) need to be more prudent on risk-taking and need to rebalance excessive credit growth, especially the one funded by short term liabilities.

Way Forward

- RBI Governor Shaktikanta Das said that though there is an improvement in NPA ratio, its current level remains still high for comfort.
- The report has also spotlighted the urgent need to tighten the oversight framework for financial conglomerates in the wake of the IL&FS crisis.
- Regulators and policymakers need to work together to insulate the economy from the risks of similar fiascos.

GST shortfall

Introduction

- The GST system settled down reasonably well in 2018, with compliance increasing on account of various anti-evasion measures undertaken by the Centre, and rates being rationalised.
- As the year progressed, the GST Council continued with its frequent meetings and came up with several measures to simplify the system, including addressing the problems being faced by SMEs and exporters.
- However, Revenue collections from the GST are going too far off the mark for comfort. Inflows declined for the second consecutive month in December to Rs 94,726 crore from Rs 97,637 crore in November and Rs 1,00,710 crore in the month before.

Declining trend

- Between April and December, GST collections have averaged about Rs 96,800 crore, and have not even once met the monthly target of Rs 1,06,300 crore, as set by the Union Budget for 2018-19.
- Now in order to achieve the year-end target, GST collections over the next three months will have to reach an average of Rs 1,34,900 crore.
- But given the spate of tax rate cuts announced by the GST Council in December and Prime Minister Narendra Modi hinting at further rationalisation of rates for construction materials soon, the pressure on revenues is likely to persist.

- Separately, the Council is considering a relaxation in the GST norms for micro, small and medium enterprises by raising the annual sales threshold for compulsory GST registration from Rs 20 lakh to over Rs 50 lakh.
- Such a relaxation, along with regulatory steps like greater forbearance for small business loans, will boost sentiment among such firms, but it will further affect the tax collections.

Hit on capital expenditure?

- Other revenue heads, including direct tax or disinvestment receipts, are unlikely to be adequate to plug the GST shortfall.
- This poses a challenge for the Centre at a time when it would have been hoping to announce some populist measures ahead of elections, while retaining its macroeconomic management credentials.
- States' revenue collections under the GST regime have been uneven and a GST Council panel is examining inter-State variations. But the Centre is bound to compensate States for revenue shortfalls for the first five years of the GST regime.
- Unless the Centre decides to drop its fiscal deficit goals (which is 3.3 % of the GDP for the current fiscal), a squeeze on spending, including planned capital expenditure, may be the only option.

Increasing compliance, falling revenue

- There is a more problematic aspect to the dip in GST collections, based on economic activity and compliance trends in November.
- The total number of returns filed that month hit a high of 72 lakh from 55 lakh at the beginning of the fiscal, yet revenues fell.
- November also marked the onset of India's festive season, with a late Deepavali. Yet, the higher compliance and the festive fervour translated into collections lower than the average monthly receipts for the year till date.

Glitches remain

- Implementation of e-waybill system from April 1, 2018 was a move expected to check tax leakage, though the impact of this is still not as visible as the government would have hoped for.
- Further, there are some glitches in the GST set-up, most notably the Advance Ruling Authority (ARA) framework. The fact that these authorities have government officials

Officers IAS Academy, Chennai as members has meant that an overwhelming number of decisions are in favour of the Revenue Department, so fewer companies are approaching ARAs.

- Another issue is that various State-level ARAs often deliver contradictory judgments that confuse industry.
- In the last GST Council meeting, it was announced that the government would set up a centralised ARA that would take a decision in situations where there are contradictory rulings by State ARAs.
- It must be ensured that the centralised ARA has representation from both government and non-government sides.

Conclusion

- Though India's growth fell to 7.1% in the second quarter of this fiscal, an uptick in private investment over the same period was considered a sign of revival.
- But if consumers are not confident enough to spend, a consumption-led investment revival to take the economy to an 8% growth path seems elusive again.

Mind the gap

Introduction

- Eight months into the financial year, the Centre's fiscal deficit has already overshoot the full year's budget estimate by as much as Rs 92,349 crore.
- (Fiscal deficit target for 2018-19 is 3.3 % of the GDP which is about Rs 6.24 lakh crore)*
- And given last year's fiscal slippage — the deficit in the revised estimates for 2017-18 was 3.5% of GDP, wider than the 3.2% originally targeted — the signs of things to come is far from reassuring.

Centre's fiscal health	Budget estimates	Actuals	% of actual to Budget estimates	
	2018-19 (₹ crore)	(up to Nov 2018) (₹ crore)	2018-19	2017-18
Total receipts	18,17,937	8,96,583	49.3	54.2
Total expenditure	24,42,213	16,13,208	66.1	68.9
Fiscal deficit	6,24,275	7,16,625	114.8	112

Revenue shortfall

- While total expenditure growth, at 9.1% so far this year, has remained below the budget projection for a 10.1% increase, worryingly growth-inducing capital spending is set on an underwhelming trajectory. The 4% increase over the eight-month period is less than half the 9.9% growth the Centre had budgeted for the year.
- However, it is the trends in revenue that is the real cause for concern.

Of financial debacles and rating agency models

Introduction

- Post ILFS (Infrastructure Leasing & Financial Services) crisis, the spotlight is on credit rating agencies (CRAs). In this, the 'issuer pays' business model of CRAs seems to have borne the brunt of criticism.
- The primary concern surrounding ILFS' ratings is about timeliness, abrupt and steep transitions, slow/inadequate change even after evident distress, and inadequate use of 'outlooks'.
- That warrants questioning of the CRAs concerned in recent cases – CARE, ICRA and India Ratings – and also of others culpable in other instances.
- However, a comparison of other possible CRA business models would indicate that the problems lie elsewhere.

The issuer pays model

- Under this, CRAs are paid by the organizations whose debt they rate, and the ratings are publicly and freely available.
- Two aspects need reflection regarding potential conflicts, whereby a CRA might systematically assign inflated ratings to satisfy issuers.
- One, if a CRA consistently indulges in such a practice, it will lose credibility, which is a critical success factor in the business.
- Two, typically, CRAs collect upfront 100% of the non-refundable rating fee even before beginning the exercise. This eliminates payment risk and significantly reduces the incentive to assign favourable ratings.
- Therefore, despite the inherent, and potentially subversive, conflict in the model, these two aspects considerably mitigate the risk of malfeasance in practice.

The 'investor pays' model

- The investor pays model has the advantage of precluding the issuer-CRA nexus. But there are other problematic issues.
- One, only those who pay for a rating can access it. Two, the cost of rating can be exorbitant since only a few investors may seek it, and the public would likely be the most deprived.
- Lastly, under investor pays, issuers may not always share full information with CRAs, which can jeopardise the quality of ratings.

- The annual budget has projected revenue receipts to show a healthy 14.6% increase from the revised estimates for the preceding year.
- However, total receipts stood only at Rs 8.9 lakh crore, or 49.3 per cent of Budget estimates, against 54.2 per cent for the same period last fiscal.
- The April-November revenue receipts and net tax revenue growth numbers, at 8.1% and 4.6% respectively, are also far from reassuring.

Non-Tax revenue

- If there is a reason to cheer on the revenue front, it is the non-tax revenue, which surged more than 31%, putting the government comfortably on track to meet the budget estimate for a 3.9% increase.
- Still, non-tax revenue is budgeted to account for just over a seventh of total revenue and it is hard to see it helping bridge anything more than the smallest of shortfalls in tax receipts.

Need for fiscal discipline

- With the general election only a few months away, the government needs to avoid the temptation to announce populist measures with an eye on the political benefits that it may see accruing.
- Some of the expenditure plans it has committed to recently — public sector bank recapitalisation, increase in the quantum of incentives for the export of onions to reverse the slide in prices- will have impact on the fiscal margins.
- The seven public sector enterprises that have been cleared by the Cabinet for share sales as part of the disinvestment programme are, at best, only likely to partly help meet the budgeted non-debt capital receipts target of Rs 92,199 crore.
- The bigger challenge remains in finding ways to improve revenue head to keep the deficit from slipping for a second year running.

Conclusion

- As the Reserve Bank never tires of cautioning, the onus is on the government to avoid further fiscal slippage as it could hurt the economy by **crowding out** vital private investment. This at a time when it has just been showing signs of a revival.

- Therefore, on all counts, the investor pays model is decidedly inferior.

The government (or regulator) pays model

- Conceptually, the 'government or regulator pays' model can eliminate bias in ratings because there is no pecuniary incentive for the CRA. Here, the regulator can also mandate free dissemination of ratings to all. But this model introduces other complexities.
- The most serious problem with this model is the 'moral hazard' wherein all ratings can be seen as regulator-endorsed. This is antithetical to efficient market practices, and can pose potentially disastrous consequences for the government/regulator in the event of poor rating calls.

Conclusion

- Each model has its pros and cons, and conflict/moral hazard potential. It's imperative, therefore, to pick the model that best meets the primary objectives of credit rating – **high quality and open access** – when offering the best opportunity to manage any conflict.
- By those yardsticks, the issuer pays model recommends itself.
- There is a need for a deeper understanding of credit rating process, related systemic issues, and a more enlightened approach to evaluation of CRAs. That would facilitate greater transparency, high quality ratings, and healthy competition.

A global slowdown?

Introduction

- In 2018, stock markets across the world witnessed the return of extreme volatility after many years, and most of them recorded their worst performance in a decade.
- Much of this gloom has to do with the rise in fears that global economic growth could come to a grinding halt in the near future.

Is the next recession on the horizon?

- The economic expansion in the U.S., which began after the 2008 recession, is now the second-longest in history. Many believe that a recession is overdue now.
- China is another major concern as the People's Bank of China's earlier moves to rein in a massive credit-fuelled bubble (i.e. lenders accepting risky assets as collateral

Officers IAS Academy, Chennai for loans) have been dampening momentum with a lagged effect.

- China's private manufacturing sector contracted in December for the first time in 19 months and the official manufacturing PMI (purchasing managers' index) number dropped below 50 for the first time since mid-2016.
- Other major economies such as Europe and Japan have also shown signs of a potential slowdown in growth.
- The steep fall in the price of oil is another indicator of faltering demand for commodities as the global economy cools down.

Over-reliance on monetary policy

- The tightening of monetary policy has often been followed by a slowdown in economic growth, and this time may be no different.
- Going forward, a major worry for policymakers globally will be the lack of sufficient central bank firepower, should the global economy move into a full-fledged recession in 2019.
- After years of adopting a monetary policy regime marked by near-zero interest rates, central banks like the Fed now have very little room to lower rates if they want to fight a recession.
- The next recession may thus witness central banks adopting even more unconventional methods to stimulate their economies.
- Some hope that governments will ramp up spending to compensate for the lack of monetary policy leeway. But it is unlikely that any fiscal stimulus will fully compensate for the absence of an accommodative monetary policy, particularly when most governments are already deeply mired in debt.
- Further, the overuse of monetary policy will eventually lead to diminishing returns. A further escalation in the trade war between the U.S. and China is another imminent risk to global growth as additional tariffs could increase the overall tax burden on the economy.

Way Forward

- In order to tackle the next recession, policymakers will have to come up with reforms to boost economic productivity, instead of just relying on an ultra-easy monetary policy to boost their economies.

Hope with concerns in 2019

Introduction

- The New Year is always looked forward to with hope, whatever the conditions might have been the previous year; 2018 has been a mixed bag, both globally and domestically.

Investment ratio

- The growth rate of a country depends on the investment rate and the productivity of capital or its inverse incremental capital-output ratio (ICOR).
- ICOR depends upon a multiple number of factors such as quality of labour, which again depends on education and skill development levels, and technology, which is constantly changing. For ensuring a sustained high growth, we need to raise the investment ratio and keep the ICOR at 4.
- The Gross Fixed Capital Formation ratio has fallen from 35.8% in 2007-08 to 28.5% in 2017-18. The journey to raise the investment ratio is not going to be easy. A tranquil political and economic environment needs to be nurtured.

Banking system

- An important factor affecting economic growth is the condition of our banking system. NPAs, including stressed assets, as a proportion of loans of public sector banks stood at 16.7% as of March 2018.
- As many as 11 public sector banks are under Prompt Corrective Action (PCA). This restricts the lending abilities of these banks. Today, banks are responsible both for short-term and long-term lending. Their inability to lend affects the availability of working capital as well as capital expenditures.
- The decision to recapitalise PSBs must be completed soon. The growth rate in the industrial sector will depend on how quickly the banking system comes back to normalcy.

Employment growth

- There is a great concern about the inadequate growth of employment. However, we do not have satisfactory employment numbers. The employment data in the organised sector are reliable. But the employment in the informal sector is much larger.
- One question that is asked is that if growth is around 7%, why is there no

corresponding growth in employment? There are two factors.

- Growth can occur either as a result of increase in investment or because of better utilisation of existing capacity. It is growth which is led by new investment that leads to a significant increase in employment. But growth caused by improved efficiency of utilisation of existing capital can lead only to a marginal increase in employment. Much of the growth seen in the last few years is of the latter variety.
- Second, the increase in employment seen in the period between 2004-05 and 2009-10 was because of the rapid growth of the information technology (IT) and financial sectors. The IT sector has slowed down. The financial sector is under stress.
- The IT sector growth rate is not likely to pick up significantly as this industry is undergoing many structural changes. The revival of the banking system depends on a number of factors. Thus, even from the point of view of employment, the key factor is the pickup in investment.

Agrarian distress

- The future growth also depends on the performance of agriculture sector. Agrarian distress is widespread. Because of the increase in production, prices of many agricultural commodities have fallen.
- The solution to the fall in prices lies in government intervening in the market and buying off the surplus over normal levels. The market will then automatically take prices to the normal level.
- The important requirement in this context is not only the financial capacity of the government to procure but also adequate physical arrangements to procure and store. The procured agricultural products can be sold by the government in later years when output is low or utilised in any safety net programme.
- Loan waivers are at best short-term solutions. The fundamental problem is one of increasing productivity and enabling farmers to achieve increased output and better prices. A combined attack to increase productivity, consolidate landholdings and improve marketing is needed to assure farmers of better income.

Conclusion

- These issues need to be addressed comprehensively, if we have to achieve sustained high growth.

Chang'e-4

- China's Chang'e-4 mission has landed on the far side of the moon making it the first spacecraft to land on the far side of the moon.

Chang'e

- Named after Chinese moon goddess "Chang'e", China's lunar exploration program, which began in 2004, includes orbiting and landing on the moon, and bringing samples back to earth.
- First Chang'e spacecraft was launched in 2007 to verify China's lunar probe technology, obtain lunar images and perform scientific surveys.
- The Chang'e 2 followed in 2010 to carry out high-definition imaging of the moon and investigate landing conditions for the Chang'e 3.
- Chang'e 3 landed on the moon in 2013 becoming the first Chinese spacecraft and the third country after the US and USSR to soft-land. Chang'e 3 released the first Chinese lunar rover, Yutu, on the moon

Chang'e-4

- Chang'e 4 is the fourth lunar probe launched by China since the country's lunar programme was opened in 2004.
- The mission which includes a lander and a rover named Yutu-2 was launched aboard Long March-3B rocket
- The exploration will gain first-hand information about the terrain and lunar soil components and other scientific data, which will help enrich human understanding of the moon and the universe.
- The rover has been programmed to launch ground penetration radar that would help map the moon's inner structures.
- It would also analyse soil and rock samples for minerals, apart from activating a radio telescope to search for possible signals from deep space.
- The tasks of the Chang'e-4 include astronomical observation, surveying the moon's terrain, landform and mineral composition, and measuring the neutron radiation and neutral atoms to study the environment on the far side of the moon.

- The **Queqiao satellite** was launched last May by China for the very purpose of helping Chang'e-4 communicate with earth, as a direct communication with it is not possible from the moon's far side, which never faces earth

Dark side of moon

- Since the moon's revolution cycle is the same as its rotation cycle, the same side always faces the earth.
- The other face, most of which cannot be seen from earth, is called the far side or dark side, not because it's dark, but because most of it remains unknown.
- The dark side being thicker has circular spots that are craters formed by meteorite collisions
- The moon's far side also differs from the near side in that it is shielded from all the radio waves emanating from earth.
- Communication devices and satellites have made it too noisy for radio astronomers to easily and accurately interpret signals.
- The far side is a quiet place and a haven for earthly aspirations to set up a radio telescope that could reveal astronomical mysteries, such as the structure of the universe shortly after the Big Bang.

Near side

- The moon's near side is believed to have a thinner shell because when meteorites bombarded it they cracked its shell, releasing lava which gushed out and covered traces of the impact and left dark patches.
- The near side of the moon too suffers from the problem of noise like the dark side.

Space programs of China

- China aims to catch up with Russia and the U.S. to become a major space power by 2030. It is planning to launch construction of its own manned space station next year
- The BeiDou Navigation Satellite System — China's homegrown Global Positioning System started worldwide service last month.
- Next year China plans to launch its Mars explorer mission.
- Beijing is moving forward with plans to build a research base on the moon.
- It is also said to be considering mining there for **helium-3**, a rare substance on earth that can be used as a fuel in nuclear fusion power generation