



# VAJIRAM & RAVI

( Institute for Civil Services Examination )

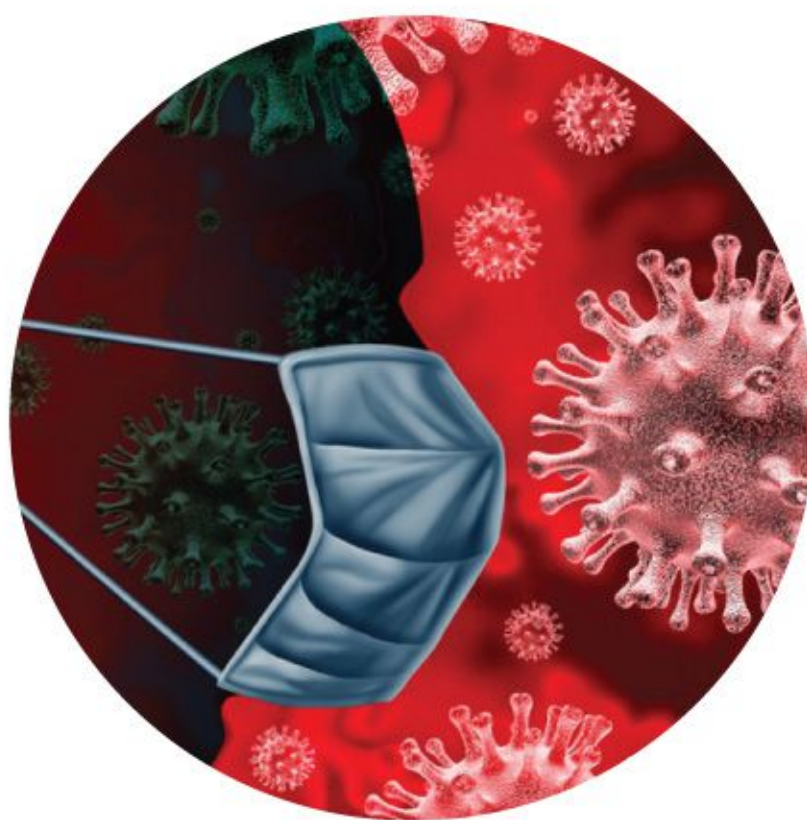
## JANUARY 2020

# *the* RECITALS

Explore Current Affairs Through Q&A



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## *From the Desk of the Director*

### **Dear Students**

The preparation of current affairs magazine is an evolutionary process as its nature and content keeps changing according to the demands of Civil Service Exam. As you are aware about the importance of current affairs for the prelims as well as mains exam, our aim is to follow an **integrated approach** covering all stages of examination from prelims to interview. Keeping these things in mind, we, at Vajiram and Ravi Institute, are always in the process of evolving our self so as to help aspirants counter the challenges put forward by UPSC.

In fulfillment of our objective and commitment towards the students, we have introduced some changes in our current affairs magazine. The CA Magazines, now with the name of “**The Recitals**”, will have four sections. These are:

1. **Feature Article:** As you are aware of the fact that civil service mains exam has become quite exhaustive and analytical, especially since 2013 after the change in syllabus, we have decided to focus on 2-3 topics every month that will provide an insight into the issue so as to help students understand the core of the issue. This will help in Essay writing as well as Mains Exam.
2. **Mains Q&A:** New students quite often struggle to find out that in what way the given topic is useful for them and in what form questions can be framed from the article. To help those students, we at Vajiram and Ravi have designed an innovative way to teach current affairs. Now, we will cover the current issues through questions and answers so as to make it more targeted towards exam. This will not just provide the information and analysis on current issues but will also help in learning the art of answer writing. Further the related information on the topics on which questions have been framed but that is outside the purview of answer will be given in the Box as ‘**Extra Mile**’.
3. **Prelims Q&A:** This section will contain prelims based MCQs that will test your diligence while reading the current issues. These MCQs will be of UPSC standard and will contain detailed explanation. Students are advised to attempt these MCQs honestly and read the Explanation carefully. The idea is to also provide students with a question bank of around 600 current affairs MCQs (50 Qs × 12 months = 600 Qs) just before their prelims examination, which will act as revision on issues spanning over the entire year.
4. **Bridging Gaps:** This section will contain miscellaneous topics which has not been covered through Q&A. That is why it is called Bridging Gaps, meaning the left-over topics.

So, the new magazine is a complete overhaul of what we have been doing for so long. We hope that the new beginning will be to the liking of students.

Thanks

Best Wishes



## Budget 2020-21

Ms. Sitharaman has presented the General Budget 2019-20 in 2019. She is only the **second woman in the history of Independent India to present the Union Budget**. Indira Gandhi was the first woman to have presented the Union Budget. In 1970, she presented the Union Budget of India for 1970-71, after she took briefly over the finance portfolio. We will next discuss the overview of Budget and some major announcements.

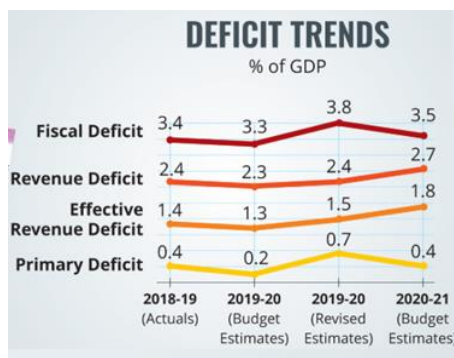
### Budget At A Glance

- Budget 2020-21 reflects the Government's firm commitment to substantially boost investment in Agriculture, Social Sector, Education and Health. This is substantiated by a proposed 21% increase in capital expenditure for the FY 2020-21. Level of expenditure has been kept at Rs. 30.42 lakh crores in BE 2020-21, as compared to Rs. 26.98 lakh crores in RE 2019-20.

	2018-2019 वास्तविक Actuals	2019-2020 बजट अनुमान Budget Estimates	2019-2020 संशोधित अनुमान Revised Estimates	2020-2021 बजट अनुमान Budget Estimates
<b>1. Revenue Receipts</b>	<b>1552916</b>	<b>1962761</b>	<b>1850101</b>	<b>2020926</b>
2. Tax Revenue				
(Net to Centre)	1317211	1649582	1504587	1635909
3. Non Tax Revenue	235705	313179	345514	385017
<b>4. Capital Receipts</b>	<b>762197</b>	<b>823588</b>	<b>848451</b>	<b>1021304</b>
5. Recovery of Loans	18052	14828	16605	14967
6. Other Receipts	94727	105000	65000	210000
7. Borrowings and Other Liabilities <sup>1</sup>	649418	703760	766846	796337
<b>8. Total Receipts (1+4)</b>	<b>2315113</b>	<b>2786349</b>	<b>2698552</b>	<b>3042230</b>
<b>9. Total Expenditure (10+13)</b>	<b>2315113</b>	<b>2786349</b>	<b>2698552</b>	<b>3042230</b>
10. On Revenue Account	2007399	2447780	2349645	2630145
of which				
11. Interest Payments	582648	660471	625105	708203
12. Grants in Aid for creation of capital assets	191781	207333	191737	206500
13. On Capital Account	307714	338569	348907	412085
<b>14. Revenue Deficit (10-1)</b>	<b>454483</b>	<b>485019</b>	<b>499544</b>	<b>609219</b>
	(2.4)	(2.3)	(2.4)	(2.7)
<b>15. Effective Revenue Deficit (14-12)</b>	<b>262702</b>	<b>277686</b>	<b>307807</b>	<b>402719</b>
	(1.4)	(1.3)	(1.5)	(1.8)
<b>16. Fiscal Deficit [9-(1+5+6)]</b>	<b>649418</b>	<b>703760</b>	<b>766846</b>	<b>796337</b>
	(3.4)	(3.3)	(3.8)	(3.5)
<b>17. Primary Deficit (16-11)</b>	<b>66770</b>	<b>43289</b>	<b>141741</b>	<b>88134</b>
	(0.4)	(0.2)	(0.7)	(0.4)

- The government has revised the fiscal roadmap in the near term and limited the fiscal deficit to 3.8% of the GDP in RE 2019-20 and 3.5% in 2020-21.

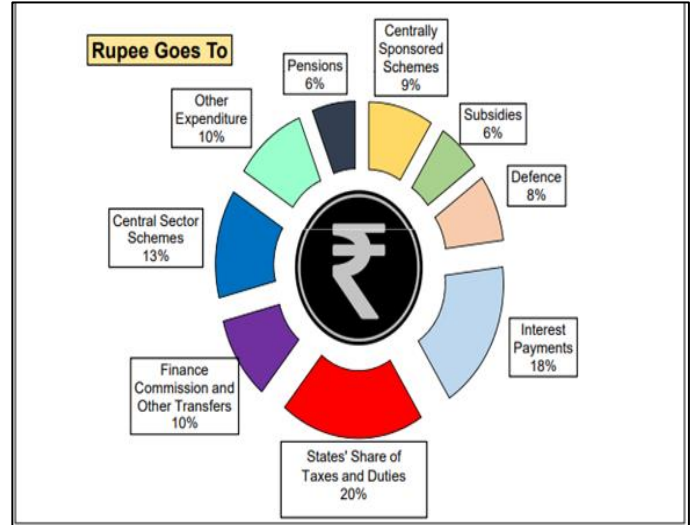
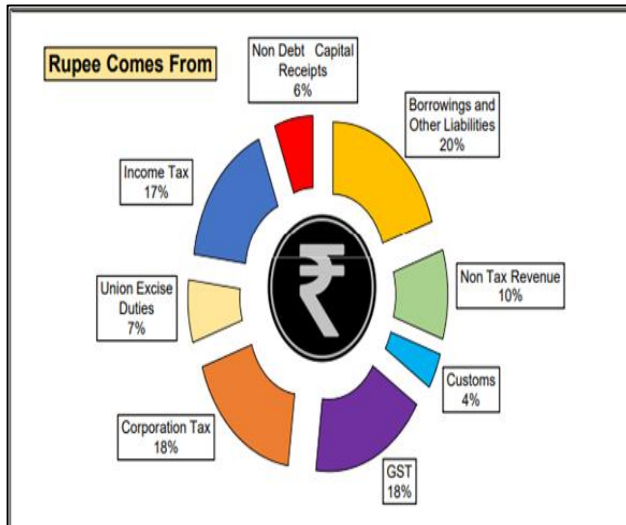
- The Budget 2020-21 announced an ambitious disinvestment agenda, aiming to raise Rs 2.1 lakh crore through stake sales next year, including plans to sell part of the Centre's stake in the country's largest insurer Life Insurance Corporation (LIC) through an initial public offer (IPO). The FM also proposed to sell the government's equity in the stressed IDBI Bank to private, retail and institutional investors through the stock exchange. With plans afoot for privatisation of BPCL, Container Corporation of India, Shipping Corporation of India and Air India, the next year is going to see the government sell its equity in several state-owned companies at an unprecedented scale.



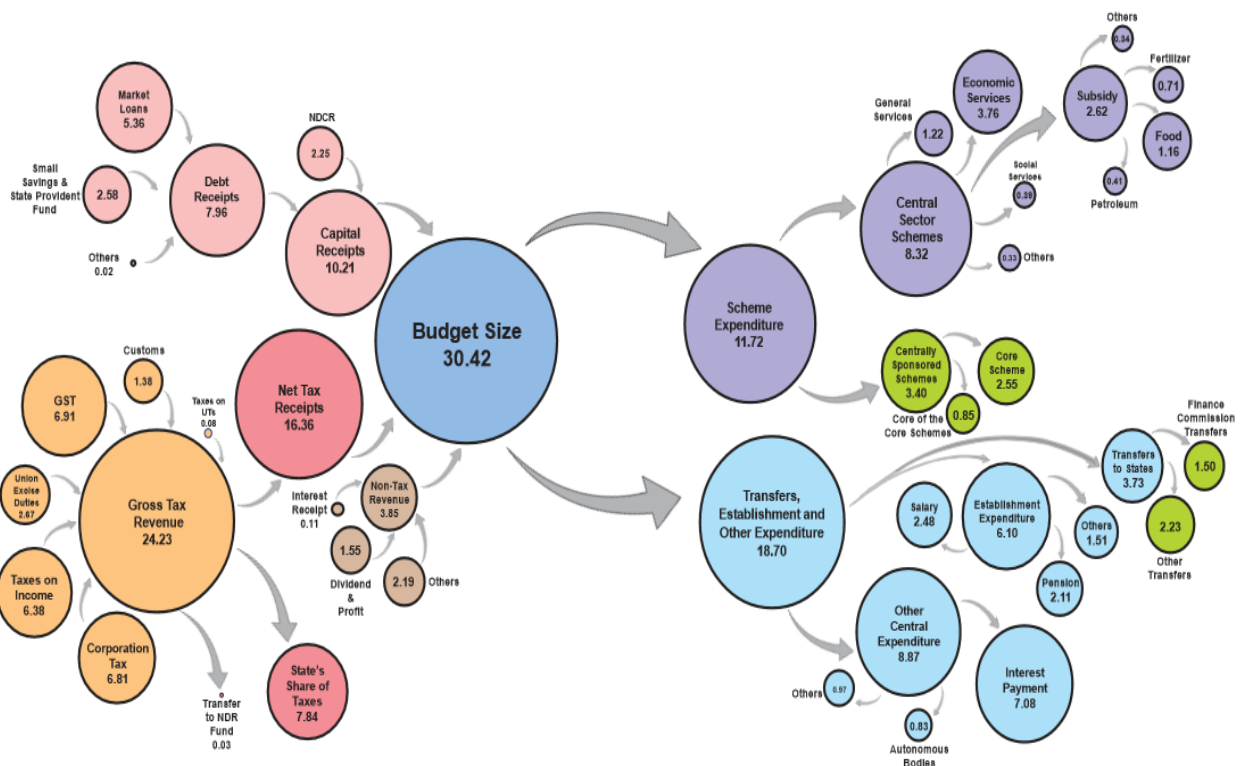
## Rupee Comes From And Rupee Goes To

This gives an estimate of the revenue and expenses of government. This is expressed below pictorially both in terms of percentage as well as in numbers (Rs Lakh crore).

### Revenue And Expenditure (In %)



### Revenue And Expenditure (In Lakh Crore)



**Taxation****Personal Tax**

- Moving to reform personal income tax, the Budget has announced a new tax regime for individuals, offering much lower tax rates to taxpayers willing to forego all deductions and exemptions including those currently available on EPF contribution, tuition fee payment, principal and interest outgo on home loans, standard deduction of Rs 50,000 and medical insurance premium among others.
- This scheme will co-exist with the existing tax structure and will be optional. While the existing tax system has four tax slabs, the new one has seven tax slabs and offers lower tax rates.

4 BECOMES 7		NEW TAX SLABS	
EXISTING TAX SLABS			
■ Up to ₹ 2.5 lakh	NIL	■ Up to ₹ 2.5 lakh	NIL
■ ₹ 2.5 lakh-5 lakh	5%	■ ₹ 2.5 lakh-5 lakh	5%
■ ₹ 5 lakh-10 lakh	20%	■ ₹ 5 lakh-7.5 lakh	10%
■ Above ₹ 10 lakh	30%	■ ₹ 7.5 lakh-10 lakh	15%
		■ ₹ 10 lakh-12.5 lakh	20%
		■ ₹ 12.5 lakh-15 lakh	25%
		■ Above ₹ 15 lakh	30%

**Employer's Annual Share To PF, NPS Over Rs 7.5 Lakh Will Be Taxed**

- From the next financial year, high-income earners will have to pay income tax for their contribution to the provident fund, superannuation fund and National Pension Scheme (NPS).
- The Union Budget for 2020-21 has proposed a combined cap of Rs 7.5 lakh for the employer's contribution to these three categories of payouts, with the amount over and above this to be taxed in the hands of the employees.
- The government in the Budget documents reasoned that those with higher salaries are able to design their salary package in a manner where a large part of their salary is paid by the employer in these three funds which does not suffer taxation at any point of time because of Exempt-Exempt-Exempt (EEE) regime, while an employee with low salary income is not able to contribute a large part of his salary to all these three funds.

**Overseas Remittances**

- In a bid to widen and deepen the tax net, the government has proposed to amend the I-T Act to levy 5 % TCS (tax collected at source) on overseas remittances and for sale of overseas tour package.
- According to the Budget documents, an authorised dealer receiving an amount or an aggregate of amounts of Rs 7 lakh or more in a financial year for remittance out of India under the Liberalised remittances Schemes (LRS) of the RBI, will be liable to collect TCS, if he receives sum in excess of said amount from a buyer — a person remitting such amount out of India — at the rate of five per cent. In non-PAN/Aadhaar cases, the rate will be ten per cent.

**Tax on NRIs**

- According to a Budget proposal, Non-resident Indians (NRIs) not paying taxes in any foreign country will now be taxed in India.
- The Budget has also proposed to reduce the period of stay in India to 120 days from 182 days earlier for persons of Indian origin (PIOs) to be categorised as NRIs. As of now, if an Indian or a person of Indian origin managed his stay in India such that he remained a non-resident in perpetuity, he was not liable to pay tax on his global income in India.

**No More Double Taxation On Dividends**

- The government fulfilled a long-standing demand of the capital markets when it proposed scrapping the dividend distribution tax (DDT) that is levied on companies. Dividend will now be taxed only in the hands of the investors. According to Budget, as the dividend received is an income to the shareholder and not the company, the incidence of the tax should also lie on the recipient of the monies.
- More importantly, the govt has also done away with the additional 10% tax on investors and the dividend will now be only taxed at the applicable tax rate based on the income slab of the individual.
- This would come as a relief for companies and capital market participants who have been lobbying hard for the removal of DDT at the company level, which, they felt led to double taxation as such payouts are also taxed at the investor level.

**Co-Operative Societies Get 22% Tax Option**

As a major concession and in order to bring parity between the cooperative societies and corporates, it has been proposed to provide an option to cooperative societies to be taxed at 22% plus 10% surcharge and 4% cess with no exemption/deductions. These cooperatives are currently taxed at a rate of 30% with surcharge and cess.

**Affordable Housing Gets A Leg-Up**

- To give further push to the government's 'Housing for All' goal, the Union Budget has yet again laid emphasis on affordable housing, giving a boost to the sector and home-buyers as well.
- Last year, an additional deduction of up to ₹1.5 lakh for interest paid on loans taken for purchase of affordable houses was announced. The deduction was allowed on housing loans sanctioned on or before March 31, 2020.
- Now, to ensure that more persons avail this benefit, the Finance Minister has proposed to extend the date of loan sanction for availing this additional deduction by one more year till March 31, 2021.



### **Provisions for Startups**

- The Budget has proposed easing the burden of taxation on employees of startups by deferring the tax payment on ESOPs (employee stock option plans) by five years, or till they leave the company, or when they sell their shares, whichever is earliest.
- ESOPs are significant component of compensation for employees of startups, and are currently taxable. This leads to cash flow problem for the employees who do not sell their shares immediately and continue to hold the same for long term.
- The minister also said that an eligible startup having a turnover of up to Rs 25 crore is allowed a deduction of 100 per cent of its profits for three consecutive assessment years out of seven years, if the total turnover does not exceed Rs 25 crore.
- In order to extend this benefit to larger startups also, it has been proposed to increase the turnover limit from existing Rs 25 crore to Rs 100 crore. Moreover, considering the fact that in the initial years, a startup may not have adequate profit to avail this deduction, the period of eligibility to claim for deduction has been extended from the existing 7 years to 10 years.

### **Fraudulently Availing GST Input Credit A Cognizable Offence**

- In a move which would further tighten the noose on those committing frauds under the Goods and Services Tax (GST) regime, the Union Budget has made the fraudulent availing of input tax credit without invoice or bill a cognizable and non-bailable offence.
- While the Central GST (CGST) Act covers those who engage in fake invoices or circular trading, this move will help the GST authorities to bring to book those who issue invoices without actually carrying out any business.
- At a time when the government's revenues from GST have slowed, with the revised estimates for 2019-20 for CGST falling short of the original target by Rs 12,000 crore and for cess by Rs 11,016 crore, stricter action on such frauds would help the government to plug revenue leakages in absence of a foolproof online returns matching system.

### **Investments**

#### **Government Moots Cut In Withholding Tax**

- With an aim to boost listing of bonds at IFSC exchange, the government has proposed to reduce the withholding tax rate to 4% from 5% on interest payment on bonds listed on the bourse. Withholding tax is levied by countries on interest or dividends paid to a person who is resident outside that country.

- The announcement shall greatly incentivise issuers to choose India as the preferred platform for listing their international bonds.
- India's only International Financial Services Centre (IFSC) is in GIFT City, near Ahmedabad in Gujarat. GIFT City is a global financial and IT services hub, a first-of-its-kind in India, designed to be at par with globally benchmarked business districts.

#### **International Bullion Exchange To Be Set Up At IFSC**

- The Budget has proposed to set up an international bullion exchange at IFSC in GIFT City, which will lead to better price discovery of gold, create more jobs and enhance India's position in such market.
- With its unique locational, infrastructural and regulatory advantages as an IFSC, GIFT city is well placed to build a fair, efficient and transparent bullion trading ecosystem.
- An organised bullion trading system will benefit the entire supply chain particularly, small players and exporters. This will lead to better price discovery of gold, create more jobs and further enhance India's position in the bullion market.

#### **Set Of Reforms To Deepen Bond Market**

- The limit for FPIs' purchases of corporate bonds, currently capped at 9% of the outstanding stock, would be increased to 15%.
- A new debt ETF will be floated consisting primarily of government securities. This will give retail investors access to government securities as much as giving an attractive investment for pension funds and long-term investors.
- The Minister also proposed opening specified categories of government debt securities to non-resident investors.
- Further, relevant laws will be amended to extend commodity transaction tax on products introduced in the commodity derivatives markets late last year.

### **Trade And Industry**

#### **Custom And Import Tariff**

- The government has announced one of the biggest-ever increases in customs duty on close to 100 product categories, as it sought to clamp down on "nonessential" imports, much of it from China. This has been done keeping in view the interests of the MSME segment, to facilitate ease of doing business, secure trade borders and to keep uncontrolled dumping under check.

- Further, in coming months, the government would review Rules of Origin requirements, particularly for certain sensitive items, to ensure that FTAs are aligned to the conscious direction of the policy.
- The measures are expected to give boost to the domestic industry, particularly the MSME sector, shore up local employment and eventually impact GDP.
- The government has reduced import tariffs on several inputs and components, such as unassembled solar cells and open cell for TV sets, as part of a push for local manufacturing of finished products.
- Besides, import of electric vehicles, in completely built form or in semi-knocked down state, as well as completely built commercial vehicles are being discouraged.

### Import Shocker

From toy tricycles to fully built units of trucks and buses, the Budget has proposed a steep hike in Customs Duty

	CUSTOMS DUTY (%)			CUSTOMS DUTY (%)	
	EXISTING	NEW		EXISTING	NEW
			Motors	7.5	10
Shelled walnuts	30	100	Fingerprint scanners in mobiles*	0	15
Footwear	25	35	Display panel and touch assembly in mobiles*	0	10
Tableware, kitchenware	10	20	Completely built commercial vehicles	25-30	40
Fans - table, ceiling, pedestal	10	20	Semi knocked down forms of electric passenger vehicles	15	30
Hair dryers	10	20			
Catalytic converters (used in cars)	10	15			
Toys	20	60			
Solar cells	20	0			
Gold used in	0	12.5			

\* from April 1, 2020

- The localisation drive was also strengthened on the high-volume mobile phones category where components such as printed circuit boards, fingerprint scanners, display panels, and ringers also saw the import duty go up.
- The Finance Minister also announced steps for the manufacture of mobile phones, electronic equipment and semi-conductor packaging in the country, which are seen to be critical to the growing import of electronic goods.

### Turnover Threshold For Audit Raised

- In a major relief to small retailers, traders and shopkeepers forming the Medium, Small and Micro Enterprise (MSME) sector, the Budget has proposed to raise by five times the turnover threshold for audit to ₹5 crore.
- Further to boost the less cash economy, the increased limit would apply only to those businesses which carried out less than 5% of their transactions in cash.

### Finance Provisions For MSMEs

- NBFCs will be allowed to extend invoice financing to MSMEs through TReDS and measures have been announced for debt recovery.
- The government has also announced a ₹1,000 crore scheme to help mid-sized companies in export development, R&D and technology upgrade.

## **Infrastructure**

### **Private Investment**

- Setting a theme of opening up more space in the infrastructure sector for private players, the Budget has proposed a slew of measures with the aim of attracting private investment.
- These include expanding public-private partnership (PPP) in physical and social infrastructure projects such as railways, highways, medical colleges and smart cities. This is in addition to laying down policy roadmaps for data centres, logistics, etc.
- Also, 100 per cent tax exemption has been proposed for interest, dividend and capital gains incomes to major FDI investments in infrastructure projects before March 31, 2024, with a lock-in period of three years.

### **Power and Renewable Energy**

- The Union Budget has allocated ₹22,000 crore to the power and renewable energy sector in 2020-21 with an aim to improve financial health of power distribution firms and boost the use of solar power.
- In a bid to promote 'smart' metering, the Finance Minister urged all the States and Union Territories to replace conventional energy meters with prepaid smart meters. A three-year roadmap will see every conventional meter in the country replaced by pre-paid meters.
- Smart meters will allow consumers to choose, through pre-paid cards, the most affordable supplier as per time of the day once multiple players enter after separation of carriage and content.
- This will help discoms improve load and service delivery management, leading to reduced operational costs through optimised power procurement.
- The Budget also announced a reduced corporate tax rate of 15% for new gencos (generating companies) that received the 'manufacturing' tag.
- In addition, removal of DDT is likely to boost foreign investment in the sector.

### **Expansion Of The Gas Grid**

- The government plans to expand the national gas grid from the present 16,200 km to 27,000 km.
- Further reforms will be undertaken to facilitate transparent price discovery and ease of transactions to deepen the gas markets in the country.

### **Solarising Farm Irrigation**

- Solar-powered pumps can reduce farming costs by a quarter and farmers can earn up to Rs 60,000 a year from selling electricity to the grid from solar projects set up on barren/fallow land.



- KUSUM will also act as a catalyst for sustainable irrigation solutions across the country along with leading to lower subsidy dependence for discoms.
- KUSUM scheme for solarising farm irrigation has been expanded from 17.5 lakh standalone solar-powered pumps to 20 lakh and the number of grid-connected solar pumps has been raised from 10 lakh to 15 lakh.

### **Five New Smart Cities**

- The government announced the setting up of five new 'smart cities' on the public-private partnership (PPP) model but did not share more details, or even the allocation set aside for them.
- The Smart City Mission was launched in 2015 and 100 cities have been selected so far, with an aim to make them citizen-friendly and sustainable.

### **Huge Allocation For Transport Infra**

- The Budget proposed an allocation of Rs 1.70 lakh crore for the transport infrastructure sector in 2020-21.
- In her speech, Finance Minister said the government would focus on infrastructure for economic development, and 6,500 projects across sectors under the **National Infrastructure Pipeline (NIP)** were envisioned towards ease of living for citizens through Ease of Moving.

### **Railways**

- The Budget proposed a budgetary allocation of ₹70,000 crore for the Indian Railways, with overall capital expenditure of ₹1.61 lakh crore for the next financial year in the Union Budget.
- While the capital expenditure for 2020-21 saw an increase of a mere 3% from ₹1.56 lakh crore for 2019-20, the Budget promises increased investment for passenger amenities and safety-related works, including track renewals, level crossings and road over/under bridges.
- The ₹1.61 lakh crore outlay comprises ₹70,000 crore from budgetary support, ₹250 crore from the Nirbhaya Fund, ₹7,500 crore from Internal Resources and ₹83,292 crore from Extra Budgetary Resources.
- The Budget also proposed setting up a large solar power capacity alongside the rail tracks, on the land owned by the railways, besides re-development of four stations, operation of 150 passenger trains via public-private partnership mode and introduction of more Tejas type trains to iconic tourist destinations.
- The FM also proposed a 148-km Bengaluru suburban transport project at a cost of ₹18,600 crore, which would have fares on the metro model.

**Allocation Up For Highways Ministry**

- The Ministry of Road Transport and Highways saw an increase of 10% in its budgetary allocation, but a large chunk of it is through monetisation of national highways by the NHAI.
- The Budget proposed accelerated development of highways which will include development of 2,500 km of access control highways, 9,000 km of economic corridors, 2,000 km of coastal and land port roads and 2,000 km of strategic highways.
- The FM said that the Delhi-Mumbai Expressway and two other packages would be completed by 2023 . Further, 12 lots of highway bundles totalling ₹6000 crore would be monetised before 2024.

**Port Development**

- The government will corporatise at least one major port and list it on the stock exchange and efforts would be made to use technology to improve performance of ports.
- The allocation for the Ministry of Shipping has seen an increase of 18% from ₹1,523 crore last year to ₹1,800 crore this fiscal. In line with the vision laid out by the Minister, the development of ports has seen a 44% increase in allocation, from ₹98 crore last fiscal to ₹142 crore.
- The **Sagarmala project** that aims to exploit India's waterways and coastline has seen a doubling of allocation from ₹98 crore to ₹211 crore and the budget for ship building has also grown more than three-fold from ₹42.43 crore to ₹151 crore.
- The shipping ministry is already preparing a change in law to convert the port trusts, which run them, into port authorities and the Major Port Authorities Bill is likely to be introduced during the ongoing Budget Session.

**100 More Airports Under UDAN**

- The Finance Minister announced that the government plans to set up 100 more airports by 2025 under the Regional Connectivity Scheme (RCS), also known as UDAN or Ude Desh ka Aam Naagrik.
- The Ministry of Civil Aviation has received Rs 465.17 crore towards the regional connectivity scheme for 2020-21, which will be utilised towards the revival of 50 airports and viability gap funding for the North East Connectivity plan.
- Under the program, airlines compete to win subsidies for operating flights linking small airports with the bigger ones.
- The scheme, launched in 2017, is now in its fourth phase and at present, 232 routes across 43 cities and towns connect 137 small cities under the RCS.

## Rural and Agriculture

### MGNREGS Budget Cut Down

- Despite a slowdown in the rural economy and the need to stimulate rural demand, the Centre has slashed budgetary allocation for the MNNREG Scheme by ₹9,500 crore for the coming year. The Finance Minister announced ₹61,500 crore for the scheme in 2020-21, a 13% drop from the 2019-20 revised estimates of ₹71,000 crore.
- MGNREGS, which provides 100 days of unskilled work for every rural household, helps generate rural employment and provides a social safety net.
- Before the Budget, a number of economists had suggested that putting money directly into the hands of rural consumers at the bottom of the pyramid would be needed to create liquidity and spur consumption demand.
- Groups representing rural workers have said the lower allocation would have a disastrous impact on rural economy.

### Announcements In The Agri Sector

- On agricultural credit, the Finance Minister said the NABARD refinance scheme would be further expanded and increased this year's farm loan disbursal target by 11% to ₹15 lakh crore.
- **PM-KISAN**, the farmers' income support scheme that was launched just before the Lok Sabha elections, received an allocation of ₹75,000 crore, the same amount as allocated for 2019-20, despite the fact that only ₹54,370 crore was actually spent last year.
- Railways would set up a **Kisan Rail programme** through public-private partnership to build a seamless national cold supply chain for perishables, including milk, meat and fish. Further, refrigerated coaches would be built in express and freight trains as well.
- A **Krishi Udaan scheme** would also be launched by the Civil Aviation Ministry on international and national routes, in a move that would help improve value realisation especially in the northeast and tribal districts.
- The Budget also proposed to step up viability gap funding to set up warehouses and double the milk processing capacity to 108 million tonnes by 2025.

### Health Sector

- The health sector got an allocation of Rs 69,000 crore in the Union Budget, including Rs 6,400 crore for Prime Minister Jan Arogya Yojana (PMJAY).

- The Finance Minister announced expansion of the Jan Aushadhi Kendra Scheme to all districts, offering 2,000 medicines and 300 surgicals by 2024.
- Also, Mission Indradhanush has been expanded to cover 12 such diseases, including 5 new vaccines.

### **Hospitals To Be Set Up In PPP Mode**

- The Finance Minister said that presently, under PM Jan Arogya Yojana, there are more than 20,000 empanelled hospitals. However, there is need of more such hospitals in Tier-2 and Tier-3 cities for poorer people under this scheme.
- It has been proposed to set up viability gap funding window for setting up hospitals in PPP mode. In the first phase, those aspirational districts will be covered where presently there are no Ayushman-empanelled hospitals.
- Also, to address the shortage of qualified doctors (specialist and general practitioners), it has been proposed to attach a Medical College with existing District Hospitals in PPP mode. Those States that fully allow the facilities of the hospital to the medical college and wish to provide land at a concession would be able to receive viability gap funding from the Centre.
- The move will encourage large hospitals with sufficient capacity to offer resident doctors DNB/FNB courses under the National Board of Examinations.

### **Bridge Course**

- There exists a huge demand for teachers, nurses, paramedical staff and caregivers abroad. However, their skill sets, many a time, do not match employer's standards and therefore need to be improved.
- Hence, the FM has proposed for a special bridge course to be designed by the Ministries of Health, Skill Development together with professional bodies to bring in equivalence.

### **Cess On Imports Of Medical Equipments**

The government, in order to boost domestic industry and to generate resources for health services, has proposed a nominal health cess of 5% on imports of specified medical equipment. The proceeds from this cess shall be used for creating infrastructure for health services in the aspirational districts.

### **Women and Child Development**

- The nodal Ministry, i.e. the Ministry for Women and Child Development, has seen an increase of 14% in allocation, which has gone up to ₹30,007 crore in financial year 2020-2021 from ₹26,184 crore in the current fiscal.



- Categorising women and children under the larger budgetary theme of “Caring India”, finance minister Nirmala Sitharaman allocated Rs 35,600 crore to nutrition related programmes under various ministries.
- The anganwadi programme under which the government provides supplementary nutrition to children between six months to six years has received an increase in allocation of 15%, going up from ₹17,704 crore to ₹20,532 crore.
- The **POSHAN Abhiyaan** or the Nutrition Mission also received an increase of 8.7% from ₹3,400 crore to ₹3,699 crore.
- According to an analysis by CRY, the entire budget for children as a proportion of the total budget has hit the lowest level in five years, falling to 3.16% of the total budget this fiscal.

### **Gross Enrolment Ratio**

- The FM shared that the gross enrolment ratio of girls across all levels of education is now higher than boys, which shows that the Beti Bachao Beti Padhao schemes has yielded results.
- The Gross enrolment ratio at the elementary level is 94.32% as against 89.28% for boys; at secondary level, it is 81.32% as compared to 78%; and at higher secondary level girls have achieved a level of 59.70% as compared to 57.54% for boys.
- However, the U-DISE data of 2015-2016 and 2016-2017 show that the gross enrolment ratio (GER) of girls at elementary and higher secondary levels has seen a decline, while at secondary level it rose only by 0.1%.

### **Gender Budget Sees A Drop**

- The gender budget of the government as a share of the Budget has seen a decline of 0.01% this fiscal - dropping from 4.72% last year to 4.71% - in financial year 2020-2021.
- However, in absolute terms there has been an increase of 8.9% as compared to last year's gender budget of ₹1,31,700 crore.
- The schemes that have seen an increase include the scheme for adolescent out-of-school girls, which has gone up from ₹150 crore to ₹250 crore.
- There is a 92% increase in the allocation for One Stop Centre which received ₹385 crore and the government has allocated ₹500 crore under the **Nirbhaya Fund** for programmes on safety of women.

- The **Pradhan Mantri Matru Vandana Yojana** has seen a paltry increase from ₹2,300 crore to ₹2,500 crore despite demands for higher allocation to improve coverage under the scheme.
- While the FM said ₹28,600 crore was set aside for programmes specific to women, there was no mention of programmes to boost women's employment, which is the need of the hour as the female labour force participation (FLPR) has seen a sharp decline at 26% in 2018 from 36.7% in 2005.

### **Task Force To Reduce Maternal Mortality**

- The FM also announced that a task force will be set up to look at the age at which a girl enters motherhood to reduce maternal mortality rate and improve nutrition levels.
- This will ensure their participation and contribution to the economy, as delayed age of marriage will enable them to complete their education and acquire job and life skills.
- This will also help the country to deal with the population momentum and achieve population stabilisation.

### **Education**

- The Budget proposes to provide Rs 99,300 crore for education in 2020-21, up from Rs 94,853.64 crore in 2019-20, while Rs 3,000 crore will be for skill development.
- School education has seen an allocation of ₹59,368 crore, an increase of 5% or ₹3,295.55 crore across three prominent schemes — **Samagra Shiksha Abhiyaan, Kendriya Vidyalaya Samiti and Navodaya Vidyalaya Samiti.**
- The FM announced that select higher educational institutions among the 'Top 100' will offer degree-level online education programmes for underprivileged students.
- Further, 150 higher educational institutions will start apprenticeship-embedded degree/diploma courses by March 2021 to boost job opportunities for general stream students.
- Government has also opened up higher education to foreign direct investment (FDI) and external financial borrowings.
- In other proposals, a National Police University and a National Forensic Science University for forensic science, cyber-forensics, and a programme in urban local bodies to provide internships to fresh engineers for up to one year were announced.
- However, for tribal children, the money for post-matric scholarship for ST students has been withdrawn.

**Miscellaneous****Subsidy Bill Marginally Higher**

- The government's food, fertiliser and fuel subsidy bill has been pegged marginally higher by 0.24% at ₹2,27,793.89 crore for the 2020-21.
- Of the total subsidy bill, the maximum allocation has been made for food (₹1,15,569.68 crore), followed by fertiliser (₹71,309 crore) with fuel getting ₹40,915.21 crore.
- The Economic Survey had called for rationalisation of government intervention in the food grain market. It said the government's role as largest procurer and hoarder of rice and wheat, has led to burgeoning food subsidy burden and inefficiencies in the markets.
- Questions have also been raised in the past, over fertiliser and fuel subsidy being provided to large scale farmers, who do not pay income tax. Hence it would be advisable to provide subsidy through direct benefit transfer below a particular threshold.
- The fertiliser subsidy also leads to overuse of fertilisers due to which the related increase in productivity is fast declining, along with a deterioration in soil quality (nutrient deficiency).
- The FM has proposed to reverse it by reducing subsidies on chemical fertilizer and encouraging organic farming. This solution is expected to benefit farmers and food security in the long run.

**Insurance Cover On Deposits Raised To ₹5 Lakh**

- The government has decided to increase the insurance cover for bank deposits to ₹5 lakh from ₹1 lakh. This is the first time since 1993 that the deposit insurance cover has been raised.
- The clamour for higher cover for bank deposits grew stronger following the Punjab and Maharashtra Cooperative Bank crisis, where depositors are facing restrictions on deposit withdrawals.
- The increase in deposit cover will increase the cost for the banks, as the premium costs will go up. The premium paid by the insured banks to the DICGC is required to be borne by the banks themselves and is not passed on to the depositors.
- The DICGC insures all bank deposits such as savings, fixed, current and recurring. Deposits not covered by the Corporation include those of foreign governments and of Central/ State governments, deposits of State Land Development Banks with State cooperative banks, inter-bank deposits, deposits received outside India and those specifically exempted by the DICGC with the prior approval of the banking regulator.

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## VAJIRAM & RAVI

### *India – Brazil Relation*

President of Brazil Mr. Jair Messias Bolsonaro paid a State Visit to India from 24-27 January 2020. He was the Chief Guest at India's 71st Republic Day Parade on 26 January 2020. This was the third time that a Brazilian President was India's Chief Guest at the Republic Day. Earlier, India had received President of Brazil as Chief Guest for its Republic Day Parade in 1996 and 2004. This was the first State Visit of President Bolsonaro to India. Prime Minister Modi recently visited Brasilia to attend the XI BRICS Summit in November 2019.

#### **Key Highlights OF Visit**

- During this visit, first edition of **Maitri** was organised. Maitri is an Indo-Brazil Agritech Cross-Incubation Program. In this programme, five startups each from Brazil and India would visit each other's country. They would come here and Indian scientists will go there to see how we can look at more innovative practices in agriculture.
- Several MoUs/Agreements exchanged during the Visit related to Bioenergy Cooperation, Investment Cooperation and Facilitation Treaty, Agreement on Mutual Legal Assistance in Criminal Matters, Cooperation in the field of Health and Medicine, Social Security, Cyber Security, Cultural Exchange Programme for the period 2020-2024, Animal Husbandry and Dairying, Geology and Mineral Resources etc.
- During the visit, the leaders of both the country adopted the Action Plan to Strengthen the **Strategic Partnership between Brazil and India**. The Action Plan contains **six thematic areas** (mentioned below) and under each theme, goals and mechanisms to achieve those goals have been enumerated.  
(a) Political and Strategic Coordination; (b) Trade & Commerce, Investments, Agriculture, Civil Aviation and Energy; (c) Science, Technology and Innovation; Space Cooperation; Environment and Technical Cooperation; Health; (d) Defence and Security; (e) Culture and Education; and (f) Consular Issues, Social Security and Legal Cooperation.

#### **Bilateral Relationship**

- India and Brazil share a close and multifaceted relationship. They extend from political, economic, defence & security issues, to cooperation in the fields of agriculture, space, health and food processing.
- Our bilateral relations are based on a common global vision, shared democratic values, and a commitment to foster economic growth of both countries. This has led to convergence of mutual interest in many areas.



- Bilateral relations were elevated to a **Strategic Partnership in 2006**, heralding a new phase in India-Brazil relations.
- We have **institutional mechanisms** in place for dialogues to carry forward cooperation in many fields; for example, **Foreign Office Consultations**, the **Trade Monitoring Mechanism** etc. We also have Joint Working Groups in many areas.
- The relations are strong not only at the bilateral level, but also at **plurilateral fora such as BRICS, IBSA, G-20** and in multilateral bodies particularly the UN.

#### **Trade & Investment**

- Bilateral trade between India and Brazil increased to USD 8.2 billion in 2018-19. This included USD 3.8 billion as Indian exports to Brazil and USD 4.4 million as imports by India.
- Major Indian exports to Brazil include agro-chemicals, synthetic yarns, auto components and parts, pharmaceuticals and petroleum products. Brazilian exports to India include crude oil, gold, vegetable oil, sugar and bulk mineral and ores.
- Indian investments in Brazil were around US\$ 6 billion and Brazilian investments in India are estimated at US\$ 1 billion in 2018.
- Recent steps taken to **facilitate a conducive environment** for boosting bilateral trade and investments are:
  - Signing of the Investment Cooperation and Facilitation Treaty
  - Signing of the Social Security Agreement to facilitate movement of professionals and businesspersons between the countries
  - Convening of the India-Brazil Business Forum

#### **Energy**

- It is the area in which we have collaboration both in the oil & gas as well as in the renewable energy side. Now we are looking at Bio-fuels also.
- India has a '**National Bio-fuel Policy**' and Brazil also has its own '**Renova Bio**' Programme and both of them have embedded in them the *possibility of ethanol blending with gasoline*. This provides an opportunity for both the countries to collaborate in order to exchange knowledge and technology.
- MoU signed, during the recent visit, on **Bioenergy Cooperation** will strengthen the cooperation in this area.

**Defence & Security**

- To broad-base bilateral defence cooperation, an institutional mechanism in the form of **Joint Defence Committee** was constituted under which number of rounds of discussions were conducted. At the last round of discussions it was agreed to set up a **joint working group on defense industrial production**. Brazilian delegation will be participating in the **Defex**, which is in February.
- Multilateral maritime exercise **IBSAMAR** has contributed to enhancing maritime security.
- During the recent visit, **MoU on cyber security** was signed to increase the cooperation in cyber defence.

**Agriculture & Animal Husbandry:**

- There is enough scope to cooperate in the field of agriculture, food processing and animal husbandry.
- Even if we look at Animal Husbandry we share the **same genetic heritage**. We have Indian breeds like **Gir and Kankrej which were exported to Brazil** many centuries ago.
- We do have a **Joint Working Group in Agriculture** where we look at possible areas of cooperation.

**People to People Contact**

- Even at the people to people level, there is broad appreciation of each other. For example: the Brazilian football team is followed very closely by Indian football fans.
- In Brazil, there is great interest in Indian culture as well as in our Yoga and Ayurveda. The Third Ayurveda conference was held in Brazil which had a participation of 4000 participants.
- India also has an **Indian Cultural Centre** which was established by ICCR in Sao Paulo in Brazil. It was the first cultural center established in the Latin American region.

**Importance of Brazil**

- Brazil is a big country, the **largest country in Latin America**. It has a population of 210 million with USD 1.8 trillion economy, which again is the largest in Latin America.
- It is a country rich in natural resources, minerals, oil & gas. It is also a leading producer of ethanol with a very strong track record in the technological field.
- For India's ambitions like permanent membership in United Nations as well as entry in Nuclear Suppliers Group (NSG), support of Brazil is vital.

## Blockchain

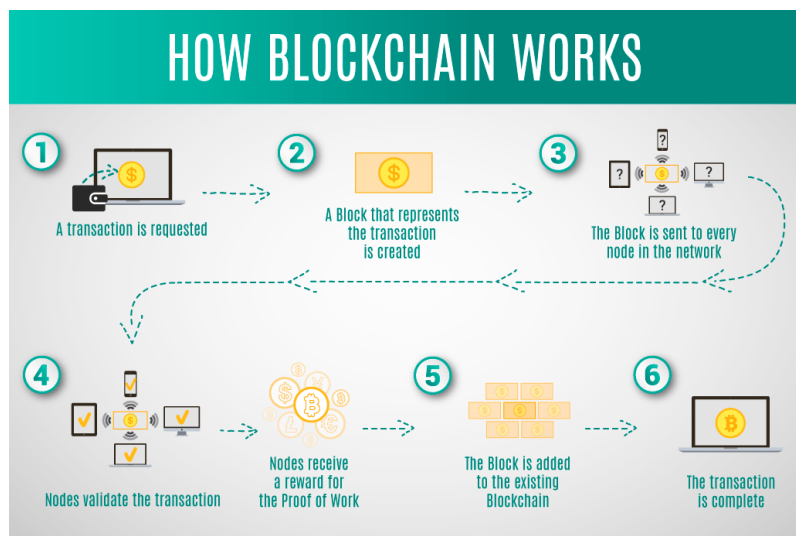
Blockchain is a foundational technology or a platform that allows designing a secure way to record transactions and circulate it among signatories, or any kind of target group with an Internet connection. It's a distributed ledger technology that stores information across multiple systems in a secured manner to enable peer-to-peer transactions based on a trustworthy source. At its core, it is an extremely democratic ledger that cannot be arbitrarily manipulated and easily shareable.

### Core Components of Blockchain Architecture

- **Node** - user or computer within the blockchain architecture (each has an independent copy of the whole blockchain ledger)
- **Transaction** - smallest building block of a blockchain system (records, information, etc.) that serves as the purpose of blockchain
- **Block** - a data structure used for keeping a set of transactions which is distributed to all nodes in the network
- **Chain** - a sequence of blocks in a specific order
- **Miners** - specific nodes which perform the block verification process before adding anything to the blockchain structure
- **Consensus (consensus protocol)** - a set of rules and arrangements to carry out blockchain operations

### How Does Blockchain Work

- Every block in a blockchain is a record of transactions and the more of the latter, the longer the chain.
- There is minimal identifying information and every block is linked to a unique 'digital signature' of the transacting participants. Every block is distinguished from another through a unique code which is a string of numbers.



- When a debit or credit card is used to make a transaction, VISA or Mastercard employ their technology to verify the bank account, connect with banks and process a transaction.
- In blockchain applications, this verifying role is outsourced to several computers on a network where each has the exact same copy of the block.
- These computers verify the genuineness of transaction by solving mathematical problems that can only be done in brute-force, energy intensive ways that require a lot of computational power, and therefore electricity.

## **Applications of Blockchain**

### **Financial Services**

- Blockchain Technology (also called Distributed Ledger Technology (DLT)) allows for the entire financial services industry to dramatically optimize business processes by sharing data in an efficient, secure, and transparent manner.
- The existing capital markets infrastructure is slow, expensive, and often requires several intermediaries. The bureaucratic nature makes performing and receiving financial services difficult.
- Many new blockchain capital market inventions are entering the market and improving work flow and helping to cut overhead dramatically, while allowing entities to deliver better, more secure and private services to businesses and individuals.

### **Government Services**

- Blockchain Technology is a potential vehicle to improve government services and foster more transparent government-citizen relations.
- It creates a trustless environment for regulatory activity and works to combat slow, expensive multi-step processes that require several intermediaries.
- Through blockchain technology, governments can improve the way they deliver services, prevent tax fraud, eliminate bureaucracy, and reduce waste. Digital cash transactions can help reshape financial transactions between the government and its citizens.
- Decentralized tech offers hope that governments can achieve more streamlined operations and pare down back-office operations.

### **Health Sector**

- Patient Record Management Blockchain based record management system can enable companies to simplify claim processing, secure medical records, monitor the pharma supply chain and collaborate with network stakeholders.

**Digital Identities**

- Blockchain technology provides the ideal engine to power digital identities. While digital identities are emerging as an inevitable part of the connected world, securing online information is coming under intense scrutiny.
- Blockchains based identity systems can provide a solution to this issue with hardened cryptography and distributed ledgers.

**IoT**

- Blockchain can be used in tracking billions of connected devices, enable the processing of transactions and coordination between devices, allow for significant savings for IoT industry manufacturers.
- This decentralized approach would eliminate single points of failure, creating a more resilient ecosystem for devices to run on.
- The cryptographic algorithms used by blockchains would help to make consumer data more private.

**Money**

- Cryptocurrencies provide people across the globe with instant, secure, and frictionless money and blockchains provide the permanent record storage for their transactions.
- Prior systems required users to trust a central authority that the monetary supply and payment transfer will not be tampered with.
- Blockchain technologies obsolete this method of payment transfer by providing a trustless environment so that there is no longer a need to rely on a third-party to ensure payment transfers, thus creating a Person-to-person(Peer-to-peer) environment.

**Real Estate**

- Blockchain technology will inevitably become a foundational pillar of the real estate industry. In a mostly paper-record based industry, block chain real estate allows for an unparalleled upgrade in how records are stored and recorded.
- Utilizing blockchain applications in essential functions such as payment, escrow, and title can also reduce fraud, increase financial privacy, speed up transactions, and internationalize markets.

**Supply Chain**

- Managing the modern, often global, supply chain is a series of intensive processes that require perfect orchestration between many moving parts and actors.

- Linking and creating the links to distribute goods and services looks much more like a web than a chain in the increasingly “smaller” global world. Blockchain can play a huge role in optimising the supply chain industry.

## **Applications Of Blockchain In India**

### **Health Sector**

- Ayushman Bharat scheme extends a healthcare cover of Rs 5 lakh to up to 10 crore financially poor people and families. As the government is making huge investments in making healthcare available to all, blockchain tech can further help with this imperative initiative.
- The healthcare industry in India lacks a definitive system that is quick in recording the extensive data, in addition to making the same easily and securely shareable. Often, a large amount of time is consumed in obtaining the same data that may otherwise be invested in extending the best of care to the patients.
- The data thus stored via blockchain tech can further be linked with a global information network, without compromising on security and also making it available to healthcare providers across the network.

### **Banking Sector**

- Banking is one amongst the foremost sectors that stands poised to be disrupted with blockchain technology. It will not only offer accuracy and security, but will also aid the government in expediting financial inclusion.
- With blockchain, the government can establish online identities of individuals and their family associations, and allow individuals to operate bank accounts, transfer money, apply for loans, and more, thereby taking financial inclusion to a whole new level.

### **Elections**

- Blockchain will not only be helpful in keeping the voter’s information and identity a secret but also present a pragmatic way for casting votes, and keeping a track and count of the same.
- When adopted, blockchain tech would completely weed out any chances of fraud or foul play, hence ensuring no hiccups in the victory of democracy.

### **Agritech**

- The food supply chain is one characterized by asymmetry of information. The complex network comprises farmers, brokers, distributors, processors, retailers, regulators and consumers.



- Improved data sharing will result in stakeholders getting their dues (particularly poor farmers with small land holdings) and consumers having control on food quality.

### **Land Disputes**

- Two-thirds of pending civil court cases pertain to disputed land records, title dispute is central to the mess.
- Information on land records, exist in silos and in no uniform format which makes retrieval and sharing so very time-consuming.
- Abysmal land records necessitate that foremost, there be a common consensus on ownership. Blockchain can play a large role in resolving these issues.

### **Limitations of Blockchain**

Although the technology itself is revolutionary, there are certain blockchain limitations that have cropped up. These blockchain limitations don't make the technology less revolutionary, but they have raised questions about its efficiency and reliability.

### **Signature verification**

- Every blockchain transaction must be digitally signed and verified using a public or private key cryptography scheme. This signature verification process is very complex to compute and this consumes time.

### **Redundancy**

- In a blockchain network, for every node to be processed, it has to traverse and process every intermediate node independently to reach the target node.
- In contrast, a centralized database system can process nodes in parallel without any dependencies from the other nodes. Thus, the redundancy involved in blockchain technology affects its performance.

### **Attaining consensus**

- In a decentralized technology like blockchain, every transaction made must ensure that every block in the blockchain network must reach a common consensus.
- Depending on the network size and the number of blocks or nodes involved in a blockchain, the back-and-forth communications involved to attain a consensus can consume a considerable amount of time and resources.

### **Security**

- Like all other distributed systems, blockchain is not 100 percent resistant against bad actors who can corrupt the network.
- For the blockchain to remain stable and to avoid corruption in a network, it needs a huge set of users and nodes connected with a robust network.

### **Storage issues**

- Because a blockchain is an immutable distributed chain of blocks, the size of the blockchain grows at a very rapid pace, and this can cause serious storage concerns.

### **Computing Power**

- Blockchain relies on encryption to provide its security as well as establish consensus over a distributed network.
- This essentially means that, in order to “prove” that a user has permission to write to the chain, complex algorithms must be run, which in turn require large amounts of computing power.

### **Conclusion**

First proposed as a research project in 1991, blockchain has seen its fair share of public scrutiny over the last two decades, with businesses around the world speculating about what the technology is capable of and where it's headed in the years to come. But with many practical applications for the technology already being implemented and explored, blockchain is finally making a name for itself and as a buzzword on the tongue of investors in various nations, it stands to change the world we are living in, in a significant way by making operations in various domains more accurate, efficient, and secure.

## MAINS Q&A

### 1. Nuclear Proliferation Treaty (NPT) failed to prevent the spread of nuclear weapons and weapons technology. Critically Discuss.

#### Context

- A motion for Iran to **withdraw from the Treaty on the Non-Proliferation of Nuclear Weapons** was introduced in Iran's parliament. So far it is not clear when parliament might vote on the motion.
- To become a law, the proposal would have to be **passed by lawmakers in two readings** and then **ratified by the Guardian Council**, a body that is in charge of ensuring bills do not contradict religious laws or Iran's constitution.
- **Iran's Supreme Leader Ayatollah Ali Khamenei**, the highest authority in the Islamic Republic, has the **final say on all state matters like Tehran's nuclear policy**.

#### Answer

The NPT is an international treaty whose objective is to prevent the spread of nuclear weapons and weapons technology, to foster the peaceful uses of nuclear energy, and to further the goal of disarmament. Since July 1968, the Treaty has become a cornerstone of international efforts to prevent the spread of nuclear weapons.

#### NPT: A Success

- With the adherence of 190 countries out of 195, the NPT is close to **universal world participation**.
- It remains unique as there is no other international agreement based on a bargain between nuclear- and non-nuclear-weapon states. The Treaty facilitates **cooperation on peaceful applications of nuclear technology** under the watch of the IAEA.
- It can be credited with embedding the non-proliferation norm that is responsible for keeping the number of countries armed with nuclear weapons lower than ten.

#### NPT: Failed To Prevent The Spread Of Nuclear Weapons

- NPT in its present form tries to **prevent horizontal proliferation** but **cannot prevent vertical proliferation**. Failure to prevent horizontal spreading can be seen in case of Iran, Libya & N Korea.
- There are still almost 16,000 nuclear weapons in existence, many of them on hair-trigger alert and far more powerful than the bomb dropped on Hiroshima.
- There is **no truthful adherence to the treaty**. Many countries even after joining NPT continued **clandestine nuclear programmes** including Brazil, South Africa, Iran and Iraq.
- Today NPT has been reduced to a treaty which protects the rights of five nuclear weapon state. These states are contributing to the vertical proliferation of nuclear weapons.
- Failure by China and the United States to **resolve the North Korea nuclear and missile problem**, and a **collapse of the JCPOA**, makes it much more difficult for the NPT members to maintain unity in tackling non-proliferation challenges.

#### Conclusion:

- NPT is a **discriminatory treaty** which divides the world into **nuclear haves and have not**. In the **absence of truthful adherence**, it does not make world safer from the threat of nuclear weapons.

- It is believed that Treaty is at **risk of becoming obsolete and eventually collapsing**, because of proliferation challenges and disputes about disarmament.
  - It is high time to formulate a **global, time bound, verifiable & non-discriminatory treaty to eliminate all nuclear weapons** from the face of the earth, which has been **India's consistent position since the beginning**.
2. Do you think there is need to restructure institutional structures managing cybersecurity in India? Justify your position.

### Answer

- According to a report by the Data Security Council of India, **India ranks second** in the list of countries affected the most by cyberattacks between 2016 and 2018.
- There was a **recent cyber-attack on the Kudankulam nuclear power** plant. Hackers were also targeting the Indian Space Research Organisation as it was working on its moon mission.
- These attacks have pointed towards a larger problem that must be addressed in terms of **India's internet governance**.
- There is need to clarify the institutions responsible for managing and addressing rising cyber threats. This could then influence and inform India's response with respect to rules governing cyberspace which so far remained modest and restrained.

### **Why We Need Restructuring**

- India's institutional apparatus on cybersecurity is **diffused and fragmented**. Several ministries and agencies manage cybersecurity.
- The Ministry of Electronics and Information Technology (MEITY), Ministry of Home Affairs (MHA), Ministry of Defence, the National Security Council Secretariat and the National Technical Research Organisation have their own cybersecurity units.
- Additional specialised units include the Computer Emergency Response Team, the National Critical Information Infrastructure and the National Cyber Coordination Centre.
- So far, **Command and control** has **not risen as a policy priority** in cyberspace.
- **Absence of a unified agency** has affected India's ability to take a **principled stand on the issue of global governance of cyberspace**. Till now, India has not unveiled a clear position regarding responsible state behaviour in cyberspace.

### **Conclusion**

- Unless India bolsters its domestic cyber-infrastructure, the global positions it takes will be broad and not targeted at preventing rising cyber-attacks.
- A more robust cybersecurity posture could reveal India's strategy when it comes to both defensive and offensive cyber operations to thwart adversaries.
- The global cybersecurity space is in flux due to different positions taken by advance economies like US, Japan, EU, China and Russia. A new unified cybersecurity agency could provide India an opportunity to emerge as a leader in the global governance of cyberspace.
- The Indian government is in the **process of unveiling a Cybersecurity Strategy Policy (2020-25)**. The upcoming policy provides an opportunity to bring out much needed reform while **bringing its domestic policy in line with its global aspirations**.

3. As per the recent report of Vidhi Centre for Legal Policy most of the reason for creation of All India judicial Service (AIJS) no longer exist or have been resolved through changes in rules/regulations. In this light discuss the argument for and against creation of AIJS.

**Answer**

The idea of an AIJS has been deliberated since Independence. In fact, the **First law commission's 14<sup>th</sup> Report** on 'Reform of Judicial Administration' suggested the need for creating a separate All India service for judicial officers. Moreover, the vision document titled **Strategy for New India @ 75**, released by the **NITI Aayog**, amongst other things, proposed creation of an AIJS akin to the other central services like the IAS and the IPS.

**Argument For Creation Of AIJS**

- It will ensure that subordinate court judges are paid salaries and given perks at parity with government bureaucrats, thereby **incentivizing the option of the state judiciary** as a viable career prospect.
- The **quality of judges** will improve as the best legal talent across the country would be selected on the basis of merit.
- The AIJS is also being proposed as a **panacea to cure the chronic vacancy crisis** plaguing the Indian subordinate judiciary.
- An All India service will offer a more **streamlined and regularized recruitment process** for the vacancies for District judges in the country.
- The **Article 312** of the Constitution permits the Rajya Sabha to create an All India Services. Presently, the appointments to the subordinate judiciary are made under **Articles 233 and 234** of the Constitution. However, the Article 312 commences with a non-obstante clause, thus will override these provisions. Furthermore, **Entry 70** of the Union List provides Parliament exclusive authority to enact a law creating such an AIJS and all connected matters. Thus, AIJS creation is constitutionally permissible.
- Lastly, the **efficiency and efficacy of judiciary** would be increased and the issue of corruption, nepotism *etc.* would be strongly dealt with.

**Other Noteworthy Facts**

- **Article 312** of the Constitution to allow for the Rajya Sabha to pass a resolution, by **two-thirds majority** for creating an All India Service.
- Approximately, there are **5,000 vacancies** across the District and Subordinate Judiciary in India.
- **Women judges account for only 9%** of the total strength of the Judiciary.

**Arguments Against Creation Of AIJS**

- As the Constitution only permits the appointments of District Judges to such a prospective AIJS, it will **not magically remedy the shortage of judges at the subordinate level**.
- The idea of an AIJS has been significantly **contentious within the legal fraternity and other concerned stakeholders**. The idea has been vehemently disagreed by almost half the High Courts.
- Many states see this as an attempt by the central government to encroach on state's domain. Thus, it will be another **ground for conflict between the Union and other federal units**.
- If the control over State judiciary is transferred to Union government by removing control of High Court as currently provided under **Article 235**, the **independence of judiciary would be undermined**.
- The judges appointed by the All India process will need to familiarize themselves with the **local languages, customs and laws of the State**.

**Way forward**

- Besides creation of AIJS, it will also be prudent to investigate the reasons and causes for the large number of vacancies in lower judiciary so that the **timely corrective steps can be taken**.
  - Moreover, even after the selection, a Judicial service officer need to be provided sufficient training to handle the job. Thus, a meritocratic judiciary is the need of the hour.
4. **Andhra Pradesh Assembly has passed a resolution to dissolve the Legislative Council of the state. In this light discuss the arguments for and against creation of second house of the State legislature.**

**Answer**

Recently, the Andhra Pradesh Assembly resolution for dissolving the Legislative Council was passed by the lower house of the State Legislature. The move comes in the wake of the Legislative Council, dominated by members of the opposition blocked the ruling party's move to create **three state capitals** instead of a **single capital city in Amaravati**.

**Arguments In Favour Of Having Two Houses Of The State Legislature**

- A second House can help **check hasty actions** by the directly elected House.
- It will also enable **non-elected individuals to contribute to the legislative process**.
- Upper House also provides a **forum for academicians and intellectuals** to contribute to the electoral politics.

**Opposition To Two Houses**

- A Legislative Council can be used to **delay legislation and to park leaders** who have not been able to win an election.
- The **legislative power of the Councils are limited**. Unlike Rajya Sabha, which has substantial powers to shape non-financial legislation, Legislative Councils lack a constitutional mandate to do so. Assemblies can override suggestions/amendments made to a legislation by the Council.
- Further, unlike Rajya Sabha MPs, **MLCs cannot vote in elections for the President and Vice President**.
- Two Bills introduced in the Rajya Sabha in 2013 for establishing Legislative Councils in Assam and Rajasthan are still pending,

**About State Legislative Council:**

- As per **Article 169**, a Legislative Council can be formed, if the Legislative Assembly of the State passes a resolution to that effect by a **majority of the total membership** of the Assembly and by a majority of not **less than two-thirds** of the members of the Assembly present and voting. Parliament can then pass a law to this effect.
- As per **Article 171** of the Constitution, the Legislative Council of a state shall **not have more than one-third** of the total number of MLAs of the state and **not less than 40** members.
- As with Rajya Sabha MPs, the tenure of a Member of the Legislative Council (MLC) is **six years**, with **one-third of the members retiring every two years**.
- **One-third** of the MLCs are elected by the state's MLAs, **another 1/3rd** by a special electorate comprising sitting members of local governments such as municipalities and district boards, **1/12<sup>th</sup>** by an electorate of teachers and **another 1/12<sup>th</sup>** by registered graduates. The remaining members are appointed by the Governor for distinguished services in various fields.
- **Six states** have second house of state legislature these are Andhra Pradesh, Bihar, Karnataka, Maharashtra, Telangana and Uttar Pradesh.



indicating the **lack of support for such a move**.

- If there was any real benefit in having a Legislative Council, all States in the country should and arguably would have a second chamber. The fact that there are only six such Councils suggests the **lack of any real advantage**, apart from the absence of a broad political consensus on the issue.
- The second house is also an **unnecessary drain on the exchequer** in form of one time cost and recurring cost.

### Way Forward

- As suggested by Parliamentary Committee that went into these Bills cleared the proposals, but struck a cautionary note. It wanted a **National Policy on having an Upper House** in State legislatures to be framed by the Union government, so that a subsequent government doesn't abolish it.
- It also favoured a review of the provision in the law for Councils to have seats for graduates and teachers.
- Thus, the events in Andhra Pradesh give the country at large an opportunity to evolve a **national consensus on Legislative Councils**.

**5. Recently, Nirbhaya accused mercy petition for death penalty was rejected by the President. In this light, discuss the concept of Mercy petition and argument for and against death penalty.**

### Answer

After the **dismissal of the curative pleas** by the Supreme Court (SC) of the Nirbhaya accused, they filed Mercy petition before the President. **Article 72** of the Indian Constitution deals with the power of President to grant pardons, to suspend, remit or commute sentences in certain cases. The similar powers are also enjoyed by the Governor under the provisions of **Article 161**.

Further, the law laid down in **Bachan Singh (1980)**, upheld the validity of the death penalty and provided that death penalty should be awarded only in the **rarest of rare cases**. Around **59 countries** have still retained the death penalty. India is one of them, even if it does not employ it as frequently as countries such as Iran, China, Pakistan, Saudi Arabia and the USA.

In this light, the **Arguments In Favour Of Death Penalty** are as follows:

- In **1962, the Law Commission (35<sup>th</sup> Report)** supported the death penalty stating that India's particular circumstances were such that it could not experiment with its abolition.
- Further, in 1991, the SC cited its use in **defending law and order** as the reason for its continuance.
- India's **neighbourhood is not peaceful**, unlike Scandinavia. On the contrary, every day vested interests attempt to destabilize the very idea of our nation from across every border it shares. Moreover, cases of violent terror are constant reminders of the need to **protect national stability**.
- A punishment cannot be judged by its impact on criminals but by its impact on those who are still innocent. Thus, there is a **moral support for the death penalty**.
- Those who defend the death penalty often do it on the basis of **retributive justice**.
- The **judiciary has already circumscribed the application of death penalty** by stating that it must only be imposed where the alternative option is unquestionably foreclosed.
- The death penalty is imposed only in **rarest of rare cases** that shock the conscience of society. This is reflective in the fact that in the **last 13 years, only four people have been executed**.

The **Arguments Against Use Of Death Penalty** are as follows:

- The death penalty is criticized mainly on three counts *i.e.* **arbitrariness, irreversibility and human rights**.
- The **moral foundation of judicial killing** has been questioned and it has been judged untenable in many countries.
- **Implementation of the death penalty** has also been deeply problematic. As the recent Death Penalty India Report by the National Law University, Delhi indicates the **structural flaws in our criminal procedure and criminal justice system** are most pronounced in death penalty cases.
- There has been an **arbitrary manner/ application** in which death penalty is awarded by **different judges (judge-centric variations)** and the way public discourse influences such decisions.
- In recent times, **public outrage, the need for deterrence** and the clamour for a befitting punishment to render substantial justice have dominated the discourse. Whereas, individual cases the decision on death penalty should depend on the nature of the crime, its gravity, cruelty and the number of fatalities.
- The Supreme Court itself spoke of the extremely **uneven application of norms laid down in Bachan Singh**. The same was also endorsed by Law Commission of India in its **262<sup>nd</sup> Report** and asserted that there exists no principled method to remove such arbitrariness from capital sentencing.
- The death penalty has refused to consider the **Reformative theory of punishment** that focuses on reforming the individual.
- No study has shown that the **death penalty deters murder** more than life imprisonment. The evidence is all to the contrary. For deterrence to work, the severity of the punishment has to coexist with the **certainty and swiftness of the punishment**.
- Due to **biases in criminal investigations**, the marginalized, whether by religious and caste denominations or class are disproportionately subject to the death penalty. Over 3/4<sup>th</sup> of prisoners on death row belong to backward classes and religious minorities. Also 93.5 % sentenced for terror are Dalits or minorities.
- In 2007, the **UN General Assembly passed a resolution** calling for a moratorium on the administration of the death penalty.

#### **Way Forward**

- The SC has covered considerable ground in limiting the scope to the rarest of rare case. Post-appeal reviews and curative petitions are routinely admitted. Review petitions are now heard in open court. The treatment of death row prisoners has been humanized and there is scope for judicial review even against a sovereign decision denying clemency.
  - If there still prevails a perception of arbitrariness in the way death sentences are awarded, the only lasting solution is their abolition after due analysis.
- 6. The issue of criminalisation of politics is a recurring topic. In this light reflect on the reason for growing criminalisation of politics and efforts by SC and EC to resolve this issue.**

#### **Answer**

Recently, the Supreme Court (SC) has agreed to consider whether directions can be issued to political parties to deny tickets to persons with criminal background. As per the Election Commission (EC), the

earlier directions issued by the SC in 2018 to **give publicity to the criminal antecedents of candidates** contesting elections has failed to yield the desired result of decriminalizing politics.

In 17<sup>th</sup> Lok Sabha, **43% of MPs** are facing criminal cases and out of which **29% have serious criminal cases** relating to rape, murder etc.

#### **Reason for Criminalisation of Politics**

- The **influence of muscle power** provided by criminals help political parties to gain vote bank.
- Further, the election requires **huge money expenditure** and criminal activities help generating such large money.
- There is also a **loophole in the functioning of election** as the voters are not usually aware of the history of the candidate, qualification and cases pending against him.
- Lastly, the **weak judicial system & denial of justice** create a lack of deterrence among criminals to participate in election process.

#### **Legal Provisions:**

- **Article 102(1) and 191(1)** disqualifies an MP and an MLA respectively on certain grounds.
- **Section 8 of the Representation of People Act, 1951**, bans convicted politicians. But those facing trial, no matter how serious the charges, are free to contest elections.

#### **To resolve this, various steps have been taken by SC and EC:**

- The EC has taken measures for effective implementation of the **model code of conduct** and the setting up of the **expense monitoring cell**.
- Further, mandatory declaration of existing criminal charges in affidavits prior to elections had also a positive impact.
- Similarly, the SC in 2002 ruled that every candidate, contesting an election, has to **declare criminal records**.
- In 2013, the SC in **Lily Thomas v. Union of India** ordered that upon conviction, MPs and MLAs would be disqualified with immediate effect from holding membership of the House.
- In 2014, SC passed an order directing that **trials against sitting MPs and MLAs must be concluded within a year** of charges being framed and that they should be conducted on a day-to-day basis.

Thus, to resolve the issue of criminalisation in politics, besides reforming the judicial system, there is also a need for reforming political parties, creating awareness among general public etc.

#### **Extra Mile**

##### **Various Committee On Criminalization Of Politics:**

- **The Santhanam Committee Report, 1963:** It referred to political corruption as more dangerous than corruption of officials and recommended for Vigilance Commission both at the Centre and in the States.
- **Vohra Committee Report, 1993:** It studied the problem of the criminalization of politics and of the nexus among criminals, politicians and bureaucrats in India.
- **Padmanabhaiah Committee on Police Reforms:** It found that Corruption is the root cause of both politicization and criminalization of the police. It was also of the opinion that it is the criminalization of politics, which has produced and promoted a culture of impunity.

**7. India has recently made certain changes in the imports of palm oil. Highlight the changes along with the dynamics of vegetable oil and palm oil imports in the country. Also throw light on the impact of the current decision.**

**Answer**

**The Changes**

- India has cut import duty on crude palm oil (CPO) and, has moved refined, bleached and deodorised (RBD) palm oil from the “free” to the “restricted” list of imports.
- While curbing oil imports has been under discussion since the Budget presented in July 2019, the move has been construed as retaliation against Malaysia’s PM Mahathir bin Mohamad, who has criticised India’s internal policy decisions such as citizenship and its policies in PoK region. Malaysia has also been sheltering the Islamic preacher Zakir Naik, since 2017, who is wanted by India on charges of money laundering, hate speech, and links to terror.
- However, it is believed that the reasons are not entirely political, as the import of RBD palm oil has been restricted, not banned — and this is from all countries, not just Malaysia. Moreover, CPO can still be imported freely.

**Dynamics Of India’s Vegetable oil and Palm Oil Imports**

- India is the world’s leading vegetable oil buyer, of which the share of palm oil is more than 60 % of the country’s total vegetable oil imports. Indonesia and Malaysia together produce 85% of the world’s palm oil, and India is among their biggest buyers.
- Further, India also imports a small quantity of crude soft oil, including soya bean oil from Argentina and sunflower oil from Ukraine and Russia.
- Commerce Ministry data shows that India imported \$10 billion worth of vegetable oil in 2019-20, making it the country’s fifth most valuable import after mineral oil (\$141 bn), gold (\$32 bn), coal (\$26 bn), and telecom instruments such as cell phones (\$17 bn).
- Reason For High Imports Of Palm Oil
  - It is the cheapest edible oil available naturally and its inert taste makes it suitable for use in foods ranging from baked goods to fried snacks.
  - It stays relatively stable at high temperatures, and is therefore suitable for reuse and deep frying
  - It is also the main ingredient in vanaspati - hydrogenated vegetable oil.
- Difference Between Importing Crude Oil And Refined Oil
  - The CPO that India imports contains fatty acids, gums and wax-like substances. Refining neutralises the acids along with filtering out other substances and the filtrate is then bleached so that the oil does not change colour after repeated use.
  - Further, substances that may cause the oil to smell are removed physically or chemically and this entire process increases the value of a barrel of crude oil by about 4%.
  - Additionally, there are costs to transporting the crude, which makes it more cost-effective to import the refined oil.
- But the refining industry has been demanding that the import duty on refined oil be increased, which would make importing crude oil cheaper than importing refined oil.

**Impact Of The Current Decision**

- The decision to restrict imports of refined oil will benefit refiners, which include big-ticket names like the Adani Wilmar group.
- As palm oil is not used in Indian homes and the fact that CPO continues to be imported, makes it unlikely that the decision to restrict refined palm oil imports will impact food inflation immediately.

**Impact On Farmers**

- Restricting refined oil imports will not help farmers directly, as they are not involved in the process of refining. However, the restrictions have caused refined palm oil prices to increase and *if prices continue to hold, farmers will get a better realisation for their crop.*
- But the timeframe over which the changes in import policy will have an effect on domestic crop realisation is fairly long, given that palm trees take over four years to provide a yield.
- Also, if the demand is met entirely by importing and refining CPO, farmers will be left out of the picture.

**Impact On Malaysia**

- Both Indonesia and Malaysia produce refined palm oil; however, Malaysia's refining capacity equals its production capacity — this is why Malaysia is keen on exporting refined oil.
- Palm oil is crucial for the Malaysian economy as it accounts for 2.8 per cent of GDP and 4.5 per cent of total exports. Placing restrictions on refined palm oil, Malaysian economy would be affected badly.
- With exports to its largest market restricted, Malaysian palm oil futures fell by almost 10%. If India does not issue licenses for importing refined oil, Malaysia will have to find new buyers but replacing a massive buyer like India won't be easy.
- The other concern for Malaysia is that following the signing of an initial trade deal between the US and China recently, China could buy more soya oil from the US and less Malaysian palm oil.

Going forward, both the countries should work on putting aside the political differences and try to engage through diplomatic channels to ensure that non trade issues do not influence the trade equations between the two countries.

**Bilateral Relation: In Brief**

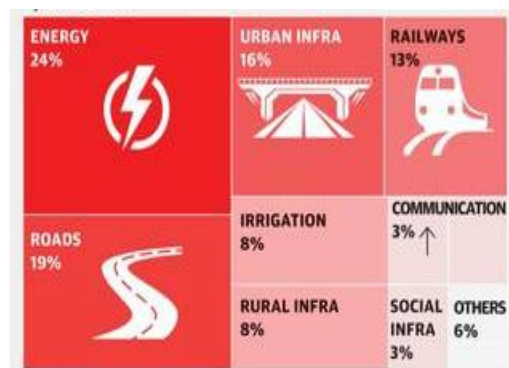
- Malaysia has been a benign trade partner since the historic visit of P V Narsimha Rao in 1995 as part of India's Look East Policy.
- Malaysia and India have many common threads. Malaysia has mix of majority Muslims, and significant minorities of Buddhist, Christian and Hindu populations.
- Singapore and Malaysia have always been at the core of India's interests in its 'Act East' policy, and its attempts to fortify the ASEAN coalition.
- **Trade and anti-terror** platforms brought the two countries together
- India and Malaysia discussed almost **\$5 billion dollar** worth of two-way investments in 2017, the **60th year of India-Malaysia diplomatic relations.**
- **Malaysia's annual trade** with India has reached **USD 15 billion**, having received a boost from a bilateral free trade agreement (FTA) and a regional FTA with India through ASEAN.
- **Malaysia's total exports to India** grew 5.1 per cent to USD 8.8 billion while **exports from India to Malaysia** touched USD 6.5 billion in 2018

- Both the country spoke of the **defence and strategic partnership** being “very important in the fight global terrorism, militancy, extremism, including the fight against IS and against any form of extremism”.
- India was specifically interested in knowing about the **success of Malaysia’s de-radicalisation programme**.
- Both the country participate in various bilateral military exercises such as - **Harimau Shakti (army), Samudra Laksamana (Navy) etc.**

**8. What is the National Infrastructure Pipeline? Highlight the challenges in the execution of National Infrastructure Pipeline along with the paths to work around the challenges.**

**Answer**

- The Union government has announced its plan to invest Rs 102 lakh crore in infrastructure projects across India that will be implemented between fiscal 2020 and 2025. This would be a significant increase over the last six years, when the Centre and States together spent ₹51 lakh crore on infrastructure.
- The new pipeline consists of 39 % projects each by the Centre and states and the balance by 22 % by private sector.
- Of the total project, capital expenditure sectors such as energy (24 %), urban (16 %), railways (13 %) and roads (19 %) are estimated to account for more than 70 % of the projected investments.



**Challenges**

Identifying the projects to be put on the pipeline is the easy part, however, there are a few hurdles that the NIP task force needs to watch out for.

- Going by the present fiscal situation, it will be no small challenge for the Centre to raise ₹39 lakh crore, even if it is over the next five years, while the State’s fiscal capacity faces a crunch (more than 20 states already have a debt-GSDP ratio of above 25 per cent) to even meet already committed state expenditure.
- The ₹22 lakh crore expected from private investment also looks steep considering the lack of appetite for fresh investment by the private sector in the last few years. In fact, this factor has been a major drag on economic growth.
- Infra-based investments have to deal with extra-market factors involving delays in land acquisition processes, enforcement of contracts and delay in court-case resolutions and they take years, sometimes decades, to be actualised.
- This is precisely why many major banks, even in case of credible borrowers, remain cautious with long-term supply of loans. If not managed well, a private public working model may accentuate some of these worries, exacerbate debt ridden projects and crowd-out investments from private players.

**Way around**

- A critical step in addressing dwindling private sector participation in infrastructure can be institutionalising dispute resolution mechanism to efficiently resolve disputes related to PPP projects.



- Investments must be made in the institutions created under the Commercial Courts Act 2015, the Specific Relief (Amendment) Act 2018 and the New Delhi Arbitration Centre Act 2019 for speedy resolution.
- The task force has suggested contract enforcement and asset monetisation among other reforms for achieving infra investment targets.
- Asset monetisation can be undertaken through sale of land, non-operational assets through long-term lease with significant upfront lease payment, toll-operate-transfer (TOT) model for operational road assets, infrastructure investment trusts (InvITs), sale of portfolio of assets to strategic/ financial investors and loan asset monetisation through securitisation and value capture financing (VCF)
- All this will come to naught if there is no review mechanism, hence, a periodic review is paramount if this is not to degenerate into a mere collation and listing of projects.

While there are genuine obstacles that the task force needs to manage, these should not detract from the need for a concerted effort to invest in infrastructure. A well-planned NIP will enable more infra projects, grow businesses, create jobs, improve ease of living, and provide equitable access to infrastructure for all, making growth more inclusive and have a strong multiplier effect in giving a much needed boost to the economy.

**9. The Supreme Court recently pronounced a judgement on the frequent internet suspensions taking place in the country. What are the rules governing the suspension of internet in the country? Also delineate the Court's judgement pronounced on the issue.**

**Answer**

- In the backdrop of the five-month-long Internet shutdown in Kashmir, the Supreme Court in **Anuradha Bhasin v. UOI** has ruled that expression of views and carrying out trade through internet are also part of the constitutionally guaranteed fundamental right to free speech and that indefinite suspension of internet services is impermissible.
- It, however, refused to express any views on whether the very access to the Internet is a fundamental right or not. In **Faheema Shirin v. State of Kerala**, the Kerala High Court had declared the right to Internet access as a fundamental right forming a part of the Right to Privacy and the Right to education under Article 21 of the Constitution.

**Procedure Followed To Suspend Internet Services**

- The Information Technology Act 2000, the Criminal Procedure Code (CrPC) 1973 and the Telegraph Act, 1885 are the three laws that deal with suspension of Internet services.
- Prior to 2017, Internet suspension orders were issued under Section 144 of the CrPC. In 2017, the central government notified the **Temporary Suspension of Telecom Services (Public Emergency or Public Service) Rules** under the Telegraph Act to govern suspension of Internet.
- These Rules derive their powers from **Section 5(2)** of the Indian Telegraph Act, which talks about interception of messages in the "**interests of the sovereignty and integrity of India**".
- Despite the 2017 rules, the government has often used the powers under Section 144. For example, in the wake of the protests against the Citizenship Amendment Act, Internet services were suspended by the District Magistrate in UP and West Bengal under Section 144.
- The use of Section 144 to suspend mobile internet was challenged before the Gujarat High Court in 2015 but the court upheld the power of the magistrate to issue such orders.

**Current Judgement On Procedure To Be Followed For Suspension Of Internet Services**

- The court recognised that the 2017 Rules are **the only procedure** to be followed to suspend Internet services in the occurrence of a “public emergency” or for it to be “in the interest of public safety”.
- The Court also highlighted ‘gaps’ in the current Suspension Rules and tightened the window for ‘complete and broad’ suspensions, stating they had to be “necessary” and “unavoidable”.
- Quoting from the 2017 Rules, the verdict reiterated that the competent authority to issue an order under the Suspension Rules, in ordinary circumstances, would be the **Secretary to the Ministry of Home Affairs**.
- The Rules also say that in case the confirmation does not come from a competent authority, the orders shall cease to exist within a period of 24 hours.
- **Clear reasons for such orders need to be given in writing**, and need to be forwarded to a Review Committee by the next working day.
- Further, the confirmation must not be a mere formality, but must indicate independent application of mind by the competent authority to the order passed by the authorised officer, who must also take into account changed circumstances if any.

**Court’s Stand On The Duration Of Suspension**

- The court held that suspending internet services indefinitely is impermissible under the Temporary Suspension of Telecom Services Rules, 2017 and suspension could be utilised for temporary duration only.
- The court pointed out that the government was able to continue with the suspension of Internet services because the 2017 Rules did not define word “temporary” and that no time-limit was prescribed in the rules.
- Hence, the court asked the legislature to repair this lacuna and till then, any order of Internet suspension under the rules would be reviewed within a week of its issuance.

**Publication of Orders**

- Although the Temporary Suspension of Telecom Services Rules, 2017 does not provide for publication or notification of the order suspending Internet, the apex court mandated that such orders must be made available to the public, particularly one that affects lives, liberty and property of people.
- By directing the government to mandatorily publish all orders permitting Internet shutdowns, the Supreme Court has for the first time set the stage for challenging suspension orders before courts.
- While suspension orders were always subject to judicial review, lack of availability of such orders in public domain prevented such challenges before courts.
- The court declared that it is a settled principle of law and of natural justice that requires publication of such orders, particularly one that affects lives, liberty and property of people. The court also ruled that the government cannot refuse to publish such orders citing logistical inconvenience.

The verdict goes a long way in acknowledging the central role played by Internet services in trade and communication, by laying down a framework of how the Internet can be suspended. Further, by streamlining the legal recourse for a citizen during internet suspension, it significantly precludes the possibility of arbitrary suspension of internet and the consequent abrogation of rights.

**Courts Judgement wrt Section 144**

- Section 144 cannot be used to **suppress the legitimate expression of opinion** or grievance, or the exercise of democratic rights
- The imposition of aforementioned Section must **strike a balance** between the rights of the individual and the concerns of the state.
- Further, when Section 144 is **imposed for reasons of apprehended danger**, that danger must be an 'emergency'.
- Lastly, powers under Section 144 should be exercised in **a reasonable and bona fide manner** and the **order must state material facts** in order to enable judicial review.

**Directives For J&K By The Court**

- The top court directed the government to review orders suspending Internet services in Jammu and Kashmir instantly and any order suspending the Internet found to violate the law should be revoked at once.
- It further instructed the government to consider restoring government websites, localised/limited e-banking facilities, hospital services and other essential services in areas in the Union Territory, where it was otherwise not thinking to do so immediately.
- It also said repetitive (prohibitive) orders under Section 144 would be an abuse of power and directed authorities to notify all prohibitory orders passed in J&K so as to enable aggrieved persons to challenge it at an appropriate forum.

**10. The Annual Status of Education Report 2019 was recently released with a focus on 'early years' What is the Annual Status of Education Report? Also, delineate the findings of Annual Status of Education Report 2019.**

**Answer**

- ASER reports on the schooling status and the ability of students at basic reading and arithmetic tasks for children in the 5-16 age group in rural India.
- Large sums of money are channelled into various social sector programs including education but lack of information on how these investments translate into outcomes on the ground is a major barrier to evaluating their effectiveness.
- ASER seeks to use simple yet rigorous methods to generate evidence on the outcomes of social sector programs. It also aims to strengthen the link between evidence and action by building the capacity of individuals and institutions to design, conduct and understand assessments that focus on key outcome indicators.

**ASER 2019**

- In 2019, ASER puts the spotlight on the early years, reporting on the schooling status, as well as on a range of important developmental indicators for young children in the age group of 4-8 years.
- Children were asked to do a variety of tasks testing cognitive skills — sort images by colour and size, recognise patterns, fit together a four-piece animal puzzle — as well as simple literacy and numeracy tests.

- Social and emotional development was tracked through activities using cards with faces showing happiness, sadness, anger and fear.

### Findings of ASER 2019

- The report shows that 90% of children in the age group of 4-8 years are enrolled in some type of educational institution with the figure standing at 99.5% for the 8-year-olds.
- Only 16% of children in Class 1 in 26 surveyed rural districts can read text at the prescribed level, while almost 40% cannot even recognise letters and only 41% could recognise two digit numbers.

#### Gap Between Private And Government Schools

- Of six-year olds in Class 1, 41.5% of those in private schools could read words in comparison to only 19% from government schools. Similarly, 28% of those in government schools could do simple addition as against 47% in private schools.
- This gap increases further by a gender divide: only 39% of girls aged 6-8 are enrolled in private schools in comparison to almost 48% of boys.
- The report also found that a classroom could include students from a range of age-groups, skewing towards younger children in government schools. More than a quarter of Class 1 students in government schools are only 4 or 5 years old, younger than the recommended age.
- The report shows that these younger children struggle more than others in all skills as permitting underage children into primary grades puts them at a learning disadvantage which is difficult to overcome.

#### Influence Of Mother's Education

- Among the key findings of ASER 2019 is that the mother's education often determines the kind of pre-schooling or schooling that the child gets.
- While 50% of the children whose mothers have eight years or less schooling ended up in anganwadis or government schools, mothers who studied beyond elementary stages are more likely to enrol their wards in private schools.
- Among 4- and 5-year-olds who were administered a four-piece puzzle and 6- to 8-year-olds who were asked to solve a 6-piece puzzle, those whose mothers had completed Class 11 or more had a higher chance of solving these cognitive tasks.

### Way Ahead

- As per the report, the solution is not to spend longer hours teaching children the 3Rs - Reading, Writing and Arithmetic. Instead, a **focus on cognitive skills** rather than subject learning in the early years can make a big difference to basic literacy and numeracy abilities.
- The idea behind early childhood education is not more institutionalisation in the form of private pre-schools or play schools but to involve children through cognitive tasks that mainly involve play.
- With 75% women in the productive age group not in the workforce, they can be better engaged in their children's development, learning and school readiness.

### Learning levels

Five-year-old children in private schools fared better in learning tasks than those in govt. schools and anganwadis

% of students who completed the tasks	Govt. pre-school	Private kindergarten
<b>COGNITIVE TASKS</b>		
Sorting	77.5	87.2
Pattern recognition	43.4	49.9
<b>BASIC LANGUAGE</b>		
Picture description	63.7	76.6
Listening comprehension	23.5	40.4
<b>BASIC MATHS</b>		
Counting objects	36.8	57.6



- Most of the young mothers in the next decade will not be very young as median age of marriage has increased from 18.2 years in 2001 to 19.2 in 2011 to nearly 21.7 in rural India and 23.4 in urban India by 2016. Further, most of these young mothers will have had at least five years of schooling.
- Hence, these changes in the young Indian mother's profile need to be taken into account when thinking of the education inputs to be designed for the Indian child of the next decade.

**Extra Mile****Significance Of Early Years**

- Global research shows that 90% of brain growth occurs by age 5, meaning that the quality of early childhood education has a crucial impact on the development and long-term schooling of a child.
- The National policy also recommends that children in the 4- to 5-year age bracket should be in pre-primary classes.
- Also at this stage, children should be encouraged to develop a range of abilities and skills, including cognitive, social, and emotional skills as well as the conceptual foundations needed for formal schooling.

**11. Oxfam International has released a report 'Time to Care: Unpaid and Underpaid Care Work and the Global Inequality Crisis'. Highlight the findings of the report along with the measures to reduce inequality.**

**Answer**

Oxfam International has published its report that underlines what has been said repeatedly by governments, research organisations and a range of multilateral bodies over the past decade or more — that economic inequality, “is out of control”, with extremes of wealth existing alongside great poverty.

**Highlights Of The Report****A. Gap Between The Richest And The Rest**

- As per the report, India's richest 1% hold more than four times the wealth held by the 953 million who make up for the bottom 70% of the country's population and the world's richest 1% have more than twice as much wealth as 6.9 billion people.
- Nearly half the world is trying to survive on \$5.50 a day or less and many people are just one hospital bill or failed harvest away from destitution.
- *Taxation System Aiding Inequality:* One reason for these outsized returns is a collapse in taxation of the super-rich and the biggest corporations because of falling tax rates and deliberate tax dodging. At the same time, only 4% of global tax comes from taxation of wealth and studies show that the super-rich avoid as much as 30% of their tax liability.
- Extremely low corporate taxation helps them cream the profits from companies where they are the main shareholders. This is evident in the fact that between 2011 and 2017 average wages in G7 countries increased by 3%, while dividends to wealthy shareholders grew by 31%.

**B. Women Are Worse Off Than Men**

- Economic inequality is also built on gender inequality, and the majority of those at the bottom of the economic pyramid are women.
- Women and girls are more likely to be found in poorly paid and precarious employment, and they do the bulk of unpaid and underpaid care work.

- The dominant model of capitalism actively exploits and drives traditional sexist beliefs that disempower women and girls, counting on them to do this work, but refusing to value them for it.

### **C. Leaders Are Failing To Act**

- Despite the evidence of the corrosive effects of the divide between rich and poor, most world leaders are still pursuing policy agendas that drive a greater gap between the haves and the have nots.
- They are offering policies like tax cuts for billionaires, obstructing measures to tackle the climate emergency, or bolstering racism, sexism and hatred of minorities.

### **Way Ahead**

- Feminist economics and gender equality are fundamental to a human economy and a core part of this new, fairer, human economy is to fully address the role of unpaid and underpaid care work.
- Building national care systems with the full participation of civil society, and in particular women's rights groups, is a fundamental step in this direction.
- Further, actions to redistribute care work should be part of a comprehensive approach of redistributive policies in order to close the gap between rich and poor.
- The policies should include progressive taxation, free public services and social protection systems and policies to limit the influence of corporations and the super-rich.

Extreme wealth is a sign of a failing economic system, hence Governments must take steps to radically reduce the gap between the rich and the rest of society and prioritize the wellbeing of all citizens over unsustainable growth and profit, to avoid a world that caters only to a privileged few and consigns millions of people to poverty.

#### **Extra mile**

In compiling the facts on economic inequality for the report [Oxfam's wealth analysis makes use of the Credit Suisse Global Wealth report](#), as it is the most comprehensive dataset of global wealth distribution.

#### **Data On Gender Inequality**

- Men predominate positions of political and economic power, as just 18% of ministers and 24% of parliamentarians globally are women.
- Further, men own 50% more wealth than women, while women occupy only an estimated 34% of managerial positions in the countries where data is available.
- Globally, extreme poverty rates are 4% higher for women than men; this gap rises to 22% during women's peak productive and reproductive ages.
- \$10.8 trillion is the estimated minimum annual monetary value of the unpaid care work by women aged 15 and above globally — this is three times the size of the world's tech industry.
- Women do 12.5 billion hours of unpaid care work every day, equivalent to 1.5 billion people working 8 hours a day with no remuneration.
- Globally, 42% of working age women are outside the paid labour force, compared with 6% of men, due to unpaid care responsibilities. Further, 80% of the estimated 67 million domestic workers worldwide are women.

#### **Oxfam**

- Oxfam is a confederation of 19 independent charitable organisations focusing on the alleviation of global poverty, founded in 1942 and led by Oxfam International.



- Oxfam's programmes address the structural causes of poverty and related injustice and work primarily through local accountable organizations, seeking to enhance their effectiveness.
- In the year 2000, Oxfam adopted the rights based approach as the framework for all the work of the Confederation and its partners.
- In doing so, it recognizes the universality and indivisibility of human rights and has adopted the following aims to express these rights in practical terms - the right to a sustainable livelihood; the right to basic social services; the right to life and security; the right to be heard and the right to an identity.

**12. The World Economic Forum has recently released the Global Social Mobility Index. What is Social Mobility? Also highlight the findings of the report along with the measures to improve Social Mobility.**

**Answer**

- The World Economic Forum has created a new index to measure social mobility, providing a much-needed assessment of the current state of social mobility worldwide.
- Social mobility can be understood as the movement in personal circumstances either “upwards” or “downwards” of an individual in relation to those of their parents.
- In absolute terms, it is the ability of a child to experience a better life than their parents. On the other hand, relative social mobility is an assessment of the impact of socio-economic background on an individual's outcomes in life.
- The WEF's Global Social Mobility Index assesses 82 economies across five key dimensions distributed over 10 pillars - health; education (access, quality and equity); technology; work (opportunities, wages, conditions); and protections and institutions (social protection and inclusive institutions)

**Findings**

- The headline finding of the report is that most economies are failing to provide the conditions in which their citizens can thrive, often by a large margin. As a result, an individual's opportunities in life remain tethered to their socio-economic status at birth, entrenching historical inequalities. This is a major problem not only for the individual, but also society and the economy.
- Poor social mobility coupled with inequality of opportunity underpin these frictions, suggesting that if the level of social mobility were increased, it could act as a lever to economic growth.
- The report shows that only a handful of nations across the 82 countries covered have put in place the right conditions to foster social mobility.
- The most socially mobile societies in the world are all European. The Nordic nations hold the top five spots, led by Denmark in the first place (scoring 85 points), followed by Norway, Finland and Sweden (all above 83 points) and Iceland (82 points).
- Rounding out the top 10 are the Netherlands (6th), Switzerland (7th), Austria (8th), Belgium (9th) and Luxembourg (10th).
- Among the world's large emerging economies, the Russian Federation is the most socially mobile of the BRICS grouping, ranking 39th, with a score of 64 points. Next is China (45th), followed by Brazil (60th), India (76th) and South Africa (77th).

- India, ranks 41st in lifelong learning and 53rd in working conditions. The Areas of improvement for India include social protection (76th) and fair wage distribution (79th).
- The top five economies which stand to gain the most from boosting social mobility are China, the United States, India, Japan and Germany. Most importantly though, the returns are intangible in the form of social cohesion, stability and enhanced opportunity for more people to fulfil their potential.
- The most socially mobile economies all share an emphasis on effective social policies that benefit communities as well as provide a platform for healthy, competitive economies. By comparison, economies that are organized more on shareholder value maximization, or state capitalism, tend to perform less well.
- Globalization and the Fourth Industrial Revolution have generated significant benefits, but have also exacerbated inequalities. The index shows that globalisation has increased inequalities within countries by transferring low-skilled jobs in high-productivity sectors in high-income economies to lower-income counterparts.
- Concurrently, technology has polarized inequalities by reducing demand for low-skilled jobs while rewarding highly skilled jobs disproportionately.

### **Way Ahead**

- It calls for a new financing model for social mobility - Improving tax progressivity on personal income, policies that address wealth concentration and broadly rebalancing the sources of taxation can support the social mobility agenda.
- Most importantly, however, the mix of public spending and policy incentives must change to put greater emphasis on the factors of social spending.
- Further, developing a new social protection contract would offer holistic protection to all workers irrespective of their employment status, particularly in a context of technological change and industry transitions, requiring greater support for job transitions in the coming decade.

The social and economic consequences of inequality are profound and far-reaching, which can lead to a growing sense of unfairness, perceived loss of identity and dignity, weakening social fabric, eroding trust in institutions, disenchantment with political processes, and an erosion of the social contract. Thus the response by business and government must include a concerted effort to create new pathways to socioeconomic mobility, ensuring everyone has fair opportunities for success.

### **13. ISRO has launched a half humanoid named Vyommitra. Why did ISRO develop the humanoid and what are the various tasks that Vyommitra would be able to perform?**

#### **Answer**

- A humanoid is basically a robot with the appearance of a human being. ISRO's Vyommitra is also being called a half-humanoid since she will only have a head, two hands and a torso, and will not have lower limbs.
- Like any robot, a humanoid's functions are determined by the computer systems to which it is connected. With the growth of artificial intelligence and robotics, humanoids are being increasingly used for repetitive jobs, such as that of a waiter at a restaurant.
- The artificial intelligence technologies that power modern systems such as autonomous cars, or voice-operated systems such as Alexa, Siri and Google Assistant are extended in a humanoid to perform simple functions that include walking, communicating and obeying commands.

**ISRO's Need For Developing A Humanoid**

- ISRO plans to send a human into space for the first time by 2022 and is developing a crew module and rocket systems that will ensure the safe travel and return of the Indian astronaut.
- Other countries that have successfully launched humans into space did so after having used animals for conducting tests of their rockets and crew recovery systems, while ISRO will use the humanoid to test the efficacy of its GSLV Mk III rocket to transport a human to space and back. Once flown into space, ISRO's half-humanoid will be able to test systems in the crew module meant for the survival and safe travel of the first Indian astronaut in 2022.

**Tasks That Vyommitra Will Perform In Space**

- The Vyommitra humanoid, which will test the ground for the human spaceflight, will be a very basic version of a TARS-type (a central character in the science-fiction film *Interstellar*), artificial-intelligence-and-robotics system.
- Vyommitra will be able to perform procedures to use equipment on board the spacecraft's crew module such as safety mechanisms and switches, as well as receiving and acting on commands sent from ground stations.
- Attaining launch and orbital postures, responding to the environment, generating warnings, replacing carbon dioxide canisters, monitoring of the crew module, receiving voice commands, responding via speech (bilingual) are other functions listed for the humanoid.
- Vyommitra will also report back to Earth on the changes occurring in the crew module during the spaceflight such as heat radiation levels, to enable ISRO to understand the safety levels required in the crew module that will eventually fly a human being.
- Scientists are further envisaging better features, including developing the robot to take part in life-support operations in events causing danger to astronauts' lives in future missions.

By performing the said tasks, Vyommitra will not only make life easier for the astronauts on board Gaganyaan, but will also help the country to break new grounds in the space frontier and will aid in fuelling the scientific temper of the country.

**Extra mile**

The name Vyommitra is made by combining two Sanskrit words — Vyoma (Space) and Mitra (Friend).

**Humanoids Used In Other Space Missions**

- There have been many space missions featuring dummy astronauts and there have also been many featuring humanoid robots like Vyommitra.
- The most recent mission with a dummy astronaut was in March 2019, when a mannequin called **Ripley** was flown on the Dragon crew capsule, launched on a SpaceX Falcon rocket and sent to the International Space Station. Ripley was fitted with sensors to measure forces that act during a space flight as part of SpaceX preparations to send a human into space in 2020 for NASA.
- An artificial intelligence robot ball called **CIMON** (Crew Interactive Mobile Companion) was deployed on the ISS by Airbus.
- **Kirobo**, a humanoid robot astronaut built in Japan, was flown to the ISS along with the first Japanese commander of the ISS, to serve as the astronaut's assistant in conducting experiments on the space station. Kirobo was equipped with technologies such as speech recognition, facial recognition, language processing and telecommunication capabilities.

- Other examples are **Int-ball**, a floating camera robot, deployed on the ISS by JAXA space agency and **Fedor**, a Russian humanoid robot, that was sent to the ISS in 2019 to carry out mechanical functions on the space station.

**14. Starlabs has recently launched NEONs. What are NEONs? Throw light on their functioning while delineating their difference from virtual assistants.**

**Answer**

- Samsung backed STARLabs has recently introduced what it calls the **world's first 'Artificial Human'** called NEON - the word derives from NEO (new) + humaN.
- NEON is described as a computationally created virtual being that looks and behaves like a real human, with the ability to show emotions and intelligence.
- Currently, NEONs don't have a physical embodiment, but rather, are digitally composed next-generation artificial intelligent entities.
- Even though NEONs are virtual, they can exhibit the most important aspects of human capabilities: the ability to communicate with human affect, the ability to learn from experiences, and the ability to form new memories.

**Difference From Virtual Assistants**

- NEON is not a virtual assistant or a bot which gives answers to questions like what's the weather. NEONs are also not androids, surrogates, copies of real humans or an interface to the Internet to ask for cricket updates or to play one's favourite music.
- Virtual Assistants now learn from all the data they are plugged into, while NEONs will be **limited to what they know and learn**. Their learning could potentially be *limited to the person* they are catering to and maybe their friends — but not the entire Internet.
- They will be built to become friends, collaborators, and companions, continually learning, evolving, and forming memories from their interactions.

**Functioning of Neons**

- There are two core technologies behind NEONs. First, there is the proprietary **CORE R3 technology** where R3 stands for Reality, Realtime and Responsive.
- CORE R3 leapfrogs in the domains of Behavioral Neural Networks, Evolutionary Generative Intelligence and Computational Reality, and is extensively trained on how humans look, behave and interact. But in the end, it is like a rendition engine, converting the mathematical models to look like actual humans.
- CORE R3 can computationally create lifelike reality that is beyond normal perception to distinguish. With a latency of less than a few milliseconds, CORE R3 makes it possible for NEONs to react and respond in real-time.
- The next stage will be **SPECTRA**, which will complement CORE R3 with the "spectrum of intelligence, learning, emotions and memory". But SPECTRA is still in development, and is not expected until later this year.
- StarLabs does not want NEONs to have collective memory, or to share data among themselves. So what is known to one NEON cannot be useful for another. The idea is to have a small network that can live independently.

- Further, no one except the person and the NEON can ever have access to the interactions, and the private data will never be shared without permission.
- Although Artificial Humans may borrow the likeness of or are modelled after real people, each NEON has his or her own unique personality and can show new expressions, movements, and dialogs.
- In the near future, one will be able to license or subscribe to a NEON as a service representative, a financial advisor, a healthcare provider, or a concierge and over time, NEONs are meant to work as TV anchors, spokespeople, or movie actors.

### Way Ahead

The plan is to continue developing the CORE R3 engine, and to beta launch NEON in the real world with selected partners from around the world but a physical embodiment for NEONs is not envisioned any time in the near future, as the technology is not in the realm of the possible atleast for the next 25-30 years. In the long run however, it is expected that NEONs will integrate with the world and serve as new links to a better future, a world where humans are humans and 'machines are humane.

**15. Recently, Australia is stated to be facing severe bushfires and the climate emergency. In this light discuss the reason and impact of such wildfire along with suitable measures to control the same.**

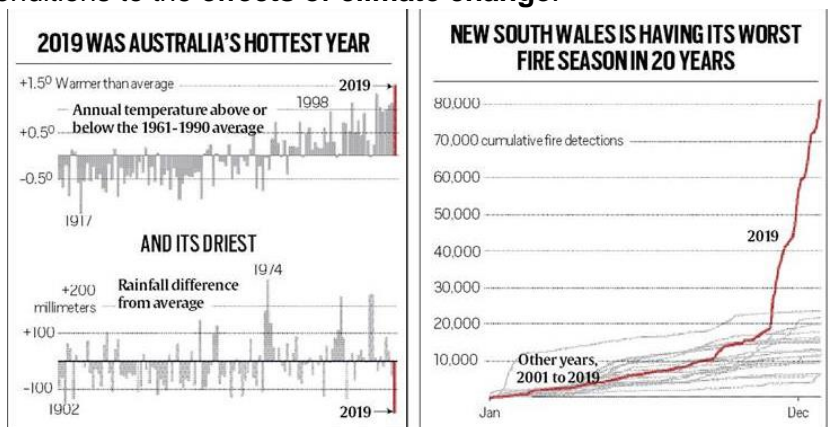
### Answer

In Australia bushfires are routine but authorities are calling this season the worst on record. This year, the fires started in **August 2020** much before the **Southern Hemisphere summer (December to February)** and have been aggravated by an impending **drought and record high temperatures**.

Bushfire generally starts when grass, branches and trees start to burn in an uncontrolled manner.

### The Reason For Severe Bushfire This Year

- Australia is **hot, dry, and prone to droughts**; providing suitable conditions for the bushfires. Dry leaves, grass, shrubs, deadwood etc. are easily combustible. Almost 70 % of Australia's area comprises arid or semi-arid land.
- This summer, besides witnessing the worst drought in more than five decades, Australia is also facing **severe heatwave**.
- Further, **ignition happens naturally**, from lightning strikes or **accidentally** from sources such as cigarette stubs. Further, **suitable speed and direction of wind** helps spread a forest fire faster.
- Scientists have also attributed the conditions to the **effects of climate change**.
- Lastly, **fires are also ignited for a purpose**, either to clear the land or even to control an incoming forest fire by removing vegetation that would have aided the incoming fire's further spread. E.g., last year, the fires in the Amazon forest was largely seen to have been a result of deliberate burning by farmers and large agro industry players keen on getting more land.





**Impact Of Wildfire/ Bushfire:**

- As per the estimate, about **5 million hectares** of land have burned nationwide over the past few months, with more than 1,000 homes destroyed.
- **Wildlife in the country has also been severely hit** with more than 2,000 koalas estimated to have died in New South Wales, with **one-third of their habitat getting burned**.
- Further, the fire may **add to high carbon emission**. Already one-third of global coal exports come from Australia, accounting for **7% of global carbon emissions**.
- Further, the **wine industry in Adelaide Hills** has also suffered serious destruction.
- Lastly, the **smoke from the wildfires has also drifted to neighbouring country New Zealand**.

**Solution**

- Wildfires are an unfortunate occurrence but **they can be prevented**.
- There is a need for **following all of the local regulations and laws regarding burning fires** during various times of the year and what materials and substances are permitted to be burned.
- **Keeping a tab of weather forecast** so that no substance is burnt, while there are high winds or other treacherous conditions.
- The **use of modern technologies** such as the **Wildland Fire Assessment System** also needs to be adopted.

**16. Recently, after the direction of Supreme Court (SC), four luxury apartments were demolished for breaching Coastal Regulation Zone (CRZ) norms 2018. In this light discuss the provisions under these norms and their criticism.**

**Answer**

The illegal apartment complexes in Maradu, Kerala were razed by controlled implosion, marking the completion of the demolition drive of the waterfront high rises. The razing of the four luxury apartments was ordered by the SC in May 2019, for breaching CRZ norms. The court had called the illegal constructions a **colossal loss to the environment**.

**Provisions Under CRZ Norms, 2018**

- In India, the CRZ Rules **govern human and industrial activity** close to the coastline, in order to protect the fragile ecosystems near the sea. Under these rules, the **regulation zone** has been defined as the **area up to 500 meters** from the high-tide line.
- These norms **restrict certain kinds of activities** like large constructions, setting up of new industries, storage or disposal of hazardous material, mining, reclamation and bunding within a certain distance from the coastline.
- The **restrictions depend on criteria such as** the population of the area, the ecological

**WHY NEED FOR COASTAL REGULATION**



sensitivity, the distance from the shore and whether the area had been designated as a natural park or wildlife zone.

- The 2018 Rules have a **no-development zone of 20 meter** for all islands close to the mainland coast and for all backwater islands in the mainland.
- For the **CRZ-III (Rural) areas**, two separate categories have been stipulated. In the **densely populated rural areas (CRZ-IIIA)** with a population density of 2,161 per sq. km as per the 2011 Census, the **no-development zone is 50 m** from the high-tide level. **CRZ-IIIB category** (rural areas with population density below 2,161 per sq km) areas continue to have a no-development zone extending up to 200 m from the high-tide line.
- While the CRZ Rules are made by the Union Environment Ministry, implementation is to be ensured by state governments through their **Coastal Zone Management Authorities**.

#### **Criticism Of CRZ Norms:**

- The CRZ rules dilutes the letter and spirit of enforcing an **Integrated coastal zone management plan** to safeguard the coast and interest of fishing communities.
- The environmentalists had alleged that the notification will open up fragile intertidal areas to real estate agents.
- Other experts say that the rules have been framed with the **intent to favour large-scale industry** at the cost of fishing communities.
- Under the rules, big hotels, restaurants, houses, coastal highways and small and large port facilities can now be built closer to the shoreline. **Increased coastal tourism translates into** further destruction of lagoons, marshland and other coastal ecosystems and their services.
- The consideration of **frequent weather-related coastal vulnerabilities** has been omitted in the CRZ norms, 2018. As has moved the concept of vulnerability and the hazard line from being at the heart of the regulatory mechanism to an optional appendage in the law.

**17. The desertification in India has become a menace as it is spreading like a cancer. In this light discuss the causes for desertification and methods to control the same.**

#### **Answer**

These are clear signs of desertification which, as per the United Nations Convention to Combat Desertification (UNCCD), is degrading **12 million ha** of productive land across the world every year. This is over **80 times the size of Delhi** and is enough to grow **20 million tonnes of grain**. Drylands affected by desertification not only lose their ability to support plant life, but also their ability to offer ecosystem services, such as management of water systems and storage of carbon use in global warming.

#### **ISRO Report's On Spread Of Desertification**

- As per **Desertification and Land Degradation of Selected Districts of India**, an atlas published by the Indian Space Research Organisation's Space Application Centre (SAC), some **96.40 million ha**, or about **30 %** of the country's total area, is undergoing degradation.
- The extent of desertification and land degradation has increased by **1.16 million ha** and **1.87 million ha** respectively in just 8 years, between 2003-05 and 2011-13 when SAC conducted the surveys.

- Further, as per **the Energy and Resources Institute (TERI)** land degradation costs **\$48.8 billion** to the country's exchequer annually.

#### **Causes of Deforestation**

- The **main reason being the changing climate**, prolonged droughts and increasing incidences of floods, landslides and frost that reduces the amount of productive land.
- Factors like **deforestation, wetland drainage, overgrazing, unsustainable land use practices** and the **expansion of agricultural, industrial and urban areas** are the other significant causes for desertification. For example, overgrazing is responsible for 90 % of dryland degradation in Australia and 60 % in Africa. Moreover, deforestation has caused 40 % dryland degradation in South America and Europe and 30 % in Asia.
- Further, **rampant mining and expanding urbanization** has also contributed to desertification.
- Other reason being the vicious cycle of **governance failure and absence of knowledge** fuelling desertification.
- Moreover, in areas such as in Nagaland, **shifting cultivation** are to blame for desertification. Thus, the rapidly vanishing vegetation cover has intensified soil erosion.

#### **About United Nations Convention on Combating desertification:**

- It is a **legally binding international agreement** that links environment and development to sustainable land management.
- It **defines this phenomenon as** land degradation in arid, semi-arid and dry sub-humid areas resulting from various factors including climatic variations and human activities.

#### **Way forward**

- By **educating people on sustainable practices**, more land can be saved from becoming desert.
- There is also needs for research and advancements in technology to prevent the issue from becoming epidemic.
- The **sustainable practices** to prevent desertification must also be incorporated. E.g. zero budget natural farming.

**PRELIMS MCQs**

1. Consider the following statements about Small Finance Banks.

1. Small Finance Banks are required to give 75% of their total credit to priority sector.
2. Existing NBFCs and Micro Finance Institutions are eligible for conversion into small finance banks.
3. Small Finance Banks are allowed to accept deposits only upto Rs 1 lakh/ customer.

Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: A**

**Explanation:**

- Shivalik Mercantile Co-operative Bank has become the first Co-operative Bank to get permission from the RBI to convert into a small finance bank (SFB). The 'in-principle' approval granted will be valid for 18 months to enable the applicant to comply with the requirements under the scheme and fulfil other conditions as stipulated by the RBI.
- On being satisfied that the applicant has complied with the requisite conditions, the RBI would consider granting it a licence for commencement of banking business under the Banking Regulation Act, 1949 as an SFB.
- Initially, only microfinance companies could convert into SFBs, however, in December 2019, the RBI came out with guidelines allowing co-operatives also to convert.

**Small Finance banks**

- SFBs are like corporate entities limited by shares and they have much more flexibility in raising finances from the banking system. The main purpose behind having small finance banks is to expand access to financial services in rural and semi-urban areas.
- These banks can do almost everything that a normal commercial bank can do, but at a much smaller scale. It can offer basic banking services, accept deposits and lend to underserved sections of customers, including small business units, small and marginal farmers, micro and small industries, and even entities in the unorganised sector.
- SFBs are required to give 75% of their total credit to priority sector, which includes those working in agriculture, and small enterprises and low-income earners.
- SFBs also have to ensure that 50% of their loan portfolio constitutes advances of up to 25 lakh. Further, these banks are also allowed to distribute third-party products such as mutual funds, insurance and pension products.

**Eligibility**

- Existing non-banking financial companies (NBFC), microfinance institutions (MFI) and local area banks (LAB) can apply to become small finance banks. The firms must have a capital of at least Rs. 100 crore and the promoters should have 10 years' experience in banking and finance.

- The UCBs (urban co-operative bank) with a minimum net worth of Rs 50 crore and maintaining capital to risk (weighted) assets ratio of 9% and above are eligible to apply for voluntary transition to SFB
- Joint ventures are not permitted and foreign shareholding is allowed in these banks as per the rules for FDI in private banks in India.

**2. An urban cooperative bank can be placed under the Supervisory Action Framework under which of the following conditions:**

- 1. Net non-performing asset ratio of the bank exceeds 6 percent of net advances.**
- 2. Capital adequacy ratio of the bank falls below 9 percent.**

**Which of the statements given above is/are correct?**

- a) Only 1**
- b) Only 2**
- c) Both 1 and 2**
- d) Neither 1 nor 2**

**Answer: C**

**Explanation:**

- The RBI has decided to rationalise the supervisory action framework (SAF) to make it more effective in bringing about the desired improvement in urban cooperative banks (UCBs) and to expedite resolution of UCBs experiencing financial stress.
- Along with it, the RBI will continue to monitor asset quality, profitability and capital/net worth of UCBs under the revised SAF.
- The supervisory action framework was introduced in 2012, to better manage stressed urban cooperative banks. It is similar to the Prompt Corrective Action that was already in place for Scheduled Commercial Banks.

#### **Thresholds To Place A Bank Under SAF**

- Under the revised rules, an urban cooperative bank may be placed under the framework, if it meets any one of the three conditions set by the RBI.
  - Net non-performing asset ratio exceeds 6 percent of net advances
  - Two consecutive years of losses or accumulated losses on their balance sheets
  - Capital adequacy ratio (CAR) falls below 9 percent.
- Action can be also taken if there are serious governance issues.

#### **Course Of Action After Placing The Bank Under SAF**

- UCBs will be asked to submit a Board-approved action plan to correct the situation like reducing net NPAs below 6%, restoring the profitability and increasing CAR to 9% or above within 12 months.
- The Board of UCB will be asked to review the progress under the action plan on quarterly/monthly basis and submit the post-review progress report to the RBI.
- The RBI may also seek a board-approved proposal for merging the UCB with another bank or converting itself into a credit society if CAR falls below 9%.

- Some of the other curbs include restricting fresh loans and advances carrying risk-weights more than 100% on incurring capital expenditure beyond a specified limit and on expansion of the balance sheet.
- Further, issue of show-cause notice for cancellation of banking licence may be considered when continued normal functioning of the UCB is no longer considered to be in the interest of its depositors/public.

**3. Consider the following statements about United Nations Conference on Trade and Development (UNCTAD)**

1. UNCTAD has a permanent secretariat in Stockholm.
2. UNCTAD was established to provide a forum to developing countries to discuss the problems relating to their economic development.
3. The concept of Generalised System of Preferences (GSP) was conceived and implemented by the UNCTAD.

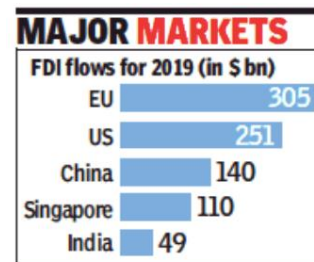
Which of the statements given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: B**

**Explanation:**

- The **Global Investment Trend Monitor report** was recently released by the United Nations Conference on Trade and Development. The report focuses on trends in foreign direct investment (FDI) worldwide, at the regional and country levels and emerging measures to improve its contribution to development.
- It is based on FDI inflows for 150 economies for which data was available for at least part of 2019, as of 17 January 2020. These countries account for 98% of global FDI flows.



**Findings Of The Report**

- The global FDI remained flat in 2019 at \$1.39 trillion — a 1% decline from a revised \$1.41 trillion in 2018. This is against the backdrop of weaker macroeconomic performance and policy uncertainty for investors, including trade tensions.
- Developing economies continue to absorb more than half of global FDI flows, with South Asia recording a 10% increase in FDI to \$60 billion.
- India was among the top 10 recipients of foreign direct investment (FDI) in 2019, attracting \$49 billion in inflows — a 16% increase from the previous year — driving FDI growth in South Asia.

**Performance Of Developed Economies**

- The FDI flows to developed countries remained at a historically low level, decreasing by a further 6% to an estimated \$643 billion.

- The FDI to the European Union (EU) fell by 15% to \$305 billion, while there was zero-growth of flows to US, which received \$251 billion FDI in 2019, as compared to \$254 billion in 2018.
- Despite this, the US remained the largest recipient of FDI, followed by China with flows of \$140 billion and Singapore with \$110 billion. China also witnessed zero-growth in FDI inflows as its inflows in 2018 were \$139 billion. Further, with the protracted unfolding of the Brexit, the FDI inflow in UK was down by 6%.

### **Cross Border M&As**

- The report added that cross-border M&As decreased by 40% in 2019 to \$490 billion – the lowest level since 2014.
- Slowed down by sluggish Eurozone growth and Brexit, European M&A sales halved to \$190 billion, whereas deals targeting United States companies remained significant – accounting for 31 % of total M&As.
- The fall in global cross-border M&As sales was deepest in the services sector (a 56 % decline to \$207 billion), followed by manufacturing (a 19 % decline to \$249 billion) and primary sector (14 % decline to \$34 billion).

### **Way Ahead**

- UNCTAD expects the FDI flows to rise moderately in 2020, as current projections show the global economy to improve somewhat from its weakest performance since the global financial crisis in 2009.
- The report said that GDP growth, gross fixed capital formation and trade are projected to rise, both at the global level and, especially, in several large emerging markets.
- Such an improvement in macroeconomic conditions, along with waning trade tensions between United States and China, could prompt Multi National Enterprises to resume investments in productive assets.
- However, significant risks persist, including high debt accumulation among emerging and developing economies, geopolitical risks and concerns about a further shift towards protectionist policies.

### **UNCTAD**

- UNCTAD was established by the United Nations General Assembly in 1964, as a permanent intergovernmental body. With a permanent secretariat in Geneva, the UNCTAD reports to the UN General Assembly and United Nations Economic and Social Council.
- The creation of UNCTAD was based on concerns of developing countries over the international market, multi-national corporations, and great disparity between developed nations and developing nations.
- The primary objective of UNCTAD is to formulate policies relating to all aspects of development including trade, aid, transport, finance and technology.

### **Generalised System of Preferences**

- One of the principal achievements of UNCTAD has been to conceive and implement the Generalised System of Preferences (GSP).
- It was argued in UNCTAD that to promote exports of manufactured goods from developing countries, it would be necessary to offer special tariff concessions to such exports.
- Accepting this argument, the developed countries formulated the GSP scheme under which manufacturers' exports and import of some agricultural goods from the developing countries enter duty-free or at reduced rates in the developed countries.



**4. Consider the following statements about the Sabka Vishwas Scheme**

1. Sabka Vishwas Scheme is a measure for liquidation of future disputes under GST.
2. Upon payment of the outstanding tax amount as per the scheme, the taxpayer will have complete immunity from prosecution proceedings.
3. The Scheme has a provision for full waiver of interest and penalties.

Which of the statements given above is/are correct?

- a) 1 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 2 only

**Answer: B**

**Explanation:**

- Mondelez India Foods Pvt Ltd (earlier Cadbury India) has settled one of its most controversial tax disputes, pertaining to its alleged plant in Baddi, Himachal Pradesh, with the government under the Sabka Vishwas (Legacy Dispute Resolution) Scheme, 2019.
- The firm, which was accused of evading taxes of about Rs 580 crore, excluding interest and penalties, paid Rs 439 crore on January 20, under the amnesty scheme. The total tax dues of the company with interest and penalties stood at over Rs 820 crore.

**Sabka Vishwas (Legacy Dispute Resolution) Scheme**

- The Sabka Vishwas (Legacy Dispute Resolution) Scheme, was a one-time measure for liquidation of past disputes of Central Excise and Service Tax which are now subsumed under GST, as well as 26 other Indirect Tax enactments.
- The Union Finance Minister had unveiled the Scheme in the Budget 2019-20 and the scheme was notified by the CBIC to come into force on the 1st of September, 2019, and was to be operational until the 31st of December, 2019, but was later extended till January 15 2020.
- According to the ministry, a total Rs 3.6 lakh crore was locked up in 1.83 lakh cases at various quasi-judicial, appellate and judicial forums under Service Tax and Central Excise put together.

**Features of the Scheme**

- Taxpayers can pay the outstanding tax amounts due and be free from any other consequences under the law and have complete immunity from prosecution proceedings.
- Taxpayers can get substantial relief in the form of full waivers of interest, penalties and fines.
- For cases pending in adjudication or appeal, the scheme provides a relief of 70% from the duty demand if it is ₹ 50 lakh or less and 50% if it is more than ₹ 50 lakh.
- Proceedings under the Scheme shall not be treated as a precedent for past and future liabilities.
- Final decision of the proceedings to be communicated within 60 days of application.

**Data On The Coverage Of The Scheme**

- As of 7 January 2020, around 161,214 taxpayers (87.5 per cent) out of the total 1.84 lakh eligible taxpayers have already availed the scheme.

- These taxpayers have declared tax dues of around Rs 79,968 crore and after availing the various reliefs and amnesty as per the rules of the scheme, they would pay around Rs 35,094 crore.
- However, the large taxpayers who are almost 12.5 per cent of the total eligible taxpayers with total tax amount of Rs 1.7 lakh crore under litigation are yet to make declaration under the scheme.

**5. India's forex reserves consist of which of the following?**

1. Gold
2. Silver
3. Foreign Currency Assets
4. Special Drawing Rights (SDR)

**Choose the correct option using the codes below:**

- a) 3 only
- b) 1 and 4 only
- c) 1, 3 and 4 only
- d) 1, 2, 3 and 4

**Answer: C**

**Explanation:**

- Fuelled by strong foreign direct investment, foreign portfolio investment and relatively stable global crude oil prices in calendar year 2019, foreign exchange reserves in the country shot up by 16.3 per cent, or \$64 billion, to close the year at \$457.46 billion, despite a slowdown in economic growth.
- While FPIs invested a net of \$19.4 billion into the Indian capital markets, the FDI equity inflows in the first nine months of calendar year 2019 amounted to \$36.97 billion.
- The rise in forex has come as a breather for the country's rising external debt, which rose significantly over the last couple of years from \$485 billion in June 2017 to \$557 billion in June 2019.
- According to experts, if external debts are higher than the forex reserves, it makes the economy vulnerable to any oil price shocks.

**Foreign Exchange Reserves**

- Foreign exchange reserves are the foreign currencies held by a country's central bank. The reserves in India are managed by the RBI and the main component is foreign currency assets.
- Reserve Bank of India accumulates foreign currency reserves by purchasing from authorized dealers in open market operations.
- Reserve Bank of India Act and the Foreign Exchange Management Act, 1999 set the legal provisions for governing the foreign exchange reserves.
- The Foreign exchange reserves of India consist of Foreign Currency Assets, Gold, Special Drawing Rights (SDRs) and Reserve Tranche Position

**Foreign Currency Assets**

This is the largest component of the Forex Reserves consisting of US dollar and other major non-US global currencies. Additionally, it also comprises investments in US Treasury bonds, bonds of other selected governments, deposits with foreign central and commercial banks.

**Gold**

Gold reserve is the gold held by the RBI with the intention to serve as a guarantee to redeem promises to pay depositors, note holders (e.g. paper money), or trading peers, or to secure a currency.

**Special Drawing Rights (SDRs)**

- Special drawing rights (SDR) refer to an international type of monetary reserve currency created by the International Monetary Fund (IMF) in 1969 that operates as a supplement to the existing money reserves of member countries.
- Created in response to concerns about the limitations of gold and dollars as the sole means of settling international accounts, SDRs augment international liquidity by supplementing the standard reserve currencies.
- SDRs are allocated by the IMF to its member countries and are backed by the full faith and credit of the member countries' governments.
- The value of the SDR is calculated from a weighted basket of major currencies, including the U.S. dollar, the euro, Japanese yen, Chinese yuan and British pound. The current weights as determined in the 2015 review are U.S. Dollar: 41.73, Euro: 30.93, Chinese Yuan: 10.92, Japanese Yen: 8.33 and Pound Sterling: 8.09.
- The SDR basket is reviewed every five years, and sometimes earlier if warranted. Reviews take place to ensure that the SDR reflects the relative importance of currencies in the world's trading and financial systems.

**Reserve Tranche Position (RTP)**

- The primary means of financing the International Monetary Fund is through members' quotas. Each member of the IMF is assigned a quota, part of which is payable in SDRs or specified usable currencies ("reserve assets"), and part in the member's own currency. In other words, the difference between a member's quota and the IMF's holdings of its currency is a country's RTP.
- It is basically an emergency account that IMF members can access at any time without agreeing to conditions or paying a service fee. In other words, a portion of a member country's quota can be withdrawn free of charge at its own discretion.
- The reserve tranches that countries hold with the IMF are considered their facilities of first resort, meaning they will tap into them before seeking a formal credit tranche that charges interest.

**6. Consider the following statements about UNCITRAL and Permanent Court of Arbitration (PCA):**

1. UNCITRAL is a legal body of the UN system in the field of international trade law.
2. PCA resolves disputes that arise out of international agreements.
3. PCA is a United Nations agency.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: A**

**Explanation:**

- The government has recently informed that an international arbitration tribunal has dismissed all claims by Tenoch Holdings Limited (Cyprus) and two others against India in entirety.
- The verdict was announced in July 2019, by a Tribunal constituted in accordance with the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules 1976, seated at the Hague, Netherlands, and proceedings were administered by the Permanent Court of Arbitration, the Hague, Netherlands.
- The arbitration proceedings were initiated against India under the bilateral investment treaties with Cyprus and Russian Federation.
- The arbitration arose out of the cancellation of Letters of Intent for the issuance of telecommunications licences to provide 2G services in five telecommunications circles in India.

**UNCITRAL**

- The UNCITRAL is a subsidiary body of the U.N. General Assembly (UNGA) responsible for helping to facilitate international trade and investment. It was established by UNGA in 1966. It is the core legal body of the UN system in the field of international trade law.
- UNCITRAL's official mandate is "to promote the progressive harmonization and unification of international trade law" through conventions, model laws, and other instruments that address key areas of commerce, from dispute resolution to the procurement and sale of goods.
- UNCITRAL carries out its work at annual sessions held alternately in New York City and Vienna, where it is headquartered.

**Permanent Court of Arbitration**

- It is an intergovernmental organization located at The Hague in Netherlands. The organization is not a United Nations agency, but the PCA is an official United Nations Observer.
- The PCA is not a court in the traditional sense but provides services of arbitral tribunal to resolve disputes that arise out of international agreements between member states, international organizations or private parties.
- The cases span a range of legal issues involving territorial and maritime boundaries, sovereignty, human rights, international investment, and international and regional trade.

**7. Consider the following statements about Cash Management Bills**

1. CMBs help the government to meet its temporary cash flow mismatches.
2. CMBs are issued by the RBI.
3. CMBs can only be issued for more than 90 days.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: A**

**Explanation:**

- RBI data shows that the government is faced with redemptions of government securities (G-Secs) aggregating Rs 1.35 lakh crore in Jan' 2020. To meet this large demand for liquidity, the government will soon be auctioning CMBs. This will be the second CMB auctioning in recent times, as the government had recently mobilised Rs 30,000 crore through CMBs of 76-day tenure.
- The central bank has also announced that RBI will buy G-Secs of long and medium tenure worth Rs 10,000 crore and at the same time sell government bonds of less than one-year tenure.
- This is the third such operation by the RBI in recent weeks, aimed at pulling down the 10-year benchmark yield, which is one of the main determinants of the lending rates by banks.

#### **Cash Management Bills**

- Cash Management Bills are short-term money market instruments that help the government to meet its temporary cash flow mismatches.
- Issued by the RBI on behalf of the government, the short term bills (CMBs) have a maturity of less than 90 days. The tenure or maturity, notified amount (how much total CMBs to be issued), and date of issue of the CMBs depends upon the temporary cash requirement of the Government.
- Investment in CMBs is also recognized as an eligible investment in Government securities by banks for *SLR purpose* under the Banking Regulation Act, 1949.
- Difference between CMBs and Treasury bills is that CMBs are issued for less than 90 days whereas treasury bills are issued for more than 90 days (91 day and 364-day treasury bills).

#### **Government Security (G-Sec)**

- A government security (G-Sec) is a tradeable instrument issued by the central government or state governments and acknowledges the government's debt obligations.
- Such securities are short term — called treasury bills — with original maturities of less than one year, or long term — called government bonds or dated securities — with original maturity of one year or more.
- In India, the central government issues both: treasury bills and bonds or dated securities, while state governments issue only bonds or dated securities, which are called the state development loans.
- Since they are issued by the government, they carry no risk of default, and hence, are called risk-free gilt-edged instruments.
- Major players in the G-Secs market include commercial banks and primary dealers (PDs) besides institutional investors like insurance companies. Other participants include co-operative banks, regional rural banks, mutual funds, provident and pension funds.
- FPIs are allowed to participate in the G-Secs market within the quantitative limits prescribed from time to time, while, corporates also buy or sell G-Secs to manage their overall portfolio.

**8. Development Support Services to States for Infrastructure Projects is an initiative of:**

- a) Ministry of Urban Development
- b) Ministry of Rural Development
- c) NITI Aayog
- d) None of the above

**Answer: C**

**Explanation:**

- In an important initiative to promote the development of key infrastructure sectors in the newly constituted Union Territory of Ladakh, NITI Aayog has entered into a memorandum of understanding (MoU) with the UT's administration.
- Under this MoU, NITI Aayog will be supporting the UT's administration through its key initiative 'Development Support Services to States for Infrastructure Projects (D3S-i)'.
- The partnership lays thrust on the identification of high-impact priority projects, expedited project implementation, addressing structural-level issues and creating unique models of development for the Union Territory of Ladakh.
- NITI Aayog has committed to assist the UT's administration in creating a strategic plan for identifying prioritized infrastructure projects and by providing end-to-end transaction-management support for the identified projects.
- A dedicated team of professionals is expected to be stationed at Ladakh for identification and development of projects in the UT, especially in tourism, solar energy and basic infrastructure.

**9. The Web Portal GATI has been created by:**

- a) NITI Aayog
- b) Food Corporation of India
- c) National Highway Authority of India
- d) Directorate General of Civil Aviation

**Answer: C**

**Explanation:**

- Ministry of Road Transport and Highways has launched an online web portal 'GATI', which has been created by the National Highways Authority of India (NHAI) on the lines of PRAGATI, the portal used by the Prime Ministers' Office for monitoring projects.
- All developers, contractors and officers of NHAI are linked to the portal and it will help sharing of all project-related information for speedy implementation.
- Any inter-ministerial issue holding up a project may also be brought to the notice of the ministry for intervention to expedite resolution.
- The issues raised on GATI will be monitored daily by a team of NHAI officers and will be constantly reviewed by the senior officers of the NHAI and the Ministry of Road Transport and Highways. This will bring transparency and speed up the decision making in highway construction

**10. What is H9N2?**

- 1. Swine influenza
- 2. Avian influenza
- 3. Both 1 and 2
- 4. Neither 1 nor 2



**Answer: B**

**Explanation:**

- Indian scientists have detected the country's first case of infection with a rare variant of the virus that causes avian influenza, or bird flu.
- The influenza virus, which causes illness, is classified by WHO into four types: A, B, C, and D. H9N2 is a subtype of the influenza A virus and was isolated for the first time in Wisconsin, US in 1966 from turkey flocks.
- According to the US Centers for Disease Control and Prevention (CDC), only the influenza A and B viruses are known to cause epidemics. The C type virus usually causes mild respiratory illness, while the D type virus typically affects cattle and is not known to infect humans.
- Only the influenza A virus is divided into subtypes and the subtype is based on two proteins on the surface of the virus, hemagglutinin (H) and neuraminidase (N). Hemagglutinin has 18 further subtypes while neuraminidase has 11 and they are named from H1 to H18 and N1 to N11 in a sequential system that applies uniformly to influenza viruses from all sources.
- Humans can be infected with avian, swine and other zoonotic influenza viruses, such as
  - Avian influenza virus subtypes A(H5N1), A(H7N9), and A(H9N2)
  - Swine influenza virus subtypes A(H1N1), A(H1N2) and A(H3N2).

#### **Human Infections**

- Cases of human infection have been observed in Hong Kong, China, Bangladesh, Pakistan, and Egypt. The first case globally was reported from Hong Kong in 1998.
- As per NIV scientists, H9N2 viruses have been witnessed in Indian poultry several times, but for the first time, a human case has come up. This infection is mostly transmitted by air droplet, dust, feed, or water.
- The identification of the first clinical human case highlights the importance of systemic surveillance in humans and animals to monitor this threat to human health.
- Despite the low pathogenicity of this subtype, the continuing emergence of the virus in unpredicted region and now rise in number of human cases pose a pandemic threat and the need to adopt a multi sector One Health approach.

#### **11. Right to Property is:**

1. A Fundamental Right
2. A Constitutional Right
3. A Human Right

**Which of the statements given above is/are correct?**

- a) 1 only
- b) 2 only
- c) 2 and 3 only
- d) 1 and 3 only

**Answer: C**

**Explanation:**

- In a recent judgement, **Vidhya Devi v. State of Himachal Pradesh (2020)**, the Supreme Court pronounced that in a welfare state, the right to property is a 'human right'.
- The bench further noted that the state cannot take possession of it without following due procedure and authority of law.

**Background Of The Case**

- In 1967, Himachal Pradesh government had forcibly taken over Vidya Devi's four acres of land at Hamipur district to build a road.
- Vidya Devi was wholly unaware of her rights and entitlement in law, and therefore, did not file any proceedings for compensation of the land compulsorily taken over by the state.
- Later, in 2010, Vidya Devi was informed about her entitlement post which she took legal recourse.

**The Judgement**

- The state of Himachal Pradesh had invoked the "**Doctrine Of Adverse Possession**" in front of the court. Under the doctrine, a person who is not the original owner becomes the owner of a property because of the fact that he has been in possession of the property for a minimum of 12-years, within which the real owner did not seek legal recourse to oust him.
- However, the court held that the state cannot trespass into the private property of a citizen and then claim ownership of the land in the name of 'adverse possession'. Grabbing private land and then claiming it as its own makes the state an encroacher.
- Ordering the state to pay her ₹1 crore in compensation, the Supreme Court noted that in 1967, when the government forcibly took over Ms. Devi's land, 'right to private property was still a fundamental right' under Article 31 of the Constitution.
- Right to Property ceased to be a fundamental right with the **44th Constitution Amendment in 1978** and it was made a Constitutional right under **Article 300A**.
- The Court reminded the government that Article 300A required the state to follow due procedure and authority of law to deprive a person of his or her private property.

**12. The Corruption Perception Index is published by:**

- a) World Bank
- b) United Nations General Assembly
- c) Transparency International
- d) International Monetary Fund

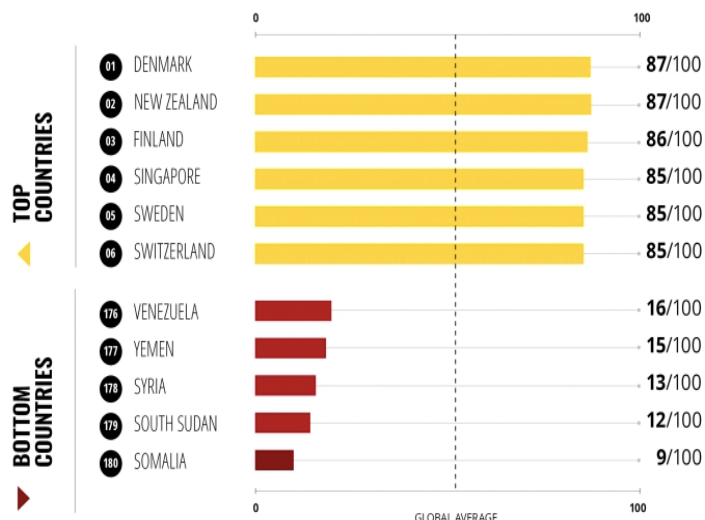
**Answer: C**

**Explanation:**

- The Corruption Perception Index 2019, prepared by Transparency International, was recently released at the World Economic Forum in Davos.
- The 2019 CPI draws on 13 surveys and expert assessments to measure public sector corruption in 180 countries and territories, giving each a score from zero (highly corrupt) to 100 (very clean).

## Findings

- India's ranking in the Corruption Perceptions Index (CPI-2019) has slipped from 78 to 80 compared to the previous year, although its score of 41 remains the same as last year.
- The top ranked countries are New Zealand and Denmark, with scores of 87 each, followed by Finland (86), Singapore (85), Sweden (85) and Switzerland (85).
- The countries ranked at the bottom of the list are Somalia, South Sudan and Syria with scores of 9, 12 and 13. These countries are closely followed by Yemen (15), Venezuela (16), Sudan (16), Equatorial Guinea (16) and Afghanistan (16).
- In the Asia Pacific region, the average score is 45, after many consecutive years of an average score of 44, which illustrates general stagnation across the region. While often seen as an engine of the global economy, in terms of political integrity and governance, the region performs only marginally better than the global average.
- Corruption is more pervasive in countries where big money can flow freely into electoral campaigns and where governments listen only to the voices of wealthy or well-connected individuals. In democracies like India and Australia, unfair and opaque political financing, undue influence in decision-making and lobbying by powerful corporate interest groups, has resulted in stagnation or decline in the control of corruption.
- Not only are more than two-thirds of countries — along with many of the world's most advanced economies — stagnating, some are seriously backsliding. In the last eight years, only 22 countries have shown significant improvement on the CPI, while almost as many have declined.



## Recommendations

To end corruption and restore trust in politics, it is imperative to prevent opportunities for political corruption and to foster the integrity of political systems. In order to do so, TI recommends:

- Manage conflicts of interest.
- Control political financing.
- Strengthen electoral integrity.
- Regulate lobbying activities.
- Empower citizens.
- Tackle preferential treatment.
- Reinforce checks and balances.

## Transparency International (TI)

- Transparency International (TI) is an international non-governmental organization which is based in Berlin, Germany, and was founded in 1993.

- Its non-profit purpose is to take action to combat global corruption with civil societal anti-corruption measures and to prevent criminal activities arising from corruption. It publishes the Global Corruption Barometer and the Corruption Perceptions Index.

**13. Consider the following statements:**

1. **Coronavirus can affect both humans and animals.**
2. **A human being infected by coronavirus can develop Pneumonia.**
3. **Bacteria, Virus and Fungi are zoonotic agents.**

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: D**

**Explanation:**

- China has been battling the Coronavirus outbreak, as the death toll rises to 490 people. Furthermore, the number of people infected with Coronavirus has exceeded 25,000. However, the number of people recovering from the virus is also rising, suggesting that the treatment plan is working
- More people have now died in this epidemic than in the severe acute respiratory syndrome, or SARS, outbreak of 2002-2003 in mainland China. During that outbreak, 349 people died.
- According to the WHO, the virus responsible for the current outbreak is not as lethal as the one that caused the SARS outbreak of 2002-2003 — it has a fatality rate of less than 2 per cent as compared to the SARS's mortality rate of nearly 10 per cent. But there is a growing consensus among scientists that it's more infectious than the pathogen that caused the 2002-2003 pandemic.
- More than 56 million people in almost 20 Chinese cities - including Wuhan, the place where the virus originated - have been prevented from travelling in an attempt to curb the spread of the virus during the Lunar New Year, traditionally China's busiest travel season. However, there are increasing fears that a quarantine will not be enough to stop the spread of the new coronavirus.

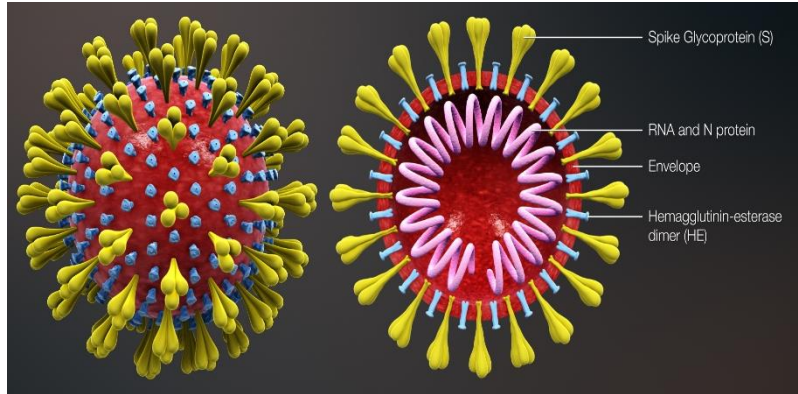
**Status Of Coronavirus In India**

- Kerala has also reported its third case of coronavirus. The student, who hails from Kasargode, is out of danger, and so are the other two Kerala residents who had contracted the infection in Wuhan.
- The state government, however, continues to be vigilant. It has placed more than 2,000 people under observation, most of whom are under home quarantine. Another 654 people have been placed under quarantine at Manesar in Haryana by the Union government.
- The Indian foreign ministry temporarily suspended the e-visa facility for Chinese travellers to the country. It also cancelled visas for Chinese and foreigners who have visited the country in the last two weeks, eliciting criticism from the Chinese ambassador to India.

**Coronavirus**

- Coronaviruses are a specific family of viruses, with some of them causing less-severe damage, such as the common cold, and others causing respiratory and intestinal diseases.

- A coronavirus has many “regularly arranged” protrusions on its surface, because of which the entire virus particle looks like an emperor’s crown, hence the name coronavirus.
- Apart from human beings, coronaviruses can affect mammals including pigs, cattle, cats, dogs, martens, camels, hedgehogs and some birds.
- So far, there are four known disease-causing coronaviruses, among which the best known are the **SARS corona virus** and the **Middle East Respiratory Syndrome (MERS) coronavirus**, both of which can cause severe respiratory diseases.
- While the SARS coronavirus is thought to be an animal virus from an as-yet-uncertain animal reservoir, perhaps bats, that spread to other animals (civet cats) and first infected humans in the Guangdong province of southern China in 2002, the MERS coronavirus was passed on from dromedary camels to humans in Saudi Arabia in 2012.



### Zoonotic Infections

- A zoonosis (zoonotic disease or zoonoses -plural) is an infectious disease that is transmitted between species from animals to humans. A zoonotic agent may be a bacterium, a virus, a fungus or other communicable disease agent.
- Some 60% of emerging infectious diseases globally are zoonoses and of the over 30 new human pathogens detected over the last three decades, 75% originated in animals.
- The WHO estimates that globally, about a billion cases of illness and millions of deaths occur every year from zoonoses.
- Human coronaviruses most commonly spread from an infected person to others through the air by coughing and sneezing and through close personal contact, such as touching or shaking hands

### Role Of China In The Spread Of Zoonotic Diseases

- Zoonotic infections occur in other parts of the world too, but the Chinese taste for exotic animal foods and the population density makes it a prime playground for zoonotic infections.
- With a population of nearly 1.4 billion and 50% of the world’s livestock, China’s ecology poses a risk for emerging, re-emerging, and novel diseases that could threaten China and the rest of the world.
- Moreover, the growing network of air travel routes dramatically increases the risk for infections to rapidly spread, and for potential pandemics that can cause illness, death, and costly disruption to global trade.

### Way Ahead

- Public health experts, have cautioned that bans can prove counterproductive in containing viral outbreaks in the long run.
- They point out that in times when viruses increasingly cross national borders, travel bans could hinder sharing information, make it harder to trace the source of an affliction and fuel drug shortages — a warning that should be salutary for India, which imports more than 60 per cent of its bulk drugs from China.

- Sharing knowledge about the coronavirus's different genetic strains will be critical to the global efforts to develop a vaccine against the pathogen. In a globalised world, the urgency of such preventive steps cannot be overstated. Quarantines and travel bans can, at best, be short-term responses.

**14. What is Drosophila?**

- a) Drone
- b) Fruit fly
- c) Spacecraft
- d) None of the above

**Answer: B**

**Explanation:**

- The fifth edition of the biennial Asia Pacific Drosophila Research Conference (APDRC5) is being organised in India for the first time by the Indian Institute of Science Education and Research (IISER). The last four editions of this conference took place in Taipei, Seoul, Beijing and Osaka.
- IISER was chosen by the APDRC board to organise the meet, as it is one the premier scientific research institutes of the country and is very strong in Drosophila research.
- It brings together scientists from all over the world who use the fruit fly, Drosophila, as a model organism to address basic and applied questions.

**Drosophila**

- The term Drosophila, meaning "dew-loving", is a modern scientific Latin adaptation from Greek words drósos, "dew", and phílos, "loving". Drosophila species are found all around the world, with more species in the tropical regions.
- Drosophila is one of the most widely-used and preferred model organisms in biological research across the world for the last 100 years and several discoveries in biology have been made using this.
- Its genome is entirely sequenced and there is enormous information available about its biochemistry, physiology and behaviour.

**15. Consider the following statements about the Indian Defence apparatus:**

1. INS Vikramaditya is the only operational aircraft carrier in Indian Navy.
2. INS Vikramaditya is an indigenously built aircraft carrier.
3. Light Combat Aircraft Tejas also has a naval version.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: C**



**Explanation:**

- In a significant development, the naval version of India's indigenous Light Combat Aircraft (LCA)-Mk1 Tejas made its first arrested landing on the deck of India's aircraft carrier INS Vikramaditya.
- The landing made LCA the first Indian made jet to land on an aircraft carrier — making it a significant milestone for the indigenization plans of the Indian military and the LCA programme in particular.
- The Navy currently operates Russian MiG-29K fighters from INS Vikramaditya which will also fly from the **first Indigenous Aircraft Carrier Vikrant** once it enters service.

**Light Combat Aircraft**

- A Light combat aircraft is a light multirole jet military aircraft, most coming from advanced trainers that have been modified or designed for engaging in light combat missions, either in light strike or attack missions, reconnaissance or interdiction roles.
- They are also slower than their bigger counterparts and most are only capable of subsonic speeds though some are capable of reaching mach 1+.
- Although equipped with either guns or short range air-to-air missiles it is usually for self-defense purpose or anti-hostile aircraft/helicopter missions not for air defense as lightweight fighters do. However, they can still be used to patrol the skies and implement border patrol or air policing.

**LCA Tejas**

- HAL Tejas is an Indian single-engine, multirole light fighter designed by the Aeronautical Development Agency (ADA) and Hindustan Aeronautics Limited (HAL) for the Indian Air Force and Indian Navy.
- It came from the Light Combat Aircraft (LCA) programme, which began in the 1980s to replace India's ageing MiG-21 fighters and was officially named Tejas in 2003.
- It is the smallest and lightest in its class of contemporary supersonic combat aircraft, and is developed in both fighter and trainer versions. It integrates technologies such as relaxed static stability, fly-by-wire flight control system, multi-mode radar, integrated digital avionics system and composite material structures.
- The naval version of the LCA took its first flight in April 2012 and two prototypes have been flying as part of the development. The first prototype (NP1) of the Naval LCA made a successful first flight from the SBTf in 2014.
- Naval LCA is designed with stronger landing gears to absorb forces exerted by the ski jump ramp during take-off, to be airborne within 200 m and land within 100 m as against 1000 m required for normal runways.

**INS Vikramaditya**

- INS Vikramaditya, meaning *Brave as the Sun*, is a modified Kiev-class aircraft carrier and the flagship of the Indian Navy, which was purchased by India in 2004 and entered into service in 2013.
- Originally built as **Baku** and commissioned in 1987, the carrier served with the Soviet Navy and later with the Russian Navy (as Admiral Gorshkov) before being decommissioned in 1996.
- It is the Indian Navy's only operational aircraft carrier at present. With a displacement of 45,000 tonnes, the warship is capable of carrying over 30 aircraft and helicopters. It also features a state of the art launch and recovery systems, for the smooth operation of the aircraft.

- With the extensive refit and modernization process conducted before joining the Indian Navy, the carrier has the capability to house aircraft such as MiG-29Ks and Sea Harrier fighter jets and also helicopters including Kamov, Sea King, Dhruv and Chetak.

**16. Which of the following Ministries has recently set up a New and Emerging Strategic Technologies (NEST) division?**

- a) Ministry of Science and Technology
- b) Ministry of Human Resource Development
- c) Ministry of External Affairs
- d) None of the above

**Answer: C**

**Explanation**

- The Ministry of External Affairs has announced the setting up of New, Emerging And Strategic Technologies (NEST) division.
- The new division is one of the many specialized desks created in recent years to deal with emerging challenges and scenarios. The development comes close on the heels of the government allowing all network equipment makers, including Huawei, to participate in 5G trials.

**Functions of NEST**

- The NEST division will act as the nodal point in India's foreign ministry for all matters connected to new and emerging technologies including exchange of views with foreign governments and coordination with domestic ministries and departments in line with India's developmental priorities and national security goals.
- It will help assess foreign policy and international legal implications of emerging technology and technology-based resources viz. 5G and artificial intelligence.
- The desk will be involved in negotiations to safeguard Indian interests at multilateral fora like the UN or the G20 where rules governing the use and access to such technologies could be decided.
- It will also undertake creation of HR capacity within the ministry for technology diplomacy work by utilising the existing talent-pool and facilitating functional specialisation of foreign service officers in various technology domains.

**17. Consider the following statements about Polycrack Technology**

1. Polycrack technology converts multiple feed stocks into hydrocarbon liquid fuels.
2. Pre-segregation of waste is mandatory for Polycrack technology

**Which of the statements given above is/are correct?**

- a) Only 1
- b) Only 2
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: A**

**Explanation:**

- Indian Railways has commissioned **country's first governmental Waste to Energy Plant**, having a capacity of 500 Kg waste per day, in Mancheswar Carriage Repair Workshop at Bhubaneswar in East Coast Railway.
- The waste to energy plant uses a patented technology called POLYCRACK, which is first-of-its-kind in Indian Railways and fourth in India. It is world's first patented heterogeneous catalytic process which converts multiple feed stocks into hydrocarbon liquid fuels, gas, carbon and water.
- A lot of non-ferrous scrap is generated in workshops for which there is no efficient method of disposal. As a result, they find their way to landfills, which is environmentally hazardous.
- Polycrack plant can be fed with all types of plastic, petroleum sludge, un-segregated MSW (Municipal Solid Waste) with moisture up to 50%, e-waste, automobile fluff, organic waste including bamboo, garden waste etc., and Jatropha fruit and palm bunch.
- The process is a closed loop system and does not emit any hazardous pollutants into the atmosphere. The combustible, non-condensed gases are re-used for providing energy to the entire system and thus, the only emission comes from the combustion of gaseous fuels.

**Advantages Of Polycrack Technology Over Conventional Approach Of Treating Solid Waste**

- Pre-segregation of waste is not required to reform the waste, therefore, waste as collected can be directly fed into Polycrack.
- It has high tolerance to moisture hence drying of waste is not required.
- The foot print of the plant is small hence the area required for installing the plant is less when compared with conventional method of processing.
- All constituents are converted into valuable energy thereby making it Zero Discharge Process.
- Gas generated in the process is re-used to provide energy to the system thereby making it self-reliant and also brings down the operating cost.
- There is no atmospheric emission during the process unlike other conventional methods except for combustion gases which have pollutants less than the prescribed norms the world over.
- Operates around 450 degrees, making it a low temperature process when compared to other options.
- The system is fully automated & thus requires minimum man power. Further, it is a safe & efficient system with built-in safety features which enables even an unskilled user to operate the machine with ease.
- Waste is processed and reformed within 24 hours.

**18. What is Juice Jacking?**

- a) A process of launching a satellite.
- b) A type of cyber-attack.
- c) The use of a catalytic agent in a chemical process.
- d) None of the above

**Answer: B**

**Explanation**

- Country's largest lender State Bank of India (SBI) has warned its customers against charging their phones at free phone charging stations to save themselves from falling prey to Juice Jacking.
- Juice jacking is a type of cyber-attack involving a charging port that doubles as a data connection, typically over USB.
- USB port is often used as a medium for data transfer. A regular USB connector has five pins, where only one is needed to charge the device, while two of the other pins are used for data transfers.
- As devices are often charged via USB ports, the attacker here often uses off-the-shelf hardware that gets installed on the charging port of public charging boards.
- These are specifically designed to breach security and gain access to connected devices information as soon as the connection is established.
- Once the device is plugged-in and connection is established, it either secretly copies sensitive data from a smartphone, tablet, or any other computer device or a installs malware.
- There are many categories of malware that cybercriminals can install through juice jacking, including adware, cryptominers, ransomware, spyware, or Trojans.

**19. Which of the following are a part of NASA's Great Observatories program:**

1. Hubble Space Telescope
2. Compton Gamma Ray Observatory
3. Chandra X-ray Observatory
4. Spitzer Telescope

**Which of the statements given above is/are correct?**

- a) 1 and 4 only
- b) 2 and 4 only
- c) 1, 2 and 3 only
- d) 1, 2, 3 and 4

**Answer: D**

**Explanation:**

- NASA has decommissioned the Spitzer Space Telescope, one of its greatest observatories which has studied the universe by detecting cosmic infrared radiation for more than 16 years.
- Spitzer was launched in 2003 and was originally built to last for a minimum of 2.5 years, with the "cryogenic" (cold) instruments functioning. The cryogen was depleted after 5.5 years in 2009 after which the warm mission of the telescope began, which got multiple extensions over time.
- Spitzer was the last mission of the NASA Great Observatories program, which saw four specialized telescopes launched between 1990 and 2003. The goal of the Great Observatories is to **observe the universe in distinct wavelengths of light**.
- Spitzer focuses on the infrared band, which normally represents heat radiation from objects. The other observatories looked at visible light (**Hubble**, still operational), gamma-rays (**Compton**

**Gamma-Ray Observatory**, no longer operational) and X-rays (the **Chandra X-Ray Observatory**, still operational).

### **Achievements**

- Spitzer's highly sensitive instruments allowed scientists to peer into cosmic regions that are hidden from optical telescopes, including dusty stellar nurseries, and newly forming planetary systems.
- It also allowed astronomers to see cooler objects in space, like failed stars (brown dwarfs), extrasolar planets, giant molecular clouds, and organic molecules that may hold the secret to life on other planets.
- Spitzer also studied some of the most distant galaxies ever detected. The light from these galaxies reached Earth after traveling for billions of years, enabling scientists to see those objects as they were long, long ago.
- Spitzer, also found a previously undetected ring around Saturn, composed of sparse dust particles that visible-light observatories cannot see.

### **20. Consider the following statements about the Vakataka Empire:**

1. The Vakataka empire was a Brahmin dynasty.
2. The rock-cut Buddhist viharas and chaityas of Ajanta Caves were built under the patronage of Vakatakas.
3. The Vakataka rulers followed the Vaishnava sect of Hinduism.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1 and 3 only
- d) 1, 2 and 3

**Answer: A**

### **Explanation:**

- For the first time, a team of archaeologists has unearthed a sealing that dates back nearly 1,500 years and belonged to Prabhavatigupta, the queen of Vakataka king Rudrasena II, who ruled the kingdom from Nagardhan in Ramtek taluka, located about 50 km from Nagpur.
- The Vakataka rulers were known to have forged several matrimonial alliances with other dynasties of their times. One of the key alliances was with Prabhavatigupta of the mighty Gupta dynasty, which was then ruling north India. She was the daughter of Chandragupta II.
- When she took over the Vakataka kingdom, after the sudden demise of Rudrasena II, her stature as a woman Vakataka ruler rose significantly. Scholars say, Queen Prabhavatigupta was among a handful of women rulers in India to have reigned over any kingdom during ancient times.

### **Importance Of The Excavation**

- Very little was known about the Vakatakas, the Shaivite rulers of Central India between the third and fifth centuries. All that was known about the dynasty, believed to hail from the Vidarbha region, was largely through some literature and copperplates.

- There were assumptions that the excavated site of Nagardhan is the same as Nandhivardhan, the capital city of the eastern branch of the Vakatakas. It was after archaeological evidence from here that Nagardhan was understood to have served as a capital of the Vakataka kingdom.
- During the excavations carried out by archaeologists some new facets of the life of the Vakatakas have emerged.

### Significance Of The Findings

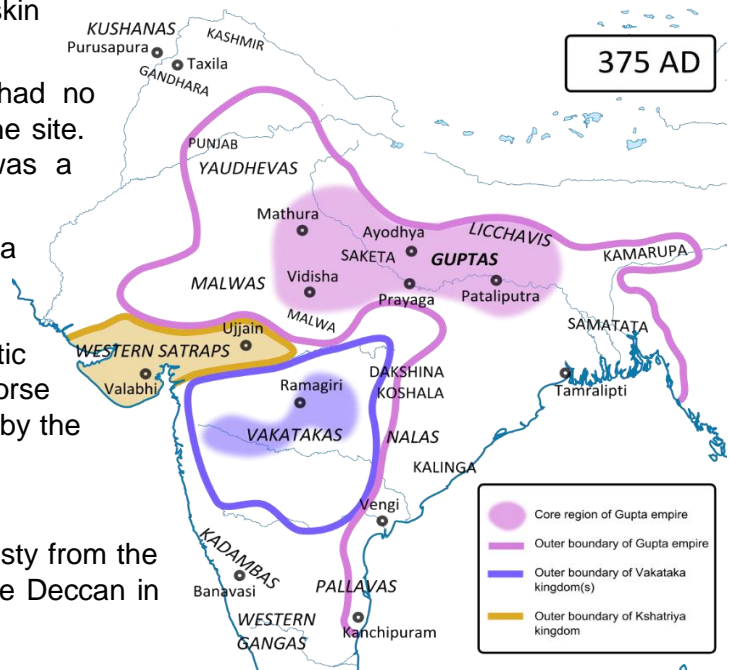
- It is the first time clay sealings have been excavated from Nagardhan. The oval-shaped sealing belongs to the period when Prabhavatigupta was the queen of the Vakataka dynasty.
- It bears her name in the **Brahmi script**, along with the depiction of a conch, which according to scholars, is a sign of the *Vaishnava affiliation* that the Guptas held. Although, Queen Prabhavatigupta was married into a family that belonged to the Shaiva sect, the queen's powers allowed her to choose a deity of worship, that is, Lord Vishnu.
- The sealing was traced on top of a mega wall that researchers think could have been part of a royal structure at the capital city of the kingdom. So far, no archaeological evidence had emerged about the types of houses or palatial structures of the Vakataka people or rulers.
- Since the Vakataka people traded with **Iran and beyond through the Mediterranean Sea**, scholars suggest that these sealings could have been used as an official royal permission issued from the capital city. Besides, these were used on documents that sought mandatory royal permissions.
- The researchers believe that the practice of worshipping Narasimha in Maharashtra emerged from Ramtek, and that Queen Prabhavatigupta had a pivotal role in propagation of Vaishnava practices in the Vidarbha region of Maharashtra.
- Some of the temples identified as Keval Narasimha, Rudra Narasimha and the one dedicated to Varaha could be traced to Ramtek, and showcase strong affinity to the incarnations of Lord Vishnu. None of these religious structures was, however, present here until the Queen took the throne.

### Other Excavations From Nagardhan So Far

- Some terracotta objects have been discovered that depicted images of gods, animals and humans, along with amulets, scotches, wheels, skin rubbers and spindle whorls.
- An intact idol of Lord Ganesha, which had no ornaments adorned, too was found from the site. This confirmed that the elephant god was a commonly worshipped deity in those times.
- On the means of living of the Vakataka people, researchers found animal rearing to be one of the main occupations. Remains of seven species of domestic animals — cattle, goat, sheep, pig, cat, horse and fowl — were traced in an earlier study by the team.

### Vakatakas

- The Vakataka Empire was a Brahmin dynasty from the Indian subcontinent that originated from the Deccan in the mid-3rd century CE.





- Their state is believed to have extended from the southern edges of Malwa and Gujarat in the north to the Tungabhadra River in the south as well as from the Arabian Sea in the west to the edges of Chhattisgarh in the east.
- They were the most important successors of Satavahanas in the Deccan and contemporaneous with Guptas in northern India.
- It is generally believed that the Vakataka dynasty was divided into four branches after Pravarasena I, of which two branches are known and two are unknown. The known branches are the Pravarapura-Nandivardhana branch and the Vatsagulma branch.
- The Vakatakas are noted for having been patrons of the arts, architecture and literature. The rock-cut Buddhist viharas and chaityas of Ajanta Caves were built under the patronage of Vakataka emperor, Harishena.

**21. Which of the following languages are given the status of a Classical Language in India?**

1. Tamil
2. Kannada
3. Odia
4. Marathi

**Which of the statements given above is/are correct?**

- a) 1 and 4 only
- b) 2 and 4 only
- c) 1, 2 and 3 only
- d) 1, 2, 3 and 4

**Answer: C**

**Explanation:**

- At the recently concluded 93rd edition of the Akhil Bharatiya Marathi Sahitya Sammelan, a resolution was passed demanding the declaration of Marathi as a 'Classical' language.
- Currently, six languages enjoy the 'Classical' status: Tamil (declared in 2004), Sanskrit (2005), Kannada (2008), Telugu (2008), Malayalam (2013), and Odia (2014).

### **Classification of Classical Languages**

According to information provided by the Ministry of Culture in the Rajya Sabha in 2014, the guidelines for declaring a language as 'Classical' are:

- i) High antiquity of its early texts/recorded history over a period of 1500-2000 years.
- ii) A body of ancient literature/texts, which is considered a valuable heritage by generations of speakers.
- iii) The literary tradition be original and not borrowed from another speech community.
- iv) The classical language and literature being distinct from modern, there may also be a discontinuity between the classical language and its later forms or its offshoots.

### **Benefits Provided To A Classical Language**

- Two major annual international awards for scholars of eminence in classical Indian languages
- A Centre of Excellence for studies in Classical Languages is set up.

- The University Grants Commission is requested to create, to start with at least in the Central Universities, a certain number of Professional Chairs for the Classical Languages so declared.
- The University Grant Commission (UGC) also awards research projects for promoting these languages.

**22. Consider the following statements regarding International Arbitration Tribunal**

1. It is a panel of independent and impartial experts who work under the auspices of United Nations Conference on Trade and Development (UNCTAD).
2. The Tribunal is seated at The Hague, Netherlands.

**Which of the above statements is/are Correct?**

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: B**

**Explanation**

- International Arbitration Tribunal has **dismissed all claims against India** in entirety in relation to cancellation of Letters of Intent for providing 2G telecom services.
- Indian Government had cancelled the Letters of Intent for the issuance of telecommunications licences to provide 2G services in five telecommunications circles due to India's essential security interests. As a result, private firms of Cyprus and Russia had brought arbitration against India under the **Bilateral Investment Treaty**.
- Bilateral Investment Treaties between two countries **allows a private investor to initiate dispute arbitration proceedings** against the government to protect its investments.

**International Arbitration Tribunal**

- It is the **independent and non-governmental panel** of independent and impartial experts.
- This tribunal is most often composed of **three members nominated by the Parties** (or appointed by the international arbitration institution, or more rarely by a national court) on the basis of their legal and practical expertise and knowledge, to render a final and binding award.
- The Tribunal is **seated at The Hague, Netherlands**.

**23. Consider the following statements regarding Ganga – Volga Dialogue:**

1. It is an official dialogue process between India and Russia.
2. It is solely organized by Ministry of External Affairs.

**Which of the above statements is/are Correct?**

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2

d) Neither 1 nor 2

**Answer – D**

**Explanation**

- The **maiden Ganga Volga Dialogue** was held in Delhi on 22 January.
- **Organized by** - Ministry of External Affairs in collaboration with Dr.Syama Prasad Mookerjee Research Foundation.
- **Objective of the dialogue** - To provide an interface between the civilizations of India and Russia.
- Theme – Connectivity

**Key Takeaway from the dialogue:**

- Need to identify a **Roadmap for creating new synergies** between India and Russia. The Dialogue discussed the impact of a rapidly changing international situation on India-Russia relations.
- Talked about implementing the decisions agreed to at the **20th India-Russia Summit** held in Vladivostok in September 2019.
- The dialogue highlighted that, beside INSTC, the concept of Connectivity also included greater academic and economic exchanges, as well as Digital Connectivity.

**About Ganga – Volga Dialogue**

- Conceptualized during India-Russia Summit 2018, it is a **track 1.5 initiative** between India and Russia which involves Official and non-official of the two countries.
- The Dialogue provided an opportunity to engage India in the development of the idea of “Greater Eurasia”, which provided the pivot to Asia for Russia’s strategic policies.

**24. The exercise 'Sea Guardians' is a mega naval exercise between**

- a) India & China
- b) India & Malaysia
- c) China & Pakistan
- d) China & Russia

**Answer: C**

**Explanation**

- India deployed its aircraft carrier INS Vikramaditya in the Arabian Sea at a time **China and Pakistan** held a mega naval exercise named “**Sea Guardians**” in the region.
- This move is seen as New Delhi sending a clear signal to its two neighbours.
- In September 2019, the Indian Navy **drove out a Chinese PLA ship from India's Exclusive Economic Zone** and had warned that such activities will be dealt with sternly.

**25. Consider the following statements regarding Zero budget natural farming (ZBNF)**

1. ZBNF is a method of chemical-free agriculture drawing from traditional Indian practices.
2. The method promises to cut down the cost of agricultural production to zero.

Which of the above statements is/are incorrect?

- a) 1 Only
- b) 2 Only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: B**

**Explanation**

- The **Andhra Pradesh** State government has **signed a MoU with Germany-based KFW to encourage Zero Budget Natural Farming (ZBNF) in the State.**
- Natural farming will be encouraged in 600 villages in the coming five years.
- The state govt. also launched **toll-free 1800 599 3366** for enquiries and providing information on the insurance scheme launched for the farmers.

**About Zero Budget Natural Farming (ZBNF):**

- ZBNF is a method of chemical-free agriculture drawing from traditional Indian practices.
- It promises to **end a reliance on loans and drastically cut production costs**, ending the debt cycle for desperate farmers. It should be noted that this method does not bring down the cost of agricultural production to zero.
- It was originally promoted by Maharashtrian agriculturist and Padma Shri recipient **Subhash Palekar**.
- He developed it in the mid-1990s as **an alternative to the Green Revolution's** methods driven by chemical fertilizers and pesticides and intensive irrigation.
- Without the need to spend money on these inputs — or take loans to buy them — the cost of production could be reduced and farming made into a “zero budget” exercise, **breaking the debt cycle for many small farmers.**
- In Budget speech of 2019, ZBNF was given an emphasis.

**26. Bhasan Char island, recently seen in news, is located in**

- a) India
- b) Bangladesh
- c) Sri Lanka
- d) None of the above

**Answer: B**

**Explanation:**

- The government of **Bangladesh** has developed a relocation site for 100000 Rohingya refugees at **Bhasan Char Island.**
- The Bangladeshi government has overseen the construction of concrete housing structures, flood defense embankments, cyclone shelters, prefabricated food and storage warehouses, roads, and a solar power grid.

**Concerns Raised:**

- The island is **prone to natural disasters** such as flooding and cyclones.
- Questions surrounding **access to basic services**, such as education and health services, and livelihoods remain unanswered. The enforcement of the right to freedom of movement is also under scrutiny.
- There are concerns around **information-sharing, communication, informed consent, and the involuntary** nature of relocation. Many activists believe that Rohingyas need to be sufficiently informed and consulted before any decisions are made.

**About The Island**

- 'Bhasan Char' or 'floating island' is a flat and uninhabited piece of land formed 20 years ago by moving silt on the **mouth of river Meghna**.
- The land mass emerged out of the sea as one of the many shifting, unstable islands, or 'chars' that naturally occur in the region.
- Located 30 kilometers off of the coast, it is estimated to be a 3 hour boat ride from the mainland of Bangladesh.

**27. Which of the following became the first country in the world to ban various types of sunscreens?**

- a) Palau
- b) Maldives
- c) Fiji
- d) Australia

**Answer: A**

**Explanation**

- The **Pacific nation of Palau** has become the first country to ban sun cream that is harmful to **corals and sea life**. The order of the ban was **passed in 2018**.
- Sun cream that includes common ingredients, including **oxybenzone and octinoxate** (absorbs ultraviolet light), is not allowed **to be worn or sold in the country**.
- US state of Hawaii announced a similar ban, which comes into effect in 2021.

**Why Ban Sun Cream**

- Sun Creams **absorb UV rays** and hence make corals **susceptible to bleaching**. Even low concentrations of sunscreen in water can also reduce the growth of young coral.
- Sunscreen also **inhibit fish reproduction by interfering** with their hormonal system.
- As per the report published by The Ocean Foundation, about 14,000 tons of sunscreen is absorbed into the oceans every year.

**Palau**

- Located in the western Pacific Ocean region, it is part of Micronesia region with over 500 islands.
- Capital– Babeldaob
- It is known for its coral reefs, marine life and clean beaches with diving destinations.

- The **Rock Islands** in the Palau is a **UNESCO World Heritage Site**.

28. Consider the following pairs:

Name of Exercise	Countries Involved
1. Winged Raider	- India & USA
2. Sahyog-Kaijin	- India & Malaysia
3. Naseem-Al-Bahr	- India & UAE

Which of the above pairs are correctly matched?

- a) 1 and 2 Only
- b) 2 and 3 Only
- c) 1 and 3 Only
- d) None of the above

**Answer: D**

**Explanation**

**Winged Raider**

- The Indian Army has conducted its biggest airborne exercise called the '**Winged Raider**'.
- It was conducted in North-Eastern theatre.
- Exercise Winged Raider demonstrated the **operational readiness Paratroopers and Air Warriors** of Indian Army to undertake airborne missions.
- Significance – Exercises like "**Winged Raider**" and "**Him Vijay**" (conducted in Arunachal Pradesh in October 2019) indicate the shift in the **army's focus towards the frontier with China**.

**Sahyog-Kaijin**

- **Indian and Japanese** coast guards participated in a joint exercise 'Sahyog-Kaijin' on January 16.
- The exercise was conducted at **Chennai Port**. The basis of this exercise was the **agreement signed** by the Coast Guards of **the countries in 2006**.
- **Other bilateral exercise** between these two countries are - Shinyuu Maitri (Joint Air Force), JIMEX (Maritime) & Dharma Guardian (Military).

**Naseem-Al-Bahr**

- 'Naseem-Al-Bahr' (or sea breeze) is a naval exercise between the **Indian Navy and the Royal Navy of Oman**, being conducted since 1993.
- The 12th edition of the Indo-Oman bilateral naval exercise was held at Goa Port.
- Other Bilateral exercises between the two countries - **Al Najah** (Army), **Eastern Bridge** (Air Force).

29. Which of the following has become the first woman officer to lead an all-men contingent at an Republic Day parade?

- a) Tanya Shergill
- b) Tanya Ahuja



- c) Bhavna Kanth
- d) None of the above

**Answer: A**

**Explanation**

Captain Tanya Shergill, a fourth generation officer with the Army's Corps of Signals, became the first woman parade adjutant for the Republic Day parade and led an all-men contingent at the march past in Rajpath.

**Many Firsts at This Year's Republic Day Parade**

- **National War Memorial** - Breaking from the tradition, PM Modi paid tributes to the soldiers who died fighting for the country at National War Memorial, instead of Amar Jawan Jyoti.
- **Heavylift helicopter Chinook and attack helicopter Apache**, both recently inducted in the Indian Air Force, made a debut in the parade.
- **The 'Dhanush' gun system** was part of the Republic Day celebrations at Rajpath for the first time on Sunday.
- **Jammu and Kashmir** took part in the Republic Day parade for the first time as a Union Territory.
- DRDO showcased **Anti-Satellite Weapons (ASAT) - Mission Shakti**.
- **CRPF women bikers** - A contingent of women bikers of CRPF performed daredevil stunts for the first time. **Inspector Seema Nag** led the contingent.

**30. SAMPRITI is the joint exercise between**

- a) India and Vietnam
- b) India and Sri Lanka
- c) India and Bangladesh
- d) India and Nepal

**Answer: C**

**Explanation**

- The **ninth edition** of joint military training exercise between **India-Bangladesh -- SAMPRITI-IX** will be conducted at **Umroi, Meghalaya** from February 3 to February 16.
- Exercise SAMPRITI is an important bilateral defence cooperation endeavour between India and Bangladesh, **hosted alternately** by both countries.

**31. Recently, Indian Navy had launched "Operation Vanilla". It was launched to**

- a) Protect Indian ships from piracy
- b) Help cyclone-hit Madagascar
- c) Evacuate Indians from Iran
- d) Evacuate Indians from epidemic hit region of China

**Answer – B**

**Explanation**

- **Operation Vanilla** has been launched by the Indian Navy **to help cyclone-hit Madagascar**.
- A cyclone hit at Madagascar and due to it, there has been heavy flooding and landslips.

**32. Consider the following statements about Good Governance Index:**

1. It is being designed and released by NITI Aayog.
2. The objective is to provide quantifiable data to compare the state of governance in all states and UTs and enable them to formulate and implement suitable strategies for improving governance.

**Which of the statement(s) given above is/are correct?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: B**

**Explanation**

- The **Good Governance Index (GGI)** is a uniform tool across States to assess the Status of Governance and impact of various interventions taken up by the State Government and UTs.
- The **objectives of GGI** are to provide quantifiable data to compare the state of governance in all states and UTs, enable states and UTs to formulate and implement suitable strategies for improving governance and shift to result oriented approaches and administration.
- These **ten Governance Sectors** are measured on **total 50 indicators**. Different indicators are given different weightage under one Governance Sector to calculate the value.

**Ranking Of Different States/UTs**

- Under the Index the states and union territories have been divided into **three groups - big states, northeast & hill states, and union territories** for rankings based on certain indicators separately.
- **Tamil Nadu** has bagged the top position in Big states category in the composite ranking for GGI, followed by Maharashtra and Karnataka.
- In the north-east and hill category, **Himachal Pradesh** has topped the ranking followed by Uttarakhand, Tripura, Mizoram, Sikkim, Assam, Jammu and Kashmir (now divided into two Union territories of Jammu and Kashmir, and Ladakh), Manipur, Meghalaya, Nagaland and Arunachal Pradesh.
- Among the union territories, **Pondicherry** has got the first position, followed by Chandigarh, Delhi, Daman and Diu, Andaman and Nicobar Islands, Dadra and Nagar Haveli and Lakshadweep.

**Sector Wise Ranking**

- Under the **agriculture and allied sector**, **Madhya Pradesh** has got first position followed by Rajasthan and Chhattisgarh in the big states category. **Mizoram** and **Daman & Diu** has got the top rank in north-east & hill states and UT category respectively..

- In the **commerce and industries sector**, **Jharkhand** has got the first position in big states category, followed by Andhra Pradesh and Telangana. **Uttarakhand** and **Delhi** has got the top rank in north-east & hill states and UT category respectively..
- In the **public health sector ranking**, **Kerala** is at the top position followed by Tamil Nadu and Goa among the big states. **Manipur and Pondicherry** have got the first position in the north-east and hill states, and UTs category for this sector.
- In the **public infrastructure and utilities sector**, **Tamil Nadu** has been ranked first followed by Gujarat and Punjab among the big states. **Himachal Pradesh and Chandigarh** have got the top slot in north-east and hill states, and UTs category for this sector.
- Under the **economic governance sector**, **Karnataka** has got the first position followed by Maharashtra, Telangana, Gujarat and Tamil Nadu among the big states. **Uttarakhand** and **Delhi** has got the top rank in north-east & hill states and UT category respectively..
- The **tenth sector i.e. citizen centric governance** has not been included for scoring and ranking purpose as at present only one indicator is identified as part of the sector.

Rank	State	Topping the class	
1	Tamil Nadu	Among 18 big States in the country, T.N. put up a good all-round show, lagging only in 'commerce and industries'	
2	Maharashtra		
3	Karnataka	Parameter-wise ranking among big States	
4	Chhattisgarh		
5	Andhra Pradesh	Public infrastructure	1
6	Gujarat	Judicial and public security	1
7	Haryana	Public health	2
8	Kerala	Environment	3
9	Madhya Pradesh	Human resource development	5
10	West Bengal	Economic governance	5
11	Telangana	Social welfare and development	7
12	Rajasthan	Agriculture and allied	9
13	Punjab	Commerce and industries	14
14	Odisha	*Ranking on citizen-centric governance was not available	
15	Bihar		
16	Goa		
17	Uttar Pradesh		
18	Jharkhand		

#### Final Analysis:

- At present there is no uniform index to **objectively assess the state of good governance in the states**. The good governance index attempts to create a tool which can be used to assess the states of governance and impact of various interventions taken by the state.
- It goes without saying that the **GGI requires fine-tuning and improvement**. But that does not take away the inherent strength of the work that has been accomplished, keeping in mind India's size and complexity.
- Notwithstanding these shortcomings, what is noteworthy is that the Centre has made an attempt to address the problem of the absence of a credible and uniform index for an objective evaluation of the States and Union Territories.

#### 33. Consider the following statements about Belgaum dispute:

1. Dispute is related to Belgaum between Maharashtra and Karnataka.
2. Mahajan Commission was formed in October 1966 to resolve the dispute.
3. States Reorganisation Act, 1956 made Belgaum a part of Maharashtra.

Which of the statement(s) given above is/are correct?

- a) 1 and 2 only
- b) 2 and 3 only
- c) 1, 2 and 3
- d) None of the above

Answer: A

**Explanation:**

The recent dispute between **Maharashtra and Karnataka over Belgaum** and other border areas is a longstanding issue between the two states and has been pending before the Supreme Court (SC) for many years.

**Genesis Of The Dispute**

- The **erstwhile Bombay Presidency**, a multilingual province included the present-day Karnataka districts of **Bijapur, Belgaum, Dharwar and Uttara-Kannada**.
- **In 1948**, the Belgaum municipality requested that the district, having a predominantly Marathi-speaking population, be incorporated into the proposed Maharashtra state.
- However, the **States Reorganisation Act, 1956**, divided states on linguistic and administrative lines, made Belgaum a part of the then Mysore State (which was renamed Karnataka in 1973).
- The Maharashtra government contested the inclusion and lodged a protest with the Centre in September 1957. This led to the formation of the **Mahajan Commission** in October 1966.
- The Commission, which submitted its report in August 1967, recommended that 264 villages be transferred to Maharashtra and that Belgaum and 247 villages remain with Karnataka. **Maharashtra rejected the report** and demanded another review.

**Current Status**

- **Maharashtra continues to claim over 865 villages** along the border, as well as Belgaum city, which are currently part of Karnataka. Successive governments in Maharashtra have demanded their inclusion within the state. Karnataka has contested these claims.
- Recently, Maharashtra Government has appointed Ministers **Chhagan Bhujbal and Eknath Shinde** as coordinators to oversee his government's efforts to expedite the case related to the dispute.

**34. Consider the following statements about curative petition:**

1. A curative petition may be filed before a review plea.
2. Principles in relation to curative petition has been laid in **Rupa Ashok Hurra Vs Ashok Hurra**.

Which of the statement(s) given above is/are correct?

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: B**

**Explanation:**

After the **mercy and review petition** of December 2012 gangrape convict were rejected, the counsel of the convicts is left with only one option *i.e.* to file a **curative petition** in the Supreme Court (SC).

**About Curative Petition**

- A curative petition may be filed **after a review plea against the final conviction is dismissed**.

- It is meant to ensure there is **no miscarriage of justice** and to **prevent abuse of process**. A curative petition is usually decided by judges in chamber, unless a specific request for an open-court hearing is allowed.
- Every curative petition is decided on the basis of principles laid down by the SC in **Rupa Ashok Hurra v. Ashok Hurra & another**. The court ruled that a curative petition can be entertained if the petitioner establishes there was a **violation of the principles of natural justice** and that he was not heard by the court before passing an order. It will also be admitted where a judge failed to disclose facts that **raise the apprehension of bias**.
- The SC has also held that curative petitions must be rare rather than regular, and be entertained with circumspection. A curative petition must be accompanied by **certification by a senior advocate**, pointing out substantial grounds for entertaining it.
- It must be **first circulated to a bench of the three senior-most judges**, and the **judges who passed the concerned judgment**, if available. Only when a majority of the judges conclude that the matter needs hearing should it be listed as far as possible, before the same Bench.
- In the event of the Bench holding at any stage that the petition is **without any merit and vexatious**, it may impose exemplary costs on the petitioner.

**35. Consider the following statements about Zonal Councils:**

1. The Zonal Councils are Constitutional bodies.
2. India was divided into 5 zones.

**Which of the statement(s) given above is/are correct?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: B**

**Explanation:**

- The State of Maharashtra coordinated the **25<sup>th</sup> annual Western Zonal Council Meet** in January 2020 to promote interstate cooperation and coordination.
- The meeting was chaired by Union Home Minister.
- The **Western Zonal Council comprises of** Goa, Maharashtra, Gujarat, Union Territories of Daman and Diu, and Dadra and Nagar Haveli.

**About Zonal Councils**

- The **Zonal Councils are statutory bodies** established under the **State's Reorganization Act 1956**.
- Through this act, India was **divided into 5 zones** i.e. Northern, Central, Eastern, Western and Southern. Each zone has its own Zonal Council.
- The members of each council include **Union Home Minister** as the chairperson, **Chief Minister as co-chairperson** (one from each state on a rotational basis every year), two other ministers nominated by the Governor from each state and two members from Union Territories which are included in that zone.

- The **advisory body of the council** includes a person nominated by the NITI Ayog, Chief Secretaries and an Officer/Development Commissioner nominated by every state included in that zone.
- The Zonal Councils have only **deliberative and advisory functions**, thus, they can only make recommendations regarding matters of economic and social planning in the national interest, such as Centre and States border disputes, national integration, execution of development projects, inter-State transport, reorganization of States or issues faced by linguistic minorities *etc.*

Name	Members	Headquarters
1. Northern Zonal Council	Jammu and Kashmir, Himachal Pradesh, Haryana, Punjab, Rajasthan, Delhi, and Chandigarh	New Delhi
2. Central Zonal Council	Uttar Pradesh, Uttarakhand, Chhattisgarh, and Madhya Pradesh	Allahabad
3. Eastern Zonal Council	Bihar, Jharkhand, West Bengal and Odisha	Kolkata
4. Western Zonal Council	Gujarat, Maharashtra, Goa, Dadra and Nagar Haveli and Daman and Diu	Mumbai
5. Southern Zonal Council	Andhra Pradesh, Telangana, Karnataka, Tamil Nadu, Kerala and Puducherry	Chennai

**36. Consider the following statements about India's position on Democracy Index:**

- The report is published by the Economist Intelligence Unit.
- India was ranked at 51<sup>st</sup> place.

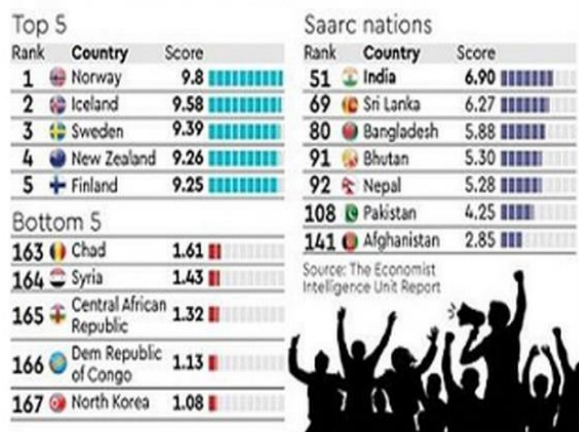
Which of the statement(s) given above is/are correct?

- 1 only
- 2 only
- Both 1 and 2
- Neither 1 nor 2

**Answer: C**

**Explanation**

- The latest edition of the Democracy Index spells gloom for India. The world's biggest democracy **slipped 10 places in Democracy Index 2019 to 51<sup>st</sup> place.**
- The report is published by the **Economist Intelligence Unit**, the research and analysis division of the Economist Group, analysing **165 independent states and two territories.**
- India was graded in electoral process and pluralism (8.67), government functioning (6.79), political participation (6.67), political culture (5.63) and civil liberties (6.76).
- The survey attributes the primary cause of the democratic regression to an **erosion of civil liberties** in the country.
- India's overall score fell from **7.23 to 6.9**, on a **scale of 0-10**, within a year (2018-2019).
- The average global score also recorded its worst value ever, down from 5.48 in 2018 to 5.44, driven by a sharp regression in Latin America and Sub-





Saharan Africa, a lesser one in the Middle East and North Africa (MENA) region, and by stagnation in the remaining regions that were covered.

- The Index also categorises India under **flawed democracies**, countries that hold free and fair elections and where basic civil liberties are respected, but have significant weaknesses in aspects of democracy, such as problems in governance, an underdeveloped political culture and low levels of political participation.
- According to the report, there are only **22 full democracies** as compared to **54 authoritarian regimes** and as **many flawed democracies**, that include the U.S. Further, almost one-half (48.4%) of the world's population live in a democracy of some sort, although only 5.7% reside in a full democracy.

**37. Consider the following statements about Great Indian Bustard:**

1. It is the state bird of state of Rajasthan.
2. It is listed as Critically Endangered on the IUCN Red List.

**Which of the statement(s) given above is/are correct?**

- a) 1 only
- b) 2 only
- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: C**

**Explanation:**

- Recently, nine GIB eggs collected from the **Desert National Park in Jaisalmer**, where a conservation centre has been set up, have hatched and the chicks are reported to be doing well. This is the largest number of hatchings reported within a six-month frame by any Great Indian Bustard (**GIB**) **conservation programme** in the world.
- This major conservation effort launched about four years ago is bringing a ray of hope. Once the frontrunner to be named India's national bird, the GIB has long been on the **brink of extinction**.
- GIB is also been designated as the **State bird of Rajasthan** and is listed as **critically endangered** on the IUCN Red List as barely **150 of these birds** are estimated to be surviving now globally.
- GIB is also one of the **heaviest flying birds** and is found mainly in the Indian subcontinent.

**38. Consider the following statements about the Padma Awards:**

1. Padma Vibhushan is the second highest civilian award in India.
2. Padma award amounts to a title and can be used as a suffix or prefix to the awardees' name.
3. Padma awards can be awarded posthumously.

**Which of the statements given above is/are correct?**

- a) 1 and 2 only
- b) 2 and 3 only

c) 1 and 3 only

d) 1, 2 and 3

**Answer: C**

**Explanation:**

- Padma Awards for the year were recently announced, wherein 141 awards will be conferred this year.
- The Padma Awards are announced annually on the eve of Republic Day.
- The Awards are given in three categories: Padma Vibhushan, Padma Bhushan and Padma Shri. The Padma Vibhushan is the second-highest civilian award of the Republic of India, second only to the Bharat Ratna.
- The Padma award seeks to recognize achievements in all fields of activities or disciplines where an element of public service is involved.
- The Padma Awards are conferred on the recommendations made by the Padma Awards Committee, which is constituted by the Prime Minister every year. The nomination process is open to the public. Even self-nomination can be made.
- All persons without distinction of race, occupation, position or sex are eligible for these awards. However, ***Government servants including those working with PSUs, except doctors and scientists, are not eligible for these Awards.***
- The award is normally not conferred posthumously. However, in highly deserving cases, the Government could consider giving an **award posthumously**.
- A higher category of Padma award can be conferred on a person only where a period of at least five years has elapsed since conferment of the earlier Padma award. However, in highly deserving cases, **a relaxation can be made** by the Awards Committee.
- The award does not amount to a title and cannot be used as a suffix or prefix to the awardees' name.

**39. World Gold Outlook Report is published by**

a) **World Bank**

b) **IMF**

c) **UNCTAD**

d) **None of the above**

**Answer: A**

**Explanation**

The **World Gold Council** (WGC) has released its report, "**World Gold Outlook 2020**".

**Key Highlights From The Report:**

- **In 2019, Gold had its best performance** since 2010, rising by 18.4% in US dollar terms. It also outperformed major global bond and emerging market stock benchmarks in the same period
- The Exchange Traded Funds (ETF) of institutional investors were the second largest buyers of gold in 2019.

- The largest gold sellers in 2019 were **Uzbekistan and Venezuela**. They sold 16.6 tonnes and 30.3 tonnes respectively.
- For the year 2020, the report expressed optimism. It said that the **financial and geopolitical uncertainty combined with low interest rates** will likely **bolster gold investment demand**.

#### **India Specific Observation**

- RBI currently holds 625.2 tonnes of gold, which is 6.6% of the country's foreign exchange.
- India ranks **sixth in the world among other central banks**. The other 5 countries are China, Russia, Kazakhstan, Turkey and Poland.
- The report highlights the fact that the **recently introduces new hallmarking reforms** in India are expected to increase consumer trust, remove inefficiencies and promote growth.
- Gold has been the **most favoured asset class for Indians** all these years, Indians prefer to keep it in jewellery form.

#### **About WGC:**

- The World Gold Council is the **market development organisation** for the gold industry.
- Its purpose is to stimulate and sustain demand for gold, provide industry leadership, and be the global authority on the gold market.
- **Headquarter** - London

**40. Which of the following personalities has been chosen as the first recipients of 'Muppavarapu Venkaiah Naidu National Award for Excellence'?**

- a) M S Swaminathan
- b) Gutta Muniratnam
- c) Both A and B
- d) Neither A nor B

**Answer: A**

#### **Explanation**

- Eminent Agricultural Scientist **Dr M S Swaminathan** and well-known social worker, **Dr. Gutta Muniratnam** were chosen as the first recipients of '**Muppavarapu Venkaiah Naidu National Award for Excellence**' and '**Muppavarapu National Award for Social Service**' respectively.
- Each award carries a cash prize of Rupees Five Lakh and citation.
- The National Award for Excellence was **instituted by the Muppavarapu Foundation**, while the one for Social Service was launched by the **Swarna Bharat Trust**, in Hyderabad.
- Prof. M.S. Swaminathan was awarded for his distinguished contributions to the field of agriculture while Dr G Muniratnam, was awarded for his extraordinary contribution in improving quality of people's lives through social service.

**41. Consider the following statements:**

1. The Statue of Liberty is situated in Gujarat, India.
2. Statue of Unity is situated in New York, United States.

3. Statue of Liberty has been included in the list of eight wonders of the Shanghai Cooperation Organisation.

Which of the above statements is/are Correct?

- a) 1 and 2 only
- b) 1 and 3 Only
- c) 2 Only
- d) None of the above are correct

**Answer: D**

**Explanation**

- India's **Statue of Unity** has been included in the list of **eight wonders of the Shanghai Cooperation Organisation (SCO)**.
- The other **seven wonders of SCO include**: Daming Palace in China, Navruz Palace in Tajikistan, Mughals Heritage in Pakistan, Tamgaly Gorge in Kazakhstan, Po-i-Kalan Complex in Uzbekistan, The Golden Ring of Russia and Lahore, the Mughals heritage in Pakistan.
- The SCO is an eight-member alliance from Eurasia, which includes India, China, Pakistan, Kazakhstan, Kyrgyzstan, Russia, Tajikistan and Uzbekistan.

**About Statue of Unity**

- The 182-meter tall Statue of Unity is the world's tallest statue. It is a monumental tribute to Sardar Vallabhbhai Patel, who was India's first home minister and Deputy Prime Minister.
- The statue is located **near the Sardar Sarovar Dam** on the river Narmada in **Kevadiya colony in Gujarat**.
- Designed by Indian sculptor **Ram V Sutar**, the project was first announced in 2010 and was finally unveiled on October 31, 2018.
- In November 2019, the **world's tallest statue surpassed** the footfall at the **133-year-old Statue of Liberty** in the US.

**Statue of Liberty**

- The Statue of Liberty is a colossal neoclassical sculpture on **Liberty Island in New York Harbor in New York, in the United States**.
- The copper statue, **a gift from the people of France** to the people of the United States, was designed by French sculptor Frédéric Auguste Bartholdi and its metal framework was built by Gustave Eiffel.
- The statue was dedicated on October 28, 1886.

**42. Consider the following statements regarding Island Development Agency (IDA):**

- 1. IDA was set up in 2017 for the holistic development of islands.
- 2. IDA is chaired by the Union Minister of Environment, Forest and Climate Change.

Which of the above statements is/are Correct?

- a) 1 Only
- b) 2 Only

- c) Both 1 and 2
- d) Neither 1 nor 2

**Answer: A**

**Explanation**

The Union Home Minister chaired the **sixth meeting of IDA**. The agency reviewed the progress made towards the programme “**Holistic development of islands**”.

**Holistic Development Plan Under the Guidance of IDA:**

- An initiative of sustainable development in the identified Islands within scientifically-assessed carrying capacity has been taken-up.
- Development Plans with **focus on creation of jobs** for the islanders through tourism promotion as well as export of seafood and coconut-based products made in the Islands have been prepared and are being implemented.
- Port Blair and another 7 islands in Andaman & Nicobar would get digitally connected through submarine optical fibre cable by June, 2020.
- Under the **Lakshadweep and Andaman and Nicobar Islands Industrial Development Scheme (LANIDS)**, Information Technology based and other micro, small and medium enterprises (MSMEs) would be set up.

**About IDA:**

- The IDA was constituted in **June 2017 for the holistic development of Islands**.
- The agency is **chaired by the union Home Minister** and CEO of NITI Ayog acts as its convener.
- Members of IDA include Cabinet secretary, Home secretary, Secretary (environment, forests and climate change), Secretary (tourism), and Secretary (tribal welfare)
- **10 islands** have been named for the **first phase of development**. These include - Smith, Ross, Aves, Long and Little Andaman in Andaman & Nicobar and Minicoy, Bangaram, Suheli, Cherium and Tinnakara in Lakshadweep.
- In the second phase, suitable sites in 12 more islands of Andaman & Nicobar Islands and 5 islands in Lakshadweep will be covered.

**43. The World Future Energy Summit 2020 (WFES) was held at**

- a) Dubai
- b) Geneva
- c) Abu Dhabi
- d) Gurugram

**Answer: C**

**Explanation**

- The World Future Energy Summit 2020 was **held in Abu Dhabi**.
- The Summit is the Middle **East's largest future energy** and sustainability event which is **held annually** at Abu Dhabi National Exhibition Centre.

- **Theme - "Rethinking Global Consumption, Production, and Investment."**
- **Five main pillars** of 2020 edition - Energy, Solar, Water, Waste and Smart cities
- The event is starting to set an example for best practice, supporting the circular economy through recycling, and acting to remove single-use plastics from the event.

**44. Consider the following statements regarding the Indian National Commission for Cooperation with UNESCO (INCCU):**

- 1. It is a governmental body formed to advise the Government in matters relating to the UNESCO.**
- 2. It functions under the Ministry of Culture.**

**Which of the above statements is/are Correct?**

- 1 Only**
- 2 Only**
- Both 1 and 2**
- Neither 1 nor 2**

**Answer: A**

**Explanation**

- Recently, the meeting of the Indian National Commission for Cooperation with UNESCO (INCCU) was held in New Delhi. This was the **first meeting of the reconstituted commission**.
- It was chaired by Union Human Resource Development Minister Shri Ramesh Pokhriyal 'Nishank'.

**About the Commission**

- Established in 1951, INCCU is a **governmental body** formed to **advise the Government** in matters **relating to the UNESCO**.
- It functions under the **Department of Secondary and Higher Education in the Ministry of Human Resource Development**.
- **Minister of HRD** acts as the **President** while Secretary of the Department of Higher Education acts as **Secretary General of the commission**.
- The commission consists of general assembly, secretariat, and **five sub-commissions** such as Education, Communications, Culture, Natural Sciences, and Social Sciences.

**45. Consider the following statements about Smog Towers:**

- 1. These air filters shall draw in the air through fans installed at the top before passing it through the filters and releasing it near the ground.**
- 2. The filters generally use carbon nanofibers as a major component and will focus on reducing particulate matter load.**

**Which of the above statement(s) given above is/are correct?**

- 1 only**
- 2 only**



- c) Both 1 and 2  
d) Neither 1 nor 2

Answer: C

Explanation

- Recently, the Supreme Court (SC) has given three months to the Centre and Delhi government for the pilot project of setting up a smog tower at 'Connaught Place' and 'Anand Vihar' to combat the menace of air pollution.
- The apex court has also directed use of **anti-smog guns** in Delhi and NCR for large construction sites, road construction stretches, mining activities, large parking sites on unpaved areas and during large public gatherings, demolition activities *etc.*
- Delhi's first-ever smog tower installed at **South Delhi's Lajpat Nagar market** started operating from January 2020.



About Smog Towers

- Smog towers are structures designed as **large-scale air purifiers** to reduce air pollution.
- The **working of these smog tower** is as follows: the air filters shall draw in the air through fans installed at the top before passing it through the filters and releasing it near the ground. The filters installed in the tower then will use **carbon nanofibers** to reduce particulate matter load.
- China** also battling air pollution over the past few years has two smog towers now. One in capital **Beijing** and the other, dubbed the world's largest, in **Xi'an city**.

46. Which of the following are the benefits of the Green Credit scheme?

- It allows forests to be traded as a commodity.
- It allows the Forest Department to outsource one of its responsibilities of reforestation to non-government agencies.

Select the correct answer from the codes given below

- a) 1 only  
b) 2 only  
c) Both 1 and 2  
d) Neither 1 nor 2

Answer: C

Explanation

- The **Forest Advisory Committee (FAC)**, an apex body tasked with adjudicating requests by the industry to raze forest land for commercial ends, has approved a scheme (**Green Credit scheme**) that could allow forests to be traded as a commodity.

- If implemented, it **allows the Forest Department to outsource one of its responsibilities** of reforesting to non-government agencies.
- **In 2015, a 'Green Credit Scheme'** for degraded forest land with public-private participation was recommended, but it was not approved by the Union Environment Ministry.

**Background:**

- In the current system, industry needs to make good the loss of forest by finding appropriate **non-forest land**, equal to that which would be razed. It also must pay the State Forest Department the current economic equivalent called **Net Present Value** of the forest land. It's then the Forest Department's responsibility to grow appropriate vegetation that, over time, would grow into forests.
- Industries have often complained that they find it hard to acquire appropriate non-forest land, which has to be contiguous to existing forest. Nearly **₹50,000 crore had been collected** by the Centre over decades, but the funds were lying unspent because States were not spending the money on re-growing forests.

**About Green Credit Scheme:**

- The proposed scheme allows agencies (private companies/ village forest communities) to identify land and begin growing plantations.
- **After three years**, they would be eligible to be considered as **compensatory forest land**, if they met the Forest Department's criteria. An industry needing forest land could then approach the agency and pay it for parcels of such forested land and this would then be transferred to the Forest Department and be recorded as forest land.
- The participating agency will be free to trade its asset, that is plantation, in parcels, with project proponents who need forest land. This is not the first time that such a scheme has been mooted.

**Analysis:**

- The FAC believes that such a scheme will encourage plantation by individuals outside the traditional forest area and will help in meeting international commitments such as **sustainable development goals and nationally determined contributions**.
- One of India's prongs to combat climate change is the **Green India Mission** that aims to sequester 2.523 billion tonnes of carbon by 2020-30, and this involves adding 30 million hectares in addition to existing forest.
- However, as per experts it **does not solve the core problems of compensatory afforestation** and it **creates problems of privatizing multi-use forest areas** as monoculture plantation plots.

### **Kolkata Port Renamed**

The Prime Minister has recently renamed the Kolkata Port Trust after Bharatiya Jana Sangh founder Dr Shyama Prasad Mookerjee, at an event to mark its 150th anniversary.

### **History of Kolkata Port**

- In the early 16th century, the Portuguese first used the present location of the port to anchor their ships, since they found the upper reaches of the Hooghly river, beyond Kolkata, unsafe for navigation.
- After abolition of slavery in the British Empire in 1833, this port was used to ship lakhs of Indians as 'indentured labourers' to far-flung territories throughout the Empire.
- As Kolkata grew in size and importance, merchants in the city demanded the setting up of a port trust in 1863. The colonial government formed a River Trust in 1866, but it soon failed, and administration was again taken up by the government.
- The Kolkata port is the only riverine port in the country, situated 203 km from the sea. The river Hooghly, on which it is located, has many sharp bends, and is considered a difficult navigational channel. Throughout the year, dredging activities have to be carried out to keep the channel open.
- The Farakka Barrage, built in 1975, reduced some of the port's woes as Ganga waters were diverted into the Bhagirathi-Hooghly system.

### **National Start-up Advisory Council**

The government has set up a National Start-up Advisory Council to advise the Centre on measures needed to build a strong ecosystem for nurturing innovation and start-ups in the country and to drive sustainable economic growth and generate large-scale employment opportunities.

### **Functions Of The Council**

- The Council will suggest measures to foster a culture of innovation amongst citizens and students in particular, promote innovation in all sectors of economy across the country, including semi-urban and rural areas.
- It will also suggest measures to facilitate public organisations to assimilate innovation, promote creation, protection and commercialisation of intellectual property rights, make it easier to start, operate, grow and exit businesses by reducing regulatory compliances and costs.
- It will suggest ways to promote ease of access to capital for start-ups, incentivise domestic capital for investments, mobilise global capital for investments, and keep control of start-ups with original promoters.

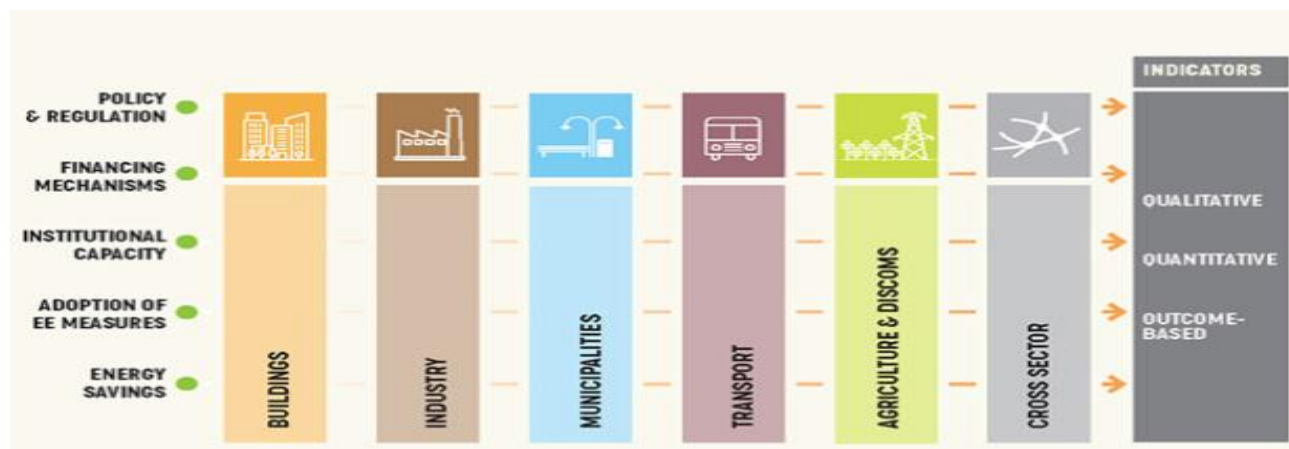
### **Composition of the Council**

- The Council, which will be chaired by the Minister for Commerce and Industry, will consist of non-official members to be nominated by the Centre, founders of successful start-ups, veterans who have grown and scaled companies in India and persons capable to represent interests of investors into start-ups.
- Besides, it will have persons capable of representing interests of incubators and accelerators and representatives of associations of stakeholders of start-ups and representatives of industry associations. The term of the non-official members will be for a period of two years.

- The ministry added that the nominees of the ministries, departments and organisations concerned not below the rank of joint secretary will be ex-officio members.

### **State Energy Efficiency Index 2019**

- The 'State Energy Efficiency Index 2019', which tracks the progress of Energy Efficiency (EE) initiatives based on 97 significant indicators was recently released.
- The Index was developed by AEEE (Alliance for an Energy Efficient Economy) under the guidance and leadership of BEE (Bureau of Energy Efficiency), with technical counsel from ACEEE (American Council for an Energy Efficient Economy).
- The first such Index, was launched in August, 2018. Taking it forward, the 2019 index incorporates qualitative, quantitative and outcome-based indicators to assess energy efficiency initiatives, programs and outcomes in five distinct sectors – buildings, industry, municipalities, transport, agriculture, and DISCOMs.
- This year, a total of 36 States and Union Territories have been assessed based on their efforts and achievements in policy and regulation, financing mechanisms, institutional capacity, adoption of energy efficiency measures and energy savings achieved.



- The Index will help states contribute towards national goals on energy security and climate action by
  - Helping drive EE policies and program implementation at the state and local level
  - Tracking progress in managing the states' and India's energy footprint
  - Institutionalising data capture and monitoring of EE activities by states

### **The Findings**

- The State Energy Efficiency Index categorises states as '**Front Runner**', '**Achiever**', '**Contender**' and '**Aspirant**' based on their efforts and achievements towards energy efficiency implementation.
- Haryana, Karnataka and Kerala** have topped the State Energy Efficiency Index 2019 and are in the achiever's category.
- Since there isn't any 'front runner' state, it can be inferred that a lot more can be done at the state level to realise energy savings from energy efficiency,
- For a rational comparison, the States or Union Territories are grouped into four groups based on the aggregated Total Primary Energy Supply (TPES) required to meet the state's actual energy demand (electricity, coal, oil, gas, among others) across sectors.

- Karnataka, Haryana, Himachal Pradesh and Puducherry led their groups, while, Manipur, Jammu & Kashmir, Jharkhand and Rajasthan performed the worst in each of their groups.

### Key Takeaways For States

Based on the analysis of responses submitted by states this year, a three-point agenda is suggested for consideration by state agencies:

- a) **Proactive role by states in policy formulation and implementation** to shift the focus from “policies in place” to “policies successfully implemented”.
- b) **Strengthening the mechanism for data capture, management and public availability of data:** For this year’s Index, State Designated Agencies proactively contacted various state departments to gather data. However, SDAs should further enhance their engagement with state departments and private sector to enable a robust mechanism for Energy Data Management System.
- c) **Enhancing the credibility of EE schemes:** Ensuring the integrity of programs that have direct or indirect linkages with common consumers is significant to energy efficiency market transformation. States must demonstrate an approach which includes enforcement and compliance checks as well as independent monitoring and verification of savings, which is integral to all EE policies and programs.

#### Alliance for an Energy Efficient Economy

- AEEE is a policy advocacy and energy efficiency market enabler with a not-for-profit motive.
- It advocates for data driven and evidence-based energy efficiency policies to unleash innovation and entrepreneurship within the country to create an energy-efficient economy.

#### Bureau of Energy Efficiency

- The **Bureau of Energy Efficiency** was set up by the Union government in 2002 under the provisions of the Energy Conservation Act, 2001.
- Its mission is to assist in developing policies and strategies with a thrust on self-regulation and market principles, with the primary objective of reducing energy intensity of the Indian economy.

### Guidelines To Check Illegal Sand Mining

- Following a series of orders by the National Green Tribunal in 2018, the Ministry of Environment, Forests and Climate Change has for the first time released guidelines (**Enforcement and Monitoring Guidelines for Sand Mining 2020**) to monitor and check illegal sand mining in the country.
- The 2020 guidelines are to be enforced simultaneously with the **Sustainable Sand Management Guidelines, 2016**, but in instances where the two sets of guidelines may seem to be in conflict, the new set will hold legal precedence.

### Need For The Guidelines

- The Mines and Minerals (Development and Regulation) Act, 1957 has empowered state governments to make rules to prevent illegal mining, transportation and storage of minerals. But in the recent past, it has been observed that there was a large number of illegal mining cases in the country and in some cases, many of the officers lost their lives while executing their duties to curb illegal mining.
- Further, illegal and uncontrolled illegal mining leads to loss of revenue to the State and degradation of the environment.



- Since there is an utter failure in the current monitoring mechanism followed by the State Boards, SEIAAs and DEIAAs, there was an urgent need to revise the existing guidelines by setting up a dedicated monitoring mechanism.

### **Objective Of The Guidelines**

- Identification and quantification of mineral resource and its optimal utilization.
- To control the instance of illegal mining.
- To regulate the sand & gravel mining.
- Reduction in demand & supply gaps.

### **Guidelines**

- The enforcement guidelines focus on the effective monitoring of sand mining from the identification of sand mineral sources to its dispatch and end-use by consumers and the general public and looks at a uniform protocol for the whole country.
- The guidelines propose night surveillance of mining activity through night-vision drones and aerial surveys.
- It also talks about the need for a replenishment study for river bed sand to nullify the adverse impacts arising due to excessive sand extraction. Further, no riverbed mining will be allowed during the monsoon.
- The mining department shall include submission of an annual environmental audit report as one of the conditions in the mining lease agreement and the audit report shall be uploaded on the website of district administration.
- In order to curb illegal mining, it is necessary that the general public is aware of the legal source of sand and RBM suppliers. Hence the guidelines suggest that the state government should develop an online portal for sale and purchase of sand and RBM, to make the process more transparent.
- State Government shall constitute a **District Level Task Force (DLTF)** under the Chairmanship of Deputy Commissioner/District Magistrate/Collector with Superintendents of Police and other related senior functionaries.
  - The DLTF shall keep regular watch over the mining activities and movement of minerals in the district.
  - The DLTF shall take appropriate corrective and remedial action, which may include a recommendation for revoking mining lease or environmental clearance.
  - The DLTF may also constitute an independent committee of experts to assess the environmental or ecological damage caused due to illegal mining and recommend recovery of environmental compensation from the miner's concern.
- While the Sustainable Sand Mining Guidelines, 2016, require the preparation of **District Survey Reports (DSR)**, which is an important initial step before grant of mining lease, the DSRs carried out by state and district administrations are often not comprehensive enough, allowing space for illegal mining. The new guidelines, therefore, list a detailed procedure of how the DSRs are to be made, including the development of an inventory, for the first time, of river bed material and other sand sources in the district. In cases where rivers become district boundaries or state boundaries, the districts or states sharing the boundary shall constitute the combined task force in the preparation of District Survey Reports (DSR).



**Global Talent Competitiveness Index**

- The Global Talent Competitiveness Index was recently released at the **World Economic Forum** at Davos. The index is based on research done by **INSEAD** (a partner and sponsor of the United Nation's Sustainable Development Goals) in partnership with The Adecco Group and Google.
- The six metrics used to decide a country's rank are - ***enable, attract, grow, retain, vocational skills and global knowledge skills***.
- GTCI is an Input-Output model, that combines an assessment of what countries do to produce and acquire talents (Input) and the kind of skills that are available to them as a result (Output).

**Findings Related To India**

- The index, which covers 132 countries, **ranked India at 72**, which is an improvement of 8 places from last year (80).
- India's GTCI score and GDP per capita are both lower than the corresponding medians of its other emerging market economies such as BRICS. China was ranked at the 42nd place, Russia (48th), South Africa (70th) and Brazil (80th).
- Although more could be done to improve the country's educational system (68th in Formal Education), India's key strength relates to growing (44th) talent, due to its levels of lifelong learning (40th) and access to growth opportunities (39th).
- India's highest-ranked sub-pillar, is Employability (28th), but the ability to match labour market demand and supply stands in contrast to the country's poor Mid-Level Skills (113th), which result in a mediocre score in Vocational and Technical Skills (76th).
- Further, India's greatest challenge is to address its weak ability to attract (92nd) and retain (95th) talent. With regard to the former pillar, there is a need to strengthen the role of minorities and women in order to raise the level of Internal Openness (104th).
- As for the latter pillar, India's low scores in the indicators that relate to the quality of life (Lifestyle, 115th) fall well short of its more positive showing in Sustainability (53rd).

**Global Findings**

- **Switzerland** topped this year's ranking, followed by the United States, its highest position yet, while Singapore is the third most talent-competitive country.
- Other countries in the top 10 include Sweden at the 4th position, Denmark (5th), the Netherlands (6th), Finland (7th), Luxembourg (8th), Norway (9th) and Australia (10th).
- As far as the regional group (Central and Southern Asia) is concerned, Kazakhstan, India and Sri Lanka took the top three spots in the region.
- Report noted that the gap between high income, talent-rich nations and the rest of the world is widening. The pecking order underlines the domination of high-income countries - the top 25 in the list are all high-income countries, 17 of them from Europe.
- At all levels of qualifications, workers will need training on adaptability, social intelligence, communication, and problem-solving. Life-long learning will increasingly play a key role in developing skills to foster empathy, creativity, imagination, judgement, and leadership, which are likely to continue to be human-only activities.
- Re-skilling will also be necessary to develop fusion skills in order to allow humans and machines to effectively and efficiently interact in hybrid activities.

### **Significance of AI**

- This year's report explores how the development of artificial intelligence (AI) is not only changing the nature of work but also forcing a re-evaluation of workplace practices, corporate structures and innovation ecosystems.
- The talent gap is also seen in the universe of artificial intelligence. AI talent is scarce and unequally distributed across industries, sectors, and nations. More than half of the population in the developing world lacks basic digital skills.
- It added that AI could provide significant opportunities for emerging markets to leapfrog. As India did in the late 1990s (becoming a global off-shoring base for IT services), AI may provide opportunities for other countries/regions (e.g., Latin America) to become 'global delivery centres' for AI applications.
- Hence, AI policies and programmes should work to minimise negative outcomes and increase access to AI for those left behind.

### **Mission Purvodaya**

- The Union government has launched Mission Purvodaya under which major PSUs like SAIL, IOCL and Coal India and concerned departments of five states— Odisha, West Bengal, Andhra Pradesh, Chattisgarh and Jharkhand—will be working towards accelerating steel production in the region.
- The concerned States collectively hold ~80% of the country's iron ore, ~100% of coking coal and significant portion of chromite, bauxite and dolomite reserves.
- Further there is presence of major ports such as Paradip, Haldia, Vizag, Kolkata etc., with >30% of India's major port capacity.
- Due to the said assets, the National Steel Policy had announced in 2017, that the government is aiming at a total production capacity of 300 million tonne by 2030-31 and out of which, around 200 million tonne is envisaged from the five eastern states.

### **Mission Objectives**

- Under the mission, the government said it will enhance capacity through easing the setup of greenfield steel plants and develop steel clusters near integrated steel plants as well as demand centres.
- Besides, the government aims to transform logistics and utilities infrastructure which would change the socio-economic landscape in the eastern India.
- The steps under mission also include growth of steel industry along with employment opportunities across the entire value chain.

### **Integrated Road Accident Database**

- The government has launched a central accident database management system that will help in analysing causes of road crashes and in devising safety interventions to reduce such accidents in the country.
- According to government data, India accounts for the largest number of road fatalities in the world. More than **1.5 lakh people lost their lives** in road crashes in the country in 2018 and more than 60% of such fatalities were due to over speeding.
- The IT tool, known as the Integrated Road Accident Database (IRAD), has been developed by the Indian Institute of Technology-Madras (**IIT-M**) and will be implemented by the **National Informatics Centre**. The project costs ₹258 crore and is being supported by the **World Bank**.

- The system will be first piloted in the six States with highest fatalities from road crashes — **Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh**. It will be improved on the basis of the learnings from the trial, following which it will be rolled out across the country.

#### **Working of IRAD**

- Around 30,000 tablets would be distributed to police personnel across the country to record data on accidents. The IRAD mobile application will enable police personnel to enter details about a road accident, along with photos and videos, following which a unique ID will be created for the incident.
- Subsequently, an engineer from the Public Works Department or the local body will receive an alert on his mobile device. He or she will then visit the accident site, examine it, and feed the required details, such as the road design.
- Data thus collected will be analysed by a team at IIT-M, which will then suggest if corrective measures in road design need to be taken. Road users will also be able to upload data on road accidents on a separate mobile application, which is expected to go live from April 1.

#### **National Informatics Centre**

- National Informatics Centre (NIC) was established in 1976 and is under the aegis of the **Ministry of Electronics and Information Technology**.
- It has been closely associated with the Government in different aspects of governance. Besides establishing a nationwide state-of-the-art ICT infrastructure, it has also built a large number of digital solutions to support the government at various levels, making the last-mile delivery of government services to the citizens a reality.
- Through its ICT Network, “**NICNET**”, it has developed institutional linkages with all the Ministries /Departments of the Central Government, 37 State Governments/ Union Territories, and about 720+ district administrations of India.

#### **World’s Fastest Growing Cities**

- Leaving behind the fast-changing metropolitan cities behind, three smaller cities in South India have secured a place in the list of world’s fastest-growing urban areas in a recently released survey by Economist Intelligence Unit (EIU). The ranking is based on the data collected by United Nations Population Division.
- **Malappuram, Kozhikode and Kollam** were the only three cities to make it to the top 10 of the world’s fastest-growing cities. Malappuram was ranked No. 1 in the world rankings with a 44.1 per cent change between 2015 and 2020. While Kozhikode was ranked fourth with 34.5 per cent change and Kollam was at number 10 with 31.1 per cent.
- Other Indian cities that made the list were Thrissur in Kerala at 13th position, Gujarat’s Surat at 26, while and Tamil Nadu’s Tiruppur is at 30.
- The other cities in the top 10 list were three cities from China, one each from Nigeria, Oman, UAE and Vietnam.

#### **Significance**

- Top heavy urbanisation is the fundamental problem of Indian urban landscape. Not only population but other basic facilities, including health are concentrated in metros and class one towns.
- When it comes to healthcare, not only corporate hospitals, but also informal health providers are highly concentrated in an around metro and class one towns. Hence, when smaller towns and cities grow it signals that a wider distribution of wealth & job opportunities is underway.

- Currently there are over 60 urban agglomerations in India with a population of 1 million or more against 35 in 2001 and about 43 percent of the urban population of India lives in these cities.
- With urban India expected to contribute nearly three-fourths of GDP by 2020, these alternative centres of growth will help kick start/ rejuvenate an economic regeneration through business models based on disruptive technologies and thus, help create thousands of jobs and propel economic growth.
- Hence, it is important that the government should consider giving priority to such cities when allocating funding for health, education, development of land, housing and infrastructure.

### **North East Gas Grid Project**

- The government has approved the viability gap funding (VGF) of Rs 5,559 crore for North East Gas Grid project, the second instance of public funding for making an energy lifeline economically viable. The VGF amount sanctioned will cover 60% of the Rs 9,265-crore project.
- About 20% of India's natural gas production comes from the North-East.
- The 1,656-km pipeline will connect Guwahati in Assam to major cities in the region such as Itanagar, Dimapur, Kohima, Imphal, Aizawl, Agartala, Shillong, Silchar, Numaligarh and Gangtok.
- The northeast pipeline grid is to be implemented by Indradhanush Gas Grid, a joint venture of GAIL, IndianOil, ONGC, Oil India Ltd and Numaligarh Refinery Ltd.
- GAIL is also laying a 750-km line from Barauni to Guwahati as part of the ₹12,940 crore JHBDPL project, which is also known as the **Pradhan Mantri Urja Ganga project**. This is proposed to be connected to the North-East via the Indradhanush grid.
- The project is critical for implementing the **Hydrocarbon Vision 2030** for the north-east, which entails leveraging the region's hydrocarbon potential for enhancing access to clean fuel and accelerating economic growth.
- The funding support to the gas grid is a part of a broader goal of the government to raise the share of natural gas in the country's energy mix to 15% by 2030 from current 6.2%.
- The government has also envisaged developing the National Gas Grid. At present, about 16,788 km natural gas pipeline is operational and about 14,239 km gas pipelines are being developed to increase the availability of natural gas across the country.

### **Benefits**

- The government's aim through this project is to substitute liquid fuels like kerosene and firewood traditionally prevalent in the region.
- The pipeline grid would ensure reliability and uninterrupted natural gas supplies which otherwise gets severely affected due to various reasons in this part of the country.
- Availability of natural gas across the region is expected to boost industrial growth without impacting the environment and would offer better quality of life to the people in general due to use of cleaner and green fuel

### **Henley Passport Index**

- The Henley Passport Index 2020, which measures the strength of passports of different nations and is widely acknowledged to be the most reliable of such rankings, has been released. It is prepared by Henley and Partners, a London-based global citizenship and residence advisory firm.

- The ranking is based on data from the International Air Transport Association (IATA), a trade association of some 290 airlines, including all major carriers.
- It lists the world's passports according to the number of destinations their holders can access without a prior visa and includes 199 passports and 227 travel destinations, including micro-states and territories. The data is updated in real time as and when visa policy changes come into effect.
- Passport rankings point towards the strength of diplomatic relations between countries. In the past decade, travel freedom has expanded vastly as a result of the rising number of bilateral visa-waiver programmes signed between different countries and unilateral decisions implemented by governments of some countries.
- Countries moving towards nationalist isolationism and away from policies that encourage visa openness are likely to drop in the rankings and incur geopolitical consequences for themselves and their neighbours.

### Highlights Of The Index

- **Japan** has been topping the Index for three straight years, its citizens are able to access *191 destinations* without having to obtain a visa in advance.
- **Singapore**, in second place (same as in 2019), has a visa-free/visa-on-arrival score of 190. **Germany** is No. 3 (same position as in 2019), with access to 189 destinations; it shares this position with **South Korea**, which dropped from the second place it held a year ago.
- **Bottom five countries** are - Eritrea (99), Yemen (103), Pakistan & Somalia (104), Syria (105), Iraq (106), Afghanistan (107).
- The US and the UK have been falling consistently over successive Indices. Both countries are in eighth place in 2020, a significant decline from the No. 1 spot they jointly held in 2015.
- China has slipped from 69<sup>th</sup> position last year to 72 in this year's index.
- The Index's historic success story remains the steady ascent of the UAE, which has climbed a remarkable 47 places over the past 10 years and now sits in 18th place, with a visa-free/visa-on-arrival score of 171.

### Findings Related To India

- The Indian passport is closer to the bottom, ranked 84th in the world. Since the index began in 2006, the Indian passport has ranked in a band of 71st to 88th.
- The Indian passport's ranking of 84th translates into visa-free access to 58 destinations, including 33 which give Indians visas on arrival. It ranked higher in both 2019 (82, with visa-free access to 59 destinations) and 2018 (81, with visa-free access to 60 destinations).
- Twenty of the 58 visa-free access destinations in the 2020 list are in Africa, and 11 each in Asia and the Caribbean. Serbia is the only European country to which Indian passport holders can travel visa-free. There is no major or developed country to which Indian passport holders have visa-free access.

### Why Indian Passport Ranks Low In The Index

- **General restrictions** by other countries owing to **large Indian population with a history of immigration**.
- **Reciprocity** is also one of the reason as India places visa restrictions on Americans and other European countries.
- **Unfriendly neighbourhood** also forces India to close its doors for the purpose of internal security.



- One should keep in mind that poor rank in the index **does not mean economic backwardness or reputation**. It is simply reflective of the **visa policies adopted by other countries towards that particular country**.

### **Andhra Pradesh Assembly Passes Bill For Three State Capitals**

- The Andhra Pradesh Assembly has passed The Andhra Pradesh Decentralisation and Equal Development of All Regions Bill, 2020, paving the way for three capitals for the state.
- Amaravati, where former Chief Minister N Chandrababu Naidu had hoped to build the capital, will now be only the legislative capital. Vishakhapatnam will become the executive capital, where the secretariat and Raj Bhavan would be located and Kurnool in Rayalaseema will be developed as judicial capital, where the AP High Court would be located.



- Naidu had focussed on building a world class capital in Amaravati, for which 33,000 acres of fertile land were taken from 29 villages, through an innovative land pooling scheme.
- However, due to lack of funds and support from the Centre, Naidu could not build the dream capital. He did, however, build a plug-and-play Interim Government Complex, a temporary High Court building, and a permanent Legislative Complex.

### **Rationale Behind Three Capitals**

The AP government says it wants to ensure equal and balanced development, instead of concentrating on just one place, and thereby develop three state capitals.

#### **A. Recommendation By Various Committees**

- According to the government, decentralisation was the central theme in recommendations of all major committees that were set up to suggest a suitable location for the capital of Andhra Pradesh.
- In 2010, the Justice B N Srikrishna Committee, set up to look into the demand for a Telangana state, said Rayalaseema and North Coastal Andhra were economically the most backward, and the “concentration of development efforts in Hyderabad is the key reason for demand of separate states”.
- In 2014, the K Sivaramakrishnan Committee appointed to identify locations for the new capital of AP said the state should see decentralised development and that one mega capital city was not desirable.
- In its December 2019 report, the G N Rao Committee recommended three capitals for balanced growth, and four regional commissionerates along the lines of Karnataka.

#### **B. Boston Consulting Group's Recommendations**

- The government had also sought an opinion from the global management consulting firm Boston Consultancy Group, which had given its recommendations in January, 2020.
- BCG recommended that Visakhapatnam should be the seat of the Governor, Chief Minister, and all government departments, and a High Court Bench, and have provisions for a Legislative Assembly for use in an emergency.



- Further, Vijayawada/Amaravati should have the Assembly and a High Court Bench and Kurnool should have the High Court and tribunals.

#### C. High-Powered Committee

- A high-power Committee appointed by the government to study the recommendations of the G N Rao Committee and the BCG suggested that the state should be demarcated into zones with separate zonal planning and development boards in order to ensure inclusive development.
- It further recommended that infrastructure projects focussed in Rayalaseema and North Coastal Andhra should be prioritised.

#### **Major Practical Problems**

- The government argues that the Assembly meets only after gaps of several months, and government Ministers, officers, and staff can simply go to Amaravati when required.
- However, coordinating between seats of legislature and executive in separate cities will not be easier and seems to be a logistics nightmare. The Executive capital Visakhapatnam is 700 km from judicial capital Kurnool, and 400 km from legislative capital Amaravati and the Amaravati-Kurnool distance is 370 km. The time and costs of travel will be significant.
- The AP Police are headquartered in Mangalagiri, 14 km from Vijayawada, and senior IPS officers who may be required to visit the Secretariat will have to travel 400 km to Visakhapatnam. Likewise, government officers who may have to appear in the High Court will have to travel 700 km to Kurnool, which does not have an airport.
- All officers and Ministerial staff who may have to be at hand to brief Ministers when the Assembly is in session, will probably have to stay put in Amaravati, leaving behind their other responsibilities in Visakhapatnam.
- This will add a significant burden in terms of travel time and travel costs and will adversely affect the efficiency and quality of governance in the State.
- Moreover, there is no blue print as to meet the Infrastructure requirement at the three capitals.
- Finally, there is also a widespread belief that the decision has been taken on political consideration.

#### **Final Analysis**

- Frequent policy changes, especially when serving governments change, dampen the business climate. Investors scare away easily when this happens.
- Government's vision of Amaravati as legislative capital, Vizag as administrative capital and Kurnool as judicial hub will complicate governance.
- Despite misgivings, Government must make an effort to complete Amaravati. Leaving it unfinished will stand as a cautionary tale for investors eyeing India, particularly Andhra Pradesh.

#### **Examples Of Multiple Capital Cities:**

- **South Africa** has **three capitals** i.e. Pretoria (executive), Cape Town (legislative), and Bloemfontein (judicial).
- In Sri Lanka, **Sri Jayawardenepura Kotte is the official capital** and seat of national legislature, while **Colombo** is the de facto seat of national executive and judicial bodies.
- **Malaysia** has its official and royal capital and seat of national legislature at **Kuala Lumpur and Putrajaya** is the administrative centre and seat of national judiciary.

#### **Examples of Indian States**

- **Maharashtra** has two capitals i.e. Mumbai and Nagpur (which holds the winter session of the state assembly).
- **Himachal Pradesh** has capitals at Shimla and Dharamshala (winter).
- The former state of **Jammu & Kashmir** had Srinagar and Jammu (winter) as capitals.

**Crime In India Report 2018**

- Crime in India Report is an annual publication of National Crime Records Bureau (NCRB) which is being published since 1953. The publication contains detailed statistical information on the crime scenario of the country.
- The changing nature and method of committing crime and the sophisticated technology used by the criminals has made the situation very complex. This poses a serious challenge to law enforcement agencies policy makers and other stakeholders of the criminal justice system
- Consequently, it is of vital importance to make this data available to investigating agencies so that they can examine the causes, emerging trends and patterns of crime and can prepare crime prevention strategies accordingly.

**Falling Crime Rate**

- The crime rate in the country, or total crimes reported per lakh population, fell to 383.5 in 2018 from 388.6 in 2017. IPC crimes made up 61.7% of the total crimes reported, while share of Special & Local Laws crimes stood at 38.2%. SLL crimes relate to Arms Act, NDPS ACT, UAPA, Gambling Act, Excise Act, Explosives Substances Act, Immoral Traffic (Prevention) Act, Registration of Foreigners Act and Dowry Prohibition Act etc.
- As per the report, Kerala accounted for the highest rate of total crimes (IPC and SLL) in the country followed by Delhi.
- As for 19 metropolitan cities with over 20 lakh population, Kochi in Kerala accounted for the highest crimes per lakh population, followed by Delhi and Jaipur, while Kolkata reported the lowest crime rate of 152.

**Registration of FIRs**

- The report suggests that, access to the criminal justice system is often determined by how much money, power, and influence the complainant has. Therefore, who the complainant is able to approach to register his/her complaint, becomes important.
- A person has the best chance of getting a complaint registered as an FIR if she is able to go to the police station with an **order from a court**. 99 % of complaints that are routed through a court are registered as FIRs.
- Further, a **written complaint** has a better chance of being registered than a verbal complaint, in which the duty officer takes down details, due to which, the uneducated are unable to get their complaints registered. The data show that 53% of written complaints were registered, while only 5% of oral complaints saw legal action by police.
- The complaints made through Dial 100 had only a 1% success rate. Moreover, complaints filed online, a new initiative by police in some states such as Delhi and UP, too have a very slim chance.

**Increase In Conviction Rate In IPC Crimes**

- For the first time in over three decades, the conviction rate for IPC (Indian Penal Code) cases has touched 50%. The last time the conviction rate for IPC crimes crossed 50% was in 1988. Since then, the rate kept declining till it fell to a low of 37.4% in 1998, thereafter, it rose slightly but stagnated at 40-42% till a few years back.
- The overall increase in the conviction rate, however, averages out poor conviction rates for serious crimes such as rape, attempt to rape, murder and crimes against scheduled castes & tribes.

- The reason for overall increase in conviction rate is due to high conviction rates for miscellaneous IPC crimes, which account for almost 40% of the total. In miscellaneous IPC crimes, the conviction rate is 72.2%.

### Crime Against Women

- According to the report, 3,78,277 cases of crime against women were reported in the country, up from 3,59,849 in 2017. **Uttar Pradesh** topped the list, followed by Maharashtra and West Bengal.
- The rate of crimes against women per lakh of their population witnessed an increase to 58.8 in 2018 from 57.9 in 2017. **Assam** reported the highest crime rate per lakh women population (166), followed by Delhi (149.6), while Nagaland was the safest for women, with a crime rate of just 7.3, followed by Gujarat (26).
- Cruelty by husband or his relatives (31.9%) followed by assault on women with intent to outrage her modesty (27.6%) constituted the major share of crimes against women.
- There was a 31% spurt in cases of rape with murder in 2018 as compared to 2017. Although at this point it is difficult to clearly point out the reason for this increase, but it is possible that inclusion of death penalty for punishment against rape encourages the perpetrator to kill the victim. However, it would need a few years more to have robust data to reach that conclusion with confidence.

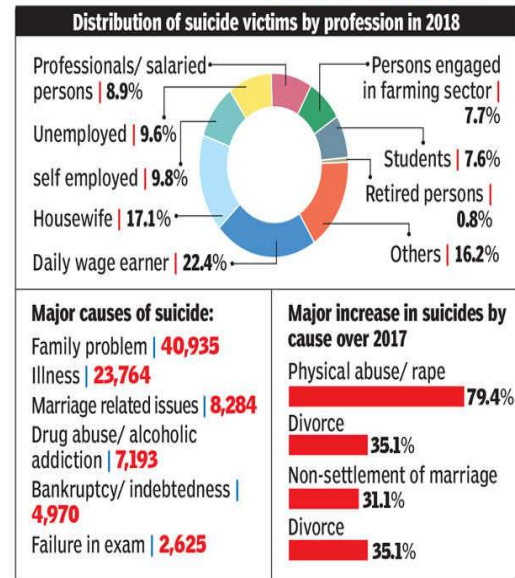
### Offences Against The State

- The number of sedition cases registered across the country doubled from 35 in 2016 to 70 in 2018. In 2018, sedition made almost 50 percent of all cases lodged under various sections related to offences against the state.
- Along with sedition, offences falling under special and local laws such as the Unlawful Activities Prevention Act (UAPA) and the Official Secrets Act (OSA) have registered a rise.
- Jharkhand topped the list of states in sedition cases (18). Apart from **Jharkhand, Assam and J&K, Kerala and Manipur** are the other two states in the top five.

### Suicide Report

- The total number of people who committed suicide in 2018 was 1,34,516, an increase of 3.6% from 2017.
- The majority of the suicides were reported in **Maharashtra** followed by **Tamil Nadu, West Bengal, Madhya Pradesh and Karnataka**.
- The four metros Delhi, Chennai, Bengaluru and Mumbai reported 36.1% of total suicides reported from 53 mega cities, with Delhi at the top of the list.
- Farm Suicide:** A total of 10,349 people working in the farm sector ended their lives in 2018, accounting for 7.7 % of the total number of suicides in the country.
- Over 66% of the 1.3 lakh suicide victims earned less than the per capita income of Rs 1 lakh annually and at least one in every five victims was a daily wage earner and one in six a housewife.
- The NCRB data shows that seven out of every 10 persons who committed suicide was a male, with more married men than single, in a ratio of 68:22, taking their own lives.

### 22% OF VICTIMS DAILY WAGERS



**Accidental Deaths**

- According to the report, of the total 4.12 lakh accident deaths reported in 2018, only 6,891 were due to natural forces such as lightning, sun stroke and severe cold.
- Traffic accidents, including railroad crashes, had over 44% share of non-natural fatalities and road accidents had the lion's share of these fatalities, registering nearly 1.53 lakh deaths.
- The report, has said 50,771 people died in accidents on the country's NH network and this worked out to one death every 2.5 km.
- While speeding has been identified as the biggest reason behind the high number of road deaths, in the case of railways, fall from train and collision of trains with people on the tracks were responsible for most fatalities.

**Performance Of Various Commissions**

- **NHRC/SHRC:** The data also shows how toothless central commissions are in dealing with complaints of human rights abuses and atrocities on women, children, and Dalits. According to the data, only 4% of complaints sent to the National Human Rights Commission or State Human Rights Commissions ended up being converted into FIRs.
- **NCSC/NCST:** The Commissions for Scheduled Castes (both in the states and at the Centre) fare no better as only 7% of complaints registered with them were converted into FIRs, while the number was worse for the Commissions for Scheduled Tribes, at only 5%.
- **NCW/SCW:** Only 5% of complaints received by National and State Commissions for Women were converted into FIRs in 2018, while Children Welfare Boards/Commission had a success rate of 20%.

**National Crime Records Bureau (NCRB)**

- NCRB is an Indian government agency responsible for collecting and analysing crime data as defined by the Indian Penal Code (IPC) and Special and Local Laws (SLL).
- NCRB is headquartered in New Delhi and is part of the Ministry of Home Affairs (MHA).
- NCRB was set-up in 1986 to function as a repository of information on crime and criminals so as to assist the investigators in linking crime to the perpetrators.

**Mission**

- To empower Indian police with information technology and criminal intelligence to enable them to uphold law and protect people.
- To provide leadership and excellence in crime analysis particularly for serious and organized crime.

**Women, Business and Law 2020**

Women, Business and Law 2020 was recently released by the World Bank Group. The study analyses laws and regulations affecting women's economic opportunity in 190 economies across **eight indicators** - *mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets and pension*.

**Findings Of The Study**

- Only eight economies among the 190 scored a perfect 100 on the WBL Index. These are Belgium, France, Latvia, Sweden, Canada, Denmark, Iceland and Luxembourg.
- The nations that saw the most significant growth were Saudi Arabia, the UAE, Nepal, South Sudan, São Tomé and Príncipe, Bahrain, the Democratic Republic of Congo, Djibouti, Jordan and Tunisia.

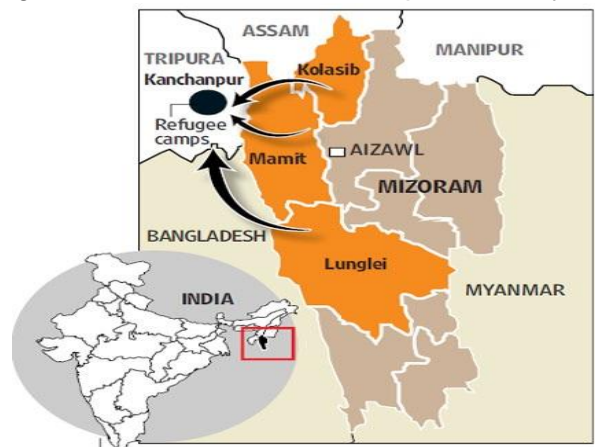
- India has taken the top spot in the South Asian region by beating Maldives in this year's index. The country gained 4 per cent year-on-year with a score of 74.4 out of 100 and was placed 117th.
- Incidentally, India's score aligns with the global mean. The **global average was 75.2** — a slight increase from 73.9 in the previous index released in 2017.
- The World Bank study particularly commended the measures adopted by Maharashtra to remove restrictions on women's ability to work in jobs deemed dangerous.
- However, compared to other **BRICS countries**, India's score was second-to-last. South Africa topped the WBL index among the BRICS grouping, scoring 88.1 points. It was followed by Brazil, with 81.9 points. China witnessed a dip in its score but obtained 1.2 points more than India.
- While scoring 100 in the indicators of mobility, workplace and marriage, India scored poorly with respect to pay (25). Further, its score was relatively low in parenthood (40), entrepreneurship (75), pension (75) and assets (80).
- The study observed that giving women equal opportunities in the workplace leads to more successful economies and the success of an economy is directly proportional to higher female labour force participation. This is only possible if timely legislative reforms are introduced.
- Over the past two years, 40 economies across varied regions and income groups have introduced 62 reforms to facilitate women's entry into the workforce, thereby making women's economic empowerment a priority.
- While the report noted significant improvements in women's contribution to the economy, legal rights are still insufficient. Women, on an average, have just three-fourths of the legal rights afforded to men globally.

### **Bru Agreement**

Twenty-three years after ethnic clashes in Mizoram forced the Bru (or Reang) community to flee their homes to neighbouring Tripura, an agreement has been signed to allow them to remain permanently in Tripura. In several ways, the agreement has redefined the way in which internal displacement is treated in India.

### **Background**

- The Bru or Reang are a community indigenous to Northeast India, living mostly in Tripura, Mizoram, and Assam. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group (PVTG).
- Over two decades ago, they were targeted by a few ethnic social organisations of Mizoram who demanded that the Bru be excluded from electoral rolls in the state.
- In 1997, following ethnic clashes, nearly 37,000 Bru fled Mizoram's Mamit, Kolasib, and Lunglei districts to Tripura, where they were sheltered in relief camps. Since then, over 5,000 have returned to Mizoram in nine phases of repatriation, while 32,000 people from 5,400 families still live in six relief camps in North Tripura.
- In June 2018, Bru leaders signed an agreement with the Centre and the two state governments, providing for repatriation to Mizoram. Most residents of the camps, however, rejected the insufficient terms of the agreement and only 328 families returned to Mizoram, rendering the process redundant.





- The camp residents said the package did not guarantee their safety in Mizoram, and that they feared a repeat of the violence that had forced them to flee.
- In November, 2019, Pradyot Kishore Debbarma, scion of Tripura's erstwhile royal family, wrote to Union Home Minister seeking the resettlement of Bru in the state, which led to the current agreement.

### **The Bru Agreement**

- All Bru currently living in temporary relief camps in Tripura will be settled in the state, if they want to stay on. The Bru, who returned to Mizoram in the eight phases of repatriation since 2009, cannot, however, come back to Tripura.
- To ascertain the numbers of those who will be settled, a fresh survey and physical verification of Bru families living in relief camps will be carried out.
- The Centre will implement a special development project for the resettled Bru; this will be in addition to the Rs 600 crore fund announced for the process, including benefits for the migrants.
- Each resettled family will get 0.03 acre (1.5 ganda) of land for building a home, Rs 1.5 lakh as housing assistance, and Rs 4 lakh as a one-time cash benefit for sustenance. They will also receive a monthly allowance of Rs 5,000, and free rations for two years from the date of resettlement.
- All cash assistance will be through Direct Benefit Transfer (DBT), and the state government will expedite the opening of bank accounts and the issuance of Aadhaar, permanent residence certificates, ST certificates, and voter identity cards to the beneficiaries.

### **Levels And Trends In Child Mortality Report**

- The 'Levels and Trends in Child Mortality' report by the United Nations (UN) inter-agency group for child mortality has been released.
- This report presents the UN IGME's latest estimates – through 2018 – of neonatal, infant and under-five mortality as well as mortality among children aged 5–14 years.

### **Global Findings From The Report**

- Tremendous progress in child survival has been made over the past two decades. The total number of deaths among children and young adolescents under 15 years of age dropped by 56 % from 14.2 million in 1990 to 6.2 million in 2018.
- The global under-five mortality rate fell to 39 deaths per 1,000 live births in 2018 from 93 in 1990 and 76 in 2000. This progress has been achieved in a world beset by natural disasters, faced with violence, conflict and epidemics.
- The report adds that despite the tremendous progress in child survival that has been made over the past two decades, one child or young adolescent died every five seconds in 2018.
- Globally, 85% of deaths among children and young adolescents in 2018 occurred in the first five years of life, accounting for 5.3 million deaths. Every single day of 2018, the world saw, on average, 15,000 deaths of children under age 5
- According to the report, half of all under-5 deaths in 2018 occurred in five countries: India, Nigeria, Pakistan, the Democratic Republic of the Congo and Ethiopia, wherein India and Nigeria alone account for about a third.

### **Neonatal Mortality**

- The first 28 days of life – the neonatal period – are most vulnerable time for a child's survival. Children face highest risk of dying in their first month of life, at a global rate of 18 deaths per 1,000 live births.



- Progress in reducing neonatal mortality is slower than mortality in older ages and the share of neonatal deaths relative to all under- five deaths has increased.

### **Gender Disparity In Mortality**

- In 2018 fewer countries showed gender disparities in child mortality, and across the world, on average, boys are expected to have a higher probability of dying before reaching age-5 than girls.
- In some countries, primarily located in Southern Asia and Western Asia the risk of dying before age 5 for girls is significantly higher than what would be expected based on global patterns.

### **SDG Target**

- The third SDG calls for an end to preventable deaths of newborns and children under age 5, with all countries aiming to reduce neonatal mortality to at least as low as **12 deaths per 1,000 live births** and under-five mortality to at least as low as **25 deaths per 1,000 live births by 2030**.
- In 2018, 121 countries had already achieved an under-five mortality rate below the Sustainable Development Goal (SDG) target of 25 or fewer deaths per 1,000 live births.
- If current trends continue, 53 countries will not meet the SDG target on under-five mortality by 2030. This would result in 11 million excess child deaths between 2019 and 2030 in addition to the 41 million children who will die before age 5 between 2019 and 2030, even if all countries meet the SDG target.

### **Indian Findings**

- India is among the few countries in the world where, in 2018, the mortality under-5 years of girls, exceeded that of boys. Among States, Jharkhand, Bihar and Uttarakhand showed the largest gender gaps in under-5 mortality.
- According to India's 2017 Sample Registration System (SRS), the States with the highest burden of neonatal mortality are Madhya Pradesh, Odisha and Uttar Pradesh, with 32, 33 and 30 neonatal deaths per 1,000 live births, respectively.
- India's overall neonatal mortality rate is 23 per 1,000 live births and estimates indicate that the majority of child mortality cases in India are attributable to deaths during the neonatal period

### **Way Ahead**

- Protecting every child's right to survive will require addressing persistent inequities and disparities in maternal and child health while also ensuring universal access to safe, effective, high-quality and affordable care for women, children and adolescents.
- The rapid growth in births and population requires additional efforts and investments to scale up high-impact maternal, newborn and child survival interventions, to strengthen the health systems and to meet other needs that contribute to child survival.
- It also demands great understanding of levels and trends in child mortality, as well as the underlying causes of child and young adolescent deaths to help guide policymaking and planning.

### **MHA Inaugurates Indian Cyber Crime Coordination Centre**

The Union Home Minister recently inaugurated the Indian Cyber Crime Coordination Centre (I4C) to fight cybercrimes and the National Cyber Crime Reporting Portal through which people can report cybercrimes online.

### **Indian Cyber Crime Coordination Centre**

- The scheme to setup I4C was approved in October 2018 at an estimated cost of Rs. 415.86 crore, to deal with all types of cybercrimes in a comprehensive and coordinated manner.

- According to Ministry of Home Affairs, I4C has seven components- National Cyber Crime Threat Analytics Unit, National Cyber Crime Reporting Portal, National Cyber Crime Training Centre, Cyber Crime Ecosystem Management Unit, National Cyber Crime Research and Innovation Centre, National Cyber Crime Forensic Laboratory Ecosystem and Platform for Joint Cyber Crime Investigation Team.
- It will identify the research problems and take up R&D activities in developing new technologies and forensic tools in collaboration with academia/research institutes within India and abroad.
- It will work towards preventing misuse of cyber space for furthering the cause of extremist and terrorist groups.
- It will suggest amendments, if required, in cyber laws to keep pace with fast changing technologies and international cooperation.
- It will coordinate all activities related to implementation of Mutual Legal Assistance Treaties (MLAT) with other countries related to cybercrimes in consultation with the concerned nodal authority in MHA.

#### **National Cyber Crime Reporting Portal**

- National Cyber Crime Reporting Portal ([www.cybercrime.gov.in](http://www.cybercrime.gov.in)) is a citizen-centric initiative that will enable citizens to report cybercrimes online through the portal.
- This portal was launched on a pilot basis in August, 2019 and it enables filing of all cybercrimes with a specific focus on crimes against women, children, particularly child pornography, child sex abuse material, online content pertaining to rapes/gang rapes.
- All the cybercrime related complaints will be accessed by the concerned law enforcement agencies in the States and Union Territories for taking action as per law.
- In future, this portal will provide for a chatbot for automated interactive assistance system to the public for guidance on cybercrime prevention and how to report incidents on the portal.
- After successful completion, this portal can improve the capacity of the law enforcement agencies to investigate the cases and will improve success in prosecution.
- It will also improve coordination amongst the law enforcement agencies of different States, districts and police stations for dealing with cybercrimes in a coordinated and effective manner.

#### **Trojan Malware 'Shopper'**

- According to the latest report by the global anti-virus brand Kaspersky, a **new malware dubbed 'Shopper'** has affected 14.23 per cent smartphones in India. It is also known as **'Trojan-Dropper'**.
- The Trojan application affects the user's device through **unauthorised installation of shopping and retail apps**. It later **boosts the ratings of such apps** and **displays unnecessary** adds adding to the annoyance of the user.
- The app can also post content from the user's social media accounts.
- Future repercussions - The app's capabilities regarding posting content from a user's social media accounts pose an imminent threat to the user's privacy and security.

#### **Cyber Crime Prevention Unit AASHVAST**

- The Union Home Minister has inaugurated various projects of Gujarat Police and Indian Postal Department in Gandhinagar Gujarat. The Projects include:

- **VISHWAS**: “Video Integration and StateWide Advance Security” Project ( It aims to improve law and order management, proactive traffic management & control, crime detection through video analytics, and post-incident investigation and video forensic screening.)
- **Netrang**: Project to establish Command and Control Room in 33 districts
- **AASHVAST**: an online portal to pay e-Challan and Cyber Crime Prevention Unit
- The Cyber AASHVAST is a unit that will **act to prevent cybercrimes** with the help of VISHWAS and NETRANG. It is the country’s **first Cyber Crime Prevention Unit**.
- It will own an exclusive online portal that will have dedicated service helpline for victims of cyber-crimes.
- The AASHVAST will also monitor, prevent and control cyber-crimes in the state.

### Indian Data Relay Satellite System

- India is planning to put up a new satellite series called the Indian Data Relay Satellite System in order to develop space to space tracking and communication capabilities of its space assets.
- The IDRSS is planned to track and be constantly in touch with Indian satellites, in particular those in low-earth orbits which have limited coverage of earth. Along with it, it will also be useful in monitoring launches.
- IDRSS satellites of the 2,000 kg class would be launched on the GSLV launcher to geostationary orbits around 36,000 km away. A satellite in GEO covers a third of the earth below and three of them can provide total coverage.

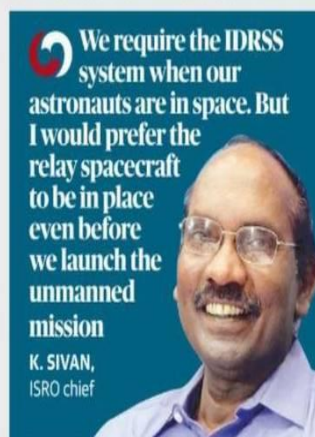
### **IDRSS and Gaganyaan Mission**

- The first beneficiary would be the prospective crew members of the Gaganyaan mission of 2022 who can be fully and continuously in touch with mission control throughout their travel.
- During the launch of the human mission and also when the crew craft orbits earth from a distance of 400 km, at least one ground station must see and track it. But with available ground stations, that would not be the case.
- Without data relay satellites, ISRO would have to create a large number ground stations everywhere or hire them globally and yet the crewed spacecraft would not be visible all the time.
- Work on the two IDRSS satellites planned initially has begun. The first of them will be sent towards the end of 2020 and will precede the pre-Gaganyaan experimental unmanned space flight which will have a humanoid dummy and the second one will follow in 2021. The two will offer 24x7 tracking, sending and receiving of information from the crew.

#### **Scaling new heights**

The Indian Data Relay Satellite System (IDRSS) is a set of satellites that will track, send and receive information from other Indian satellites

- The project will aid the crew of Gaganyaan mission helping them in maintaining contact with the mission control throughout
- Work on two IDRSS satellites has already begun
- First satellite will be launched by 2020-end and the second one by 2021



### **Relay Satellite Systems In Other Countries**

- Older space majors such as the U.S. and Russia started their relay satellite systems in the late 1970s-80s and a few already have around 10 satellites each.
- They have used them to monitor their respective space stations and the International Space Station, and trips that dock with them, as well as the Hubble Space Telescope.

- While the U.S. is putting up its third-generation advanced fleet of TDRS (Tracking & Data Relay Satellites), Russia has its Satellite Data Relay Network and Europe is building its own European Data Relay System, while China is into its second generation Tianlian II series.

### **Indian Science Congress**

- The 107th Indian Science Congress, was recently organised by Indian Science Congress Association in Bangalore. The first Indian Science Congress was held in 1914 at the Asiatic Society in Calcutta.
- The five-day long event aims to bring together science fraternity across the world to discuss scientific innovation and research. The theme of this edition was '*Science & Technology: Rural Development*'.
- A **Farmers Science Congress** was held for the first time in the history of Indian Science Congress, with focus on rural development through Science and Technology. The farmers congress covered themes ranging from farmer's innovation on integrated agriculture and entrepreneurship for doubling farmer's income, climate change, bio-diversity, conservation, ecosystem services & farmer's empowerment to agrarian distress, and rural bio-entrepreneurship.
- An event Rashtriya Kishore Vaigyanik Sammelana was also held at the ISC. The aim was to provide a unique opportunity for children to listen to and interact with eminent scientists & Nobel Laureates.
- The women's science congress held at ISC aims to provide a single platform for women working in different arena of science and technology to showcase their achievements and experiences.
- It also came up with a road map for women in science and technology and recommend policies to enhance the role and utilize the full potential of women in science and technology.

### **Indian Science Congress Association**

- Indian Science Congress Association (ISCA) is a premier scientific organisation of India with headquarters at Kolkata. The association started in the year 1914.
- The Association was formed with the following objectives:
  - To advance and promote the cause of science in India.
  - To publish such proceedings, journals, transactions and other publications as may be considered desirable.
  - To secure and manage funds and endowments for the promotion of Science including the rights of disposing of or selling all or any portion of the properties of the Association.

### **GSAT 30 Launched**

- The nation's latest communication satellite, GSAT-30, was recently launched to space from the Guiana Space Centre in Kourou, onboard Arianespace's Ariane 5 vehicle.
- The 3,357-kg satellite will **replace INSAT-4A** which was launched in 2005 and marks the first mission of the year for ISRO. It has been built to last for 15 years through the 2030s.
- GSAT-30 will provide DTH (direct to home) television services, connectivity to VSATs (that support working of banks') ATMs, stock exchange, television uplinking and teleport services, digital satellite news gathering and e-governance applications. The satellite will also be used for bulk data transfer for a host of emerging telecommunication applications.
- The high-power satellite is equipped with 12 normal C band and 12 Ku band transponders and its unique configuration provides flexible frequency segments and flexible coverage. The satellite will

provide communication services to Indian mainland and islands through the Ku band and wide coverage over Gulf countries, a large number of Asian countries and Australia through the C band.

### **Need For A Foreign Launcher**

- ISRO hired a foreign launcher as GSAT-30 is much heavier than the 2,000-kg lifting capacity of its geostationary launch vehicle GSLV-MkII.
- As for the newer and more powerful GSLV-MkIII that can lift up to 4,000 kg, the space agency plans to save the two or three upcoming MkIIIs mainly for its first human space flight Gaganyaan of 2022 and two preceding crew-less trials.
- Arianespace, the European launch service operator, has now sent 24 Indian communication satellites to orbit over the last 30 years; the APPLE experimental satellite of 1981 was its first Indian contract.

### **Zo Kutpui**

The first edition of the Zo Kutpui (festival) was recently held in Tripura. The festival then moved on to other states in the country and countries such as US, Myanmar and Bangladesh which have significant **Mizo population**. The move is an attempt to unify and strengthen the brotherhood among various Mizo tribes living in different parts of the world

### **Mizo People**

- The Mizo people are an ethnic group native to north-eastern India, western Myanmar and eastern Bangladesh; this term covers several ethnic peoples who speak various Kuki-Chin languages.
- The present Indian state of Mizoram (literally "Mizoland") was called the Lushai Hills or Lushai District and was defined as an excluded area during British Raj and a district of Assam in independent India.
- The people of Lushai Hills demanded a distinct political territory when India achieved independence. Due to continued efforts by its people to gain autonomy, the national government approved Mizoram in 1972 as a Union Territory and in 1987 as a full-fledged state of the Republic of India.
- As the people organized, they chose to identify as Mizo rather than by individual clan/tribe names. Thus, there is no Mizo Tribe as such, rather an umbrella name for all the different tribes. Of their languages, the most widely spoken is the "Mizo", which is the common language of all Mizos, which belong to the Tibeto-Burman language family.

### **Lai Haraoba**

- Lai Haraoba is a ritualistic festival observed by **Manipuri meitei communities** since ancient times.
- In January, the festival was organized by Department of Information and Cultural Affairs, Government of Tripura.
- In the **state of Manipur**, the Lai Haraoba Festival **is celebrated in the month of May**.
- It is celebrated through oral literature, music, dance and rituals.

### **Nagoba Jatara**

- The month long Nagoba jatara was recently held in Telangana.
- Nagoba Jatara is a tribal festival held in Keslapur village of Telangana. It is the second biggest tribal carnival and celebrated by **Mesaram clan of Gond tribes**.



- Tribal people from Maharashtra, Chhattisgarh, Orissa and Madhya Pradesh belonging to the Mesram clan offer prayers at the festival to Nagoba, also known as Persa Pen or great god, which marks the actual beginning of the annual tribal fair.
- The **Gusadi Dance performance** by dancers from Gond tribe is a special attraction of the event.

### **World Hindi Day**

- World Hindi Day was recently celebrated on 10<sup>th</sup> January, marking the anniversary of first World Hindi Conference which was held in 1975 by then Prime Minister Indira Gandhi.
- World Hindi Day was first observed on January 10, 2006. Since then, it is celebrated on January 10 every year.

### **World Hindi Day vis a vis National Hindi Diwas**

- National Hindi Diwas is celebrated every year on September 14. On that day in 1949, the constituent assembly adopted Hindi, written in Devanagari script, as the official language of the Union, while the focus of the World Hindi Day is to promote the language at the global stage.
- The first World Hindi Conference was held in Nagpur with Mauritius prime minister Seewoosagur Ramgoolam as the chief guest. Also, persons of Indian origin and non-residential Indians in many countries organise events to commemorate the day to spread the greatness of the language.

### **Facts About The Hindi Language**

- The word Hindi originated from the **Persian word Hind**, which means the land of the Indus river.
- Hindi is the first language of around 430 million people around the world. Apart from India, the language is also spoken in Nepal, Guyana, Trinidad and Tobago, Suriname, Fiji and Mauritius. Hindi and Nepalese share the same script - Devanagari.
- In linguistic terms, Hindi belongs to Indo-Iranian sub-family of the Indo-European family of language.
- Hindi has been influenced and enriched by Turkish, Arabic, Persian, English and Dravidian (ancient South India) languages.
- The earliest form of Hindi was called 'Apabhramsa', which was an offspring of Sanskrit. In 400 AD, poet Kalidas wrote Vikramorvashiyam in Apabhramsa.

### **India Nepal Jointly Inaugurate New Check Post**

- PM Modi and his Nepali counterpart KP Sharma Oli jointly inaugurated an Integrated Check Post (ICP) at **Jogbani-Biratnagar border**.
- It was built **with Indian assistance** to facilitate trade and people's movement.
- This is the **second ICP** on the Nepal border. The **first** was built at the **Raxaul-Birgunj border** in 2018.
- The check posts ensure better border management for the movement of passenger and cargo. It also helps in smooth facilitation of trade between the two countries.
- So far, there are **7 ICPs in India**. It is planning to construct **14 more ICP and 13 Land Customs Stations**.

*[For details on India-Nepal bilateral relation, please refer the Yellow Book on International Relation.]*

**[The unique relationship between India and Nepal is facing various challenges leading to growing anti-Indian sentiment amongst the government and people of Nepal. Discuss.** This question has already been dealt in June 2019 edition of the CA magazine]



### Ujjwala Inspires Ghana

- Ghana wants to replicate the highly successful Ujjwala Yojana of India.
- It has **signed an agreement** with state-owned Indian Oil Corp (IOC) seeking its assistance and technical expertise in **implementation of the African nation's national LPG promotion policy**.
- The MoU will increase the support offered to National Petroleum Authority of Ghana by India.
- LPG coverage in Ghana is **just 23 per cent** and customers have to queue up at petrol stations with cylinders to get a refill. Hence, it wants to replicate the Indian model with a view to expand the coverage to cover at least 50 per cent of the population.

As many as <b>8 crore free cooking gas connections</b> were given to poor women in three years under the <b>Pradhan Mantri Ujjwala Yojana</b> .
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### India To Place Restrictions on Non-essential Imports

- India is set to finalize stricter quality standards for **371 items by March 2020**.
- This move is primarily aimed at **curbing imports of non-essential items** such as toys, plastic goods, sports items and furniture, **especially from China**.

#### **Key Highlights:**

- The proposed rules are to be framed by ministries in coordination with the Bureau of Indian Standards (BIS). It will also ensure stricter inspection of imports.
- The rules will **also apply to Indian producers** so as to make the regulations World Trade Organization-compliant.

#### **Possible Impact:**

- It will help in **narrowing down the trade deficit** especially with China. According to a commerce ministry estimate, non-essential imports from China amount to ₹4 trillion a year. Also, **trade deficit with China** is widening and it currently stands at 53.6 billion USD.
- These rule will also **improve market surveillance of imports and checking compliance** which was very weak till now.
- Currently there are 370 standards for imports. India's plan is to increase it to 5000 in the second phase. This step will help boost the local industries and help Indian consumers get quality products.
- Overall, it will help in **cutting the country's import bill** of non-essential items, **promoting Make in India** and promote **sale of quality and standard goods** in the market.

### Hormuz Peace Initiative

India attended a special meeting on Hormuz Peace Initiative in Tehran. The aim of this meeting was to **seek stability in one of the world's busiest and strategically located shipping lanes** amid escalating US-Iran tensions.

#### **Key Highlights**

- This initiative was **led by Iran** to stabilise the Strait of Hormuz which saw participation from key regional players including Oman and India besides Afghanistan and China.

- The meeting reviewed the latest developments in the Persian Gulf region and evaluated the regional cooperation plans under the '**Hormuz Peace Endeavor**' (HOPE), proposed by Tehran during UN General Assembly meeting in September 2019.

#### **Importance of Strait of Hormuz**

- The Strait of Hormuz is the gateway for a significant amount of global oil supplies.
- Two-thirds of the oil and half the liquefied natural gas India imports come through the strait between Iran and Oman.
- As much as 18 million barrels of oil pass through the Strait of Hormuz every day, accounting for one-third of the global oil trade. A third of the world's LNG trade also passes through the strait.

#### **About Strait of Hormuz:**

- On the north coast lies Iran, and on the south are the UAE and Musandam, an enclave of Oman.
- The strait is about 90 nautical miles (167 km) long, with a width varying from about 52 nautical miles to 21 nautical miles.

#### **First Session Of India-Norway Dialogue On Trade & Investment**

- The **first Session** of India-Norway Dialogue on Trade & Investment (DTI) was convened in New Delhi. It was based on the agreement signed between India and Norway in January, 2019 during the visit of Prime Minister of Norway to India.
- This meeting enabled discussions on various areas such as renewable energy, ICT, fisheries, MSME, maritime, shipping.

#### **Bilateral relation between India and Norway:**

- Bilateral trade between the two countries stood at USD 1.2 billion during 2018.
- Cumulative FDI equity inflows to India from Norway during April, 2000 to September, 2019 were around USD257 million.
- India has 2 important research stations in Norway, namely - Himadri and IndARC.

#### **Killing of Iranian Commander and India's Concerns**

In a drone strike held by the US force at Baghdad airport, Iran's most powerful military commander General Qasem Soleimani was killed.

#### **India's Response**

- India's response came in a carefully worded statement which reflected its concern about escalation in a region.
- The statement identified Soleimani as a "**senior Iranian leader**," but used the term "**killing**" rather than "**assassination**." It expressed global — rather than just Indian — alarm.

#### **India's Concern:**

- India has so-called **civilisational ties with Iran**. Iran's importance can also be seen in India's **quest for an alternative route to Central Asia and Afghanistan**. The **International North South Transportation Corridor (INSTC)** gives India overland access to Russia and Europe.

- This region is a **significant source of Indian oil and gas imports** (although, India has drastically its crude imports from Iran under US pressure and neighbouring Iraq has emerged as one of its top energy suppliers, any escalation would affect India's supplies from this region).
- There is **political congruence**, too, between New Delhi and Teheran in **hardline position against the Taliban** in Afghanistan. In the 1990s, Iran and India joined hands in helping Ahmed Shah Massoud and the Northern Alliance against the Pakistan-backed Taliban.
- Also the region is home to almost 8 million Indians. Hence, India fears that the killing of general will provoke retaliation and ultimately end up destabilizing the region thereby jeopardizing India's interests in the region.

*[For detailed discussion on India's dilemma with Iran, please refer the mains Q&A section of May 2019 edition of the CA Magazine]*

### **US Signs 'Phase One' Trade Deal with China**

- The US has signed the first phase of a trade deal with China in a push to stop economic conflict.
- A trade war has been going on for the past 18 months between these two countries thereby affecting the entire global trade.

*[For detailed discussion on trade war, please refer mains section of The Recitals (May 2019)]*

#### **Key Highlights**

- The first phase of the **trade deal includes**:
  - Intellection Property (IP) Protection and Enforcement,
  - ending forced technology transfer, dramatic expansion of American agriculture,
  - removing barriers to American financial services, ending currency manipulation,
  - rebalancing the US-China trade relationship and effective dispute resolution.
- The centrepiece of the deal is a pledge by **China to purchase at least an additional \$200 billion worth of U.S. farm products and other goods and services** over two years, over a baseline of \$186 billion in purchases in 2017.
- Commitments include \$54 billion in additional energy purchases, \$78 billion in additional manufacturing purchases, \$32 billion more in farm products, and \$38 billion in services.
- The deal, however, leaves in place **tariffs on about \$360 billion** in Chinese imports till the time the **second phase of the trade deal is agreed**.
- The US has **dropped plans to impose tariffs on an additional \$160 billion** in Chinese imports.

#### **Analysis:**

- The deal shows how the two countries can resolve their differences and find solutions based on dialogue. This historic agreement includes a major **commitment by China to make significant reforms** in a wide range of critical areas and to **make substantial additional purchases** of American goods and services in the coming years. It aims to resolve some longstanding American concerns about Chinese trade abuses.
- However, the accord appears to leave questions about **how Washington and Beijing will enforce its terms and prevent further tensions**.

- The deal **fails to address structural economic issues** that led to the trade conflict, does not fully eliminate the tariffs that have slowed the global economy, and sets hard-to-achieve purchase targets, analysts and industry leaders said.
- Although the deal could be a boost to U.S. farmers, automakers and heavy equipment manufacturers, some analysts question **China's ability to divert imports** from other trading partners to the United States.

#### **US Drops China Currency Manipulator Label**

- The U.S. Treasury Department dropped its designation of China as a currency manipulator.
- In August 2019, U.S. Treasury Department had designated China as currency manipulator.
- The Treasury report also cited continued concerns about the **currency practices of eight other countries** - Germany, Ireland, Italy, Japan, Malaysia, Singapore, South Korea and Vietnam - and **added a ninth, Switzerland, to its list.**

*[For detailed discussion on Currency Manipulation, please refer the topic **China Designated as a "Currency Manipulator"** from August 2019 edition of The Recitals]*

#### **Myanmar-China Deal Under Belt and Road Initiative**

Myanmar and China signed 33 bilateral deals related to the implementation of the China Myanmar Economic Corridor (CMEC) under the Belt and Road Initiative (BRI). These deals were signed during the two-day visit of President Xi Jinping to Myanmar.

##### **Key Highlights**

- The agreements covered areas such politics, trade, investment and people-to-people communications.
- It also included the agreements to **strengthen collaboration in the infrastructure sector** including roads, rail connectivity and power interconnection projects.
- The two countries signed a concession agreement and shareholders' agreement for the **Kyaukphyu Special Economic Zone (SEZ)** deep seaport project. The port will link the land locked Yunnan province of China directly to the Indian Ocean allowing China to **bypass the strait of Malacca** through which it imports a sizeable amount of oil and gas.
- The two sides did not address a controversial \$3.6 billion **Beijing-backed Myitsone dam**, where work has been stalled since 2011 due to local protests and cost considerations.

##### **Myitsone Dam**

- 6000 MW dam project proposed across Irawaddy river
- Controversy - It is located at a 60-mile distance from the **Sagaing fault line.**

##### **Analysis**

- This event is also significant because Myanmar had started to distance itself from Beijing's long-time influence, beginning around 2011, and had until recently been increasingly open to more engagement with the West.
- China, for decades, has maintained close ties with Myanmar military even when Suu Kyi was incarcerated for years. It has again come forward to help Myanmar in fending off global isolation in the wake of the Rohingya crisis.
- Myanmar wants to **jumpstart its economy** after laboring under Western sanctions for about 20 years. It wants to enhance cooperation in transport, energy, production capacity, humanitarian and cultural exchanges in order to improve its socio-economic condition.

- However, there are many who are sceptical that the economic benefits will actually trickle down to the masses. They believe China is taking advantage of the situation.
- The lack of transparency surrounding the 33 deals will lead to a “backlash” as mistrust grows.

### **India's Concern**

- India is already feeling the squeeze of an increasingly aggressive China across the breadth of the Indian Ocean.
- The new deal with Myanmar, especially the construction of a new deep-water port, **threatens to further encircle India**. The deep-water port in Kyaukpyu on the western coast of Myanmar is situated just a few hundred miles from the easternmost Indian-held islands.
- Chinese port deals in Pakistan, Sri Lanka, Djibouti, the Maldives, and the Seychelles have all made headlines in India as Indian planners fear being choked by a Chinese “string of pearls.”
- China's port-buying spree is laying the groundwork to enable its already huge and growing navy to dominate waters far from the Chinese coast.

### **Russian Government Resigns**

- Russia's government resigned after President Vladimir Putin **proposed a series of constitutional reforms**. The proposals would make significant changes to the country's balance of power.
- Hence, in order to provide the President Putin with the opportunity to make all the decisions necessary, the government in its current form has resigned.
- The head of the Federal Taxation Service, **Mikhail Mishustin**, is to replace Medvedev as Prime Minister.

### **Key Highlights**

- Key proposal is to **transfer the power to select the prime minister and cabinet** from the president to the parliament.
- As per the reform, the **State Duma will be entrusted with the power** to approve the candidacy of the prime minister, and then, as per the prime minister's proposal, appoint all deputy prime ministers and federal ministers.
- **According to the current constitution**, the president needs to secure approval from the lower house of parliament to appoint the head of the government, and it is within presidential rights to then appoint all deputies and ministers.
- The proposal also suggested an **increased role for an advisory body** called the **State Council**. The council, which is currently chaired by Mr Putin, comprises the heads of Russia's federal regions.
- Other measures include:
  - Limiting the supremacy of international law
  - Amending the rules that limit presidents to two consecutive terms
  - Strengthening laws that prohibit presidential candidates who have held foreign citizenship or foreign residency permits

### **Background:**

- After Putin's **first two terms ended in 2008**, Medvedev served as a placeholder president for just one term, from 2008 to 2012 and appointed his mentor as prime minister, although Putin continued to wield power. **Putin's term is about to expire in 2024.**

- Under Medvedev, the constitution was amended to lengthen the president's term from four years to six, although it limits the leader to two consecutive terms.

### **Pakistan Nuclear Smuggling Activity Caught**

- Five men have been indicted in the United States for allegedly running an international network that purchased US products for Pakistan's nuclear weapons program.
- The five were accused of operating a front company called "Business World" in Rawalpindi, Pakistan.
- They were charged with conspiring to violate the International Emergency Economic Powers Act and the Export Control Reform Act.
- The busting of the Pakistani smuggling ring also has a security bearing on India. Not only it posed a threat to Indian security interests but it has the potential to affect the delicate balance of power among nations within the region.

### **Pakistan's Tryst with Nuclear Smuggling:**

- About 16 years ago, Pakistan was caught in a **nuclear smuggling and proliferation scandal involving AQ Khan**, a metallurgist whose theft of centrifuge designs from a Dutch company called Urenco enabled Pakistan to develop the atomic bomb in the 1980s.
- Pakistan subsequently **sold and bartered the technology to North Korea** with China's help to develop ballistic missiles, even as Khan hawked nuclear wares to Libya and Iran.

### **Iran Fully Withdraws from Nuclear Deal**

- Iran has announced its decision to **fully withdraw from the Joint Comprehensive Plan of Action (JCPOA)**, commonly known as the Iran nuclear deal.
- The decision was taken following the **U.S. targeted strike** that killed the country's Quds Force **Commander Qassem Soleimani** in Iraq.
- This simply means that now Iran will *no longer commit to any limits on the level of uranium enrichment, stockpile of nuclear fuel and also nuclear research and development*

### **Background**

- The fate of the 2015 pact has been in doubt since U.S. President Donald Trump pulled the **United States out of it in 2018** and **reimposed sanctions** that have crippled the Iran's economy.
- In May 2019, **Iran responded by gradually scaling back its commitments**, although it said these steps are reversible if the European powers can salvage the deal by shielding Iran's economy from U.S. penalties.
- Britain, France and Germany formally accused Iran on Jan. 14 of violating the terms of the agreement to curb its nuclear program, which eventually could lead to the reimposing of U.N. sanctions lifted under the pact.

### **Joint Comprehensive Plan of Action (JCPOA)**

- The JCPOA, which was signed in July 2015, **imposes restrictions on Iran's civilian nuclear enrichment program**.
- China, France, Russia, the United Kingdom, and the United States—the five permanent members of the UN Security Council—negotiated the agreement alongside Germany; together they were known as the **P5+1**.



- Under JCPOA, Iran had dismantled much of its nuclear program and gave international inspectors extensive access to its facilities in exchange for relief from economic sanctions.
- Consistent **reports from the United Nations'** nuclear watchdog had found that Tehran **remained in compliance with the JCPOA's terms**.

### **Nuclear-Capable K-4 Ballistic Missile**

- India has successfully test-fired the **3,500 km strike range** nuclear-capable K-4 submarine-launched ballistic missile off the coast of Andhra Pradesh.
- Missile developed by - **Defence Research and Development Organisation (DRDO)**
- Deployment - on the fleet of the Arihant Class nuclear submarines
- K-4 is **one of the two underwater missiles** that are being developed by India for its submarine force. The other one is K-15 with a range of 750 km.

### **'K' Missile Family**

- The top secret indigenous "K" missiles are faster, lighter, stealthier and have been named after former president A. P. J. Abdul Kalam.
- India is only the **sixth country** to develop undersea strategic missiles.
- The other K-series missiles are K-15, K-5 (range 5000 km) and K-6 (range – 6000 km)
- K5 and K6 are under development by DRDO. K-15 is also known as **Sagarika missiles**.
- 'K' missiles are intrinsically important for India's nuclear deterrence arsenal as they can provide India with a much needed **invulnerable second-strike capability**.

### **IAF Inducts Its First Squadron Of Sukhoi-30 MKI Aircraft**

- The IAF has commissioned '**Tiger Sharks**' squadron. It will be based in Thanjavur, Tamil Nadu.
- The squadron will consist of Sukhoi Su-30 MKI fighter jets, equipped with the supersonic BrahMos cruise missiles that have a range of over 300 km.
- This is the **first time the Fourth Generation air dominance fighters** have been based out of the Southern Air Command.
- The IAF has made this move with an **eye on the increasing Chinese presence** in the Indian Ocean Region.

The Su-30s have a range of about 1,500 km without mid-air refuelling capacity, and now come equipped with the 2.5-tonne air-launched BrahMos.
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### **War Memorial in Nagaland for 357 Martyrs**

- The **Assam Rifles** has constructed a **combined war memorial in Nagaland** for the 357 Army and Assam Rifles personnel killed while fighting insurgency in the northeastern state.
- The memorial has been built at **Mokokchung**, which is also the cultural and intellectual centre of Nagaland.
- This memorial is the first of its kind in Nagaland. It also has the famous Second World War Cemetery at Kohima known as "Veer Samriti".
- Assam Rifles has been guarding India's **1,640-km long border with Myanmar and also parts of Arunachal Pradesh** border opposite China.

**Bodo Accord 2020**

- The government **has signed an accord with one of the dreaded insurgent groups** of Assam, the National Democratic Front of Bodoland (NDFB), in order to bring peace and stability in the region.
- The All Bodo Students' Union (ABSU), which has been spearheading a movement for a Bodoland state was also signatory to the accord.

**Key Highlights**

- The **tripartite agreement** was signed by Centre, Assam and the top leadership of the four factions of the NDFB, ABSU.
- This agreement will provide **political rights to the Bodo Tribes** living in Assam. It will also provide economic benefits to them while **reaffirming the territorial integrity** of Assam.
- Bodoland Territorial Council (BTC) will now be named as **Bodoland Territorial Region (BTR)**, and will have **more administrative power**.
- As per the accord, 1,550 militants belonging to **NDFB would lay down their arms** by January 30.
- An **economic programme of Rs 1,500 crore** will be implemented in the next three years with equal contribution of Rs 750 crore each from the central and state governments.
- The existing structure of the Bodoland Territorial Council (BTC) will be strengthened with more powers and its seats will be **expanded from 40 to 60**.
- A **commission will be set** up for inclusion of Bodo-dominated villages in the BTC and exclusion of those where Bodos are not in majority.
- The Assam government will soon **notify Bodo language as in Devanagari script as an associate official language of the state**.

**Background:**

- This was the third Bodo accord to be signed in 27 years.
- The **first accord** was signed with the **All Bodo Students Union in 1993**, leading to the creation of a Bodoland Autonomous Council with limited political powers.
- **In 2003**, the **second accord** was signed with the militant group **Bodo Liberation Tigers**, leading to formation of a Bodoland Territorial Council (BTC) with four districts of Assam -- Kokrajhar, Chirang, Baska and Udalguri -- called Bodoland Territorial Area District (BTAD).

**About BTC**

- The BTC was formed under the 6th Schedule of the Constitution.
- The BTC currently has control over 30 subjects such as education, forests, horticulture but **no jurisdiction over the police, revenue and general administration** departments, which are controlled by the Assam government.

**Bodo Movement in Assam**

- The **demand for the creation of a homeland for the Assam plains tribal communities** in the shape of Udyachal was a major plank of the Bodo political movement in the 1960s.
- The All Bodo Students Union (ABSU) was formed in 1967 to represent the Bodo cause. They agitated and got Bodo recognised as an official language of Assam.
- **Assam Movement against illegal immigrants** was another movement spearheaded by the All Assam Students Union (AASU) and All Assam Gana Sangram Parishad (AAGSP) during the period 1979-85.

- The **Assam Accord** was signed between AASU, AAGSP, Central and State Governments on 15th August 1985, which determined 1st January 1966 as the cut-off date for the purpose of detection and deletion of foreigners.
- Unhappy with the Assam Accord, **ABSU stepped up the movement in 1987 for a separate state of Bodoland** on the North Bank of the Brahmaputra.

### **UP Government Introduces Police Commissionerate System**

In a significant police reforms measure, the Uttar Pradesh government introduced the police commissionerate system. So far, the police commissionerate system was functioning in all the states except for the Hindi belt regions of UP, Uttarakhand, MP, Chhattisgarh, Bihar and Jharkhand.

#### **Key Highlights**

- Two additional director general (ADG) of police rank officials has been appointed as the first police commissioners of Lucknow and Noida.
- The two towns have been **selected on a pilot basis**, since they are respectively the political and financial capital of UP.
- A total of 15 functions, which were earlier administered by the district magistrate office, will now be taken care of by the police commissionerate.

#### **What Is Commissionerate System**

- Normally, at the district level, a '**dual system**' of the control of the police administration operates in which the Superintendent of Police (SP) works with the District Magistrate (DM).
- In this system, the DM is the overall in-charge, and the powers of the executive magistrate, such as issuing orders for preventive arrests or imposition of Section 144 CrPC, are vested in him. The SP has to report to the DM.
- However, in the commissionerate system, a unified police command structure is headed by the Commissioner of Police (CP) who wields wide-ranging powers.
- The CP manages the force in the city, as well as exercises magisterial powers, including those related to regulation, control, and licensing. He directly reports to the state government, and not the DM.

#### **Arguments In Support of the New System**

- The Police Act already provided for introducing the police commissionerate systems in towns having population of more than a million.
- It gives an integrated command structure. It helps fix responsibility with the Commissioner and eliminates blame game between civil administration and police when something goes wrong.
- There is greater team work under the police commissionerate system as police gets magisterial powers too.

#### **Arguments Opposing The New System**

- The police in UP is already very powerful, evidenced by the brazen manner in which they have conducted encounters.
- The police **do not inspire public confidence** and people generally bring their grievances to the magistrates.
- The system has worked with reasonable satisfaction in states **where literacy rates are high and there is a vibrant civil society** with a high degree of activism and participation by non-governmental

organisations. Unfortunately, these are rare in Uttar Pradesh, a state with low literacy, poor public awareness and high poverty.

### **Constructions and Demolition Waste**

- Recently, after the decision of Supreme Court to demolish the newly constructed buildings in Kerala that were in violation of **Coastal Regulation Zone (CRZ)**, the issue of management of construction and demolition (C&D) waste arose.
- India is urbanizing faster than its urban planners can handle. It is building roads, bridges, fly-overs, factories, commercial complexes and also building our homes and residential properties.
- But India has not paid sufficient heed to the C&D waste that is generated due to various reasons. **For example-** bricks, concrete, stones, hard core subsoil, topsoil, timber, glass, gypsum, ceramics and also plastics. Neglecting this waste has consequences for public health as well as the environment.
- The **Ministry of Environment, Forests and Climate Change in 2010**, put the annual estimate of C&D waste at **10-12 million tonnes**. The Central Pollution Control Board settled for **12 million tonnes** in 2011, but its Guidelines Document of 2017 has upped the estimate to **25-30 million tonnes**, based on information from the Ministry of Urban Development.
- The **Centre for Science and Environment**, swung to the other extreme and estimated C&D waste at a humongous **530 million tonnes for 2013**, as they include the waste from renovations/repairs, assuming that one-third of the existing stock of buildings carried out renovations/repairs in 2013.

### **Harmful Impact of C&D**

- **Illegal dumping and encroachment:** This waste is dumped illegally on vacant sites, on the sides of highways, below fly-overs, beside lakes and rivers, in other low-lying areas & open stormwater drains.
- **Air pollution:** High presence of **particulate matter (PM 2.5 and PM 10)**, resulting from the construction debris adds to the air pollution.
- **Other consequences: Waterlogging**, with all its adverse impact on public health and the environment, is another consequence as the runoff from smooth surfaces is trapped in the debris. This also adds to the rising **menace of mosquito breeding**

### **The Issue Areas**

- **Lack of Segregation:** Until few years ago, C&D waste was not even looked at separately from the municipal solid waste (MSW). **Municipal Solid Waste (Management and Handling) Rules, 2000**, merely stated that C&D waste be separately collected & disposed of in accordance with State laws.
- **Till recently no separate rules:** It was only later that **Construction and Demolition Waste Management Rules, 2016** were separately notified by Ministry of Environment, Forests and Climate Change, and the Solid Waste Management Rules (2016) superseded the 2000 Rules. This reflected the growing recognition of the need to manage C&D waste separately from the municipal solid waste.
- **Lack of enforcement of rules:** Rules specify that all government construction projects, at all levels, should utilize between **10 and 20 % of C&D recycled products** (aggregates, kerb stones, paver blocks, tiles and manufactured sand). This has not happened despite the orders of the **National Green Tribunal** and other regulatory bodies.
- **Lack of capacity to recycle:** In Delhi itself, which has three C&D waste recycling plants set up by IL&FS Environment, at Burari (2000 TPD capacity), Shastri Park (500 TPD capacity) and Mundka (150 TPD capacity), the government projects have used only 200,000 tonnes of recycled material per annum even as the C&D waste generated has reached 1.5 million tonnes per annum.

**Solution**

- **Reuse and recycle:** While C&D waste was earlier typically sent to dump sites in many countries, in the past 20 years or so there has been a greater appreciation of the reuse and recycling possibilities of the waste into construction material (recycled aggregate concrete, manufactured sand, etc.) and its implication for the conservation of natural resources. Most **EU members** have set goals for recycling C&D waste that range from **50 per cent to 90 per cent of their C&D waste production**. The UK's use of recycled aggregates (materials formed from a mass of fragments or particles loosely compacted together) is the highest in Europe and accounts for 25 per cent of all aggregates used in construction. This has created a vibrant recycling industry, which promotes innovation and new products and their uses, while the International Recycling Federation works to harmonise quality standards for recycled materials.
- **Example of other countries:** Even in the US that is known for its proliferation of landfills, **California**, the most progressive state, has promulgated an ordinance which requires 50 per cent recycling of C&D waste and 75 per cent diversion of inerts away from landfills. Similarly, **Singapore was recycling 98 per cent of its construction waste** by 2007. **Hong Kong** has been recycling its waste to produce recycled aggregates (RA) for use in government projects and R&D work. In **Taiwan**, a comprehensive plan for the management of C&D waste was put in place in 1999 as a response to the challenge posed by the severe earthquake that year, which damaged about 100,000 dwellings.
- **Role of ULB:** The urban local bodies must ensure that the Rules are enforced. **For example**, the Rules specify that all government construction projects, at all levels, should utilize between **10 and 20 %** of C&D recycled products (aggregates, kerb stones, paver blocks, tiles and manufactured sand). This has not happened despite the orders of the National Green Tribunal and other regulatory bodies.
- **Benefits:** Last but not least, effective management of C&D waste helps in curbing excessive consumption of natural resources and contributes to sustainable development. **For example**, the demand for sand is expected to more than double between 2010 and 2020. In India, we primarily use river sand for construction. The Supreme Court has recently warned about the adverse environmental consequences of riparian sand mining. Increasing demand, easy availability and limited government oversight have given rise to a thriving illegal trade in sand. Manufactured sand from C&D waste provides an environmentally sustainable alternative.

**Way forward:**

- The C&D waste recycling industry is in a very nascent stage in India. The challenge is to ensure that C&D waste comes to the recycling plants as segregated input, and the recycled products are picked up for use in construction.
- The government has to build awareness of the value of recycled products and also provide standard codes to ensure adherence to quality. The government also has to set an example in its own construction activity by complying with the Rules.
- At the same time, the incentives also have to be aligned for the private sector, for example, the imposition of a reasonable charge for disposal at dumpsites can induce builders or owners to divert the C&D waste to recycling plants.
- An important additional step in this direction would be to reduce GST rates on products using recycled materials.
- Since almost 60 per cent of the stock of buildings projected to be there in 2030 is yet to be built, sustainable construction and effective management of C&D waste assume even greater significance.



### **SC On Position of Speaker On 10<sup>th</sup> Schedule**

In a notable judgment in case of **Keisham Singh vs. Hon'ble Speaker, Manipur**, the Supreme Court (SC) has held that Speaker of the Legislative Assembly should decide on a petition seeking disqualification of a member under 10<sup>th</sup> Schedule within a **period of three months**, in the absence of exceptional reasons.

#### **Noteworthy Points Of SC Decision**

- The Speaker, in acting as a Tribunal under the Tenth Schedule, is bound to decide disqualification petitions within a reasonable period.
- The bench also acknowledged the problem of Speakers acting in a partisan manner due to their **political loyalties**. The bench also noted that this apprehension was voiced by the minority judgment in the case **Kihoto Hollohan v Zachillhu & Ors**.
- Therefore, the bench suggested that the Parliament should amend the Constitution to provide for an independent mechanism, such as a **Permanent Tribunal** headed by retired judges, to decide disputes under Tenth Schedule.
- The bench also reiterated its decision in **Rajendra Singh Rana v. Swami Prasad Maurya (2007)** holding that the failure of Speaker to exercise his jurisdiction will attract the jurisdiction of judicial review.

#### **Grounds For Disqualification Under 10<sup>th</sup> Schedule**

- He voluntarily **gives up his membership** of such political party.
- He **votes or abstains from voting** in such House contrary to any direction issued by his political party and such act has not been condoned by the party within **15 days**.
- An **Independent candidate** joins a political party after the election.
- A **nominated member** joins a party **six months** after he becomes a member of the legislature.

#### **Exceptions To The Disqualification On The Ground Of Defection:**

- A **merger** takes place when **two-thirds of the members** of the party have agreed to such merger.
- If a member, after being elected as the **presiding officer** of the House, voluntarily gives up the membership of his party or rejoins it after he ceases to hold that office.

### **Article 131: Centre-State Dispute**

- Kerala has become the **first state to challenge the Citizenship (Amendment) Act (CAA)** before the Supreme Court (SC).
- The Kerala government has moved the apex court under **Article 131** of the Constitution, the provision under which the Supreme Court has **original jurisdiction** to deal with any dispute between the Centre and a state; the Centre and a state on the one side and another state on the other side; and two or more states.
- Further, the Chattisgarh government also filed a suit in the SC under Article 131, challenging the **National Investigation Agency (NIA) Act** on the ground that it encroaches upon the state's powers to maintain law and order.

#### **The Provisions of Article 131**

- For a dispute to qualify as a dispute under Article 131, it has to **necessarily be between states and the Centre** and must **involve a question of law or fact** on which the existence of a legal right of the state or the Centre depends.
- In **State of Karnataka v. Union of India 1978**, SC held that to accept a suit under Article 131, the state need not show that its legal right is violated, but only that the **dispute involves a legal question**. Thus, Article 131 *cannot be used to settle political differences* between state and central governments headed by different parties.



- Although earlier judgments had held that the **constitutionality of a law can be examined under Article 131**, a 2011 judgment in the case of **State of Madhya Pradesh v. Union of India** ruled otherwise. The matter has now been referred to a larger bench in case of **State of Bihar v. Jharkhand**. This decision could have bearing on the CAA issue.

### **Final Analysis**

- The framers of the Constitution expected such differences and added the exclusive original jurisdiction of the Supreme Court for their resolution.
- Moreover, under a powerful Centre with a clear majority in Parliament, faultlines in India's federal structure are frequently exposed. E.g., the linguistic divide on the National Education Policy, land acquisition, proposed All India Judicial Services *etc.*

### **State Power To Regulate Minority Institutions**

- The Supreme Court (SC) in **Sk. Md. Rafique v. Managaing Committee, Contai Rahamania High Madrasah and others** has held that the state is well within its rights to introduce a regulatory regime in the national interest to provide minority educational institutions with well-qualified teachers in order for them to achieve excellence in education.
- The judgment came on a challenge to the validity of the **West Bengal Madrasah Service Commission Act of 2008**. The State Act mandated that the process of appointment of teachers in aided madrasahs, recognised as minority institutions, would be done by a Commission, whose decision would be binding.

### **The Judgement**

- The apex court **upheld the validity of the 2008 Act**, saying the Commission was composed of persons with profound knowledge in Islamic Culture and Islamic Theology.
- The Court held that the managements of minority institutions **cannot ignore such a legal regime** by saying that it is their fundamental right under **Article 30** of the Constitution to establish and administer their educational institutions according to their choice.
- Further, the regulatory law should however **balance the dual objectives of ensuring standard of excellence as well as preserving the right of the minorities** to establish and administer their educational institutions. Regulations that embrace and reconcile the two objectives is reasonable.
- Referring to the 11-judge Bench decision in the **TMA Pai Foundation case**, SC said **Article 30(1) was neither absolute nor above the law**.

### **Tulu Language And Eighth Schedule**

According to the **2001 Census**, India has **30 languages** that are spoken by more than a million people each. Additionally, it also has **1,599 languages** that are restricted to specific regions and many of them are on the verge of extinction.

### **Constitutional Provisions In Relation To The Language**

- **Article 29** of the Constitution provides that a section of citizens having a distinct language, script or culture have the right to conserve the same.
- Further, **Article 351** enjoins that it shall be the duty of the Union to promote the spread of the Hindi language.

- Similarly, **Article 350B** provides for appointment of Special Officer for linguistic minority with responsibilities of safeguarding the interest of language spoken by the minority groups.
- There are **22 languages**, which are protected under **Schedule VIII** of the Constitution. But as per experts, many languages such as '**Tulu**' (Dravidian language whose speakers are concentrated in Karnataka & Kerala) are kept out of this favoured position though deserved to be included in the Eighth Schedule.

#### **Important Facts In Relation To The Languages**

- **English and Hindi** are the official languages of the Central Government.
- However, there is **no national language** as all the states are free to decide their own official languages.
- The **six languages** have been conferred the status of **Classical Language in India** viz. Kannada, Telugu, Tamil, Sanskrit, Malayalam and Odia.

#### **Benefits Of Inclusion Under 8<sup>th</sup> Schedule**

- A language included in the Eighth Schedule gets **recognition from the Sahitya Akademi**.
- The books of that language would be translated into other recognised Indian languages.
- Further, Members of Parliament (MPs) and MLAs **could speak in such a language in Parliament and State Assemblies**, respectively.
- Moreover, Candidates could write all-India competitive examinations like the Civil Services exam in language included in 8<sup>th</sup> Schedule.

#### **Final Analysis**

- India need to implement **Yuelu Proclamation** made by the UNESCO (2018) that emphasises endangered language protection and the protection of intangible cultural heritage.
- Moreover, both the state and the citizens have an equal responsibility to conserve the distinct language, script and culture of a people.

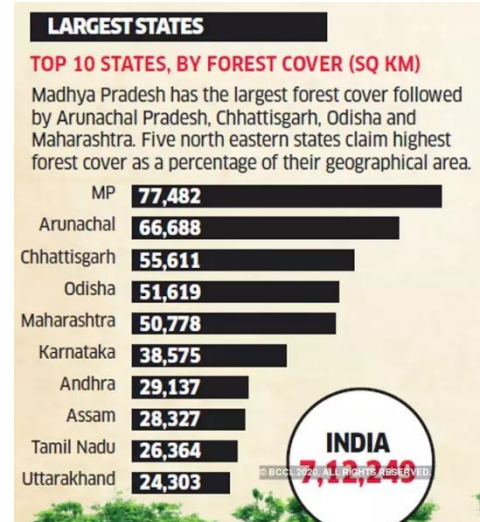
#### **State of Forest Report, 2019**

- State of Forest Report, 2019 has shown a **1,275\_sq km** gain in very dense forest, but what this statistic masks is the fact that the country continues to lose its best natural forests.
- The Forest Survey of India (FSI) uses satellite images to identify greenery as forest cover. In the 1980s, satellite imagery mapped forests on a scale of 1:1 million, and missed details of land units smaller than 4 sq. km. The **1:50,000 scale** now scans patches as small as **1 hectare** and any unit that shows a **10% tree canopy density** is considered forest.
- **National Forest Policy, 1988** aim for **33% of total area** to be under forest cover.

#### **Specific Facts Pointed Out By Report**

- At 7,12,249 sq. km, the **forest cover** constituted 21.67% of the nation's geographical area.
- The **tree cover** of the country is estimated as 95,027 sq km which is 2.89% of the geographical area.
- There is an increase of 5,188 sq. km in the total forest and tree cover of the country. Out of this, the increase in the forest cover has been observed as 3,976 sq km (0.56%) and that in tree cover is 1,212 sq. km since 2017.
- India has a total **mangrove cover** of 4,975 sq. km *i.e.* an increase of 54 sq. Km in mangrove cover has been observed as compared to the previous assessment of 2017.

- The extent of **bamboo bearing area** of the country has been estimated 16.00 million hectare. There is an increase of 0.32 million hectare in bamboo bearing area as compared to the last assessment of ISFR 2017.
- As per report, **2,145 sq. km** of dense forests became non-forests since 2017. This means India has lost dense forests one-and-a-half times in just two years.
- Since 2017, plantations with high canopy density have added **2,441 sq. km** to the dense forest category, while **1,858 sq. km** of non-forests have become dense forests.
- While hill forests have gained in quality, large tracts of tropical forests have fallen off the dense category since 2017. The biggest loss *i.e.* **23,550 sq. km** is under the **tropical semi-evergreen head**.
- Area-wise** Madhya Pradesh has the largest forest cover in the country followed by Arunachal Pradesh, Chhattisgarh, Odisha and Maharashtra.
- In terms of **forest cover as percentage of total geographical area**, the top five States are Mizoram (85.41%), Arunachal Pradesh (79.63%), Meghalaya (76.33%), Manipur (75.46%) and Nagaland (75.31%).
- Further, northeastern States of **Arunachal Pradesh, Manipur and Mizoram** saw sharpest decline in forest cover. The states that have shown highest increase in forest cover are **Karnataka, Andhra Pradesh and Kerala**.



### Fame II Scheme

- The **Department of Heavy Industries** has sanctioned 2,636 charging stations under the **FAME India (Faster Adoption and Manufacturing of Electric Vehicles in India)** scheme phase II. These stations are spread over 62 cities across 24 States and Union Territories.
- The said move will boost the confidence of users of Electric Vehicles and also encourage the OEMs (Original Equipment Manufacturers) to launch the new electric vehicle models.

### Provisions Of FAME II Scheme

- Emphasis is on **electrification of the public transportation** that includes shared transport.
- To encourage advance technologies, the **benefits of incentives** will be extended to only those vehicles which are fitted with advance battery like a Lithium Ion battery and other new technology batteries.
- The scheme proposes for establishment of **charging infrastructure**, whereby about 2700 charging stations will be established in metros, other million plus cities, smart cities and cities of Hilly states across the country so that there will be availability of at least **one charging station in a grid of 3 km x 3 km**.

### Demand For Declaring Goa Wildlife Sanctuaries As Tiger Reserve

- Recently, the activists and politicians from Goa have demanded that certain areas in wildlife sanctuaries of the state be notified as tiger reserve. The demand has come following the death of four tigers in **Mahadayi Wildlife Sanctuary** in North Goa district.

- The **National Tiger Conservation Authority (NTCA)** is a statutory body formed in 2005-06, with an overarching supervisory/coordination role, performing functions for protection of tigers.

#### Other Details

- As part of the state's proposal, about 500 sq. km area of **Mahadaya, Netravali and Cotigao wildlife sanctuaries** and some part of **Mahaveer National Park** was selected to be marked as tiger reserve, considering the presence of the striped animals in those places.
- Wildlife Sanctuaries and National Parks** are areas of significant ecological, floral, faunal or natural significance. They are **notified by State Governments** and protected by the Forest Department under the provisions of the **Wildlife (Protection) Act, 1972**. Further, a National Park or Wildlife Sanctuary that is considered significant for protecting tigers can be additionally **designated as a Tiger Reserve**.
- A Tiger Reserve consists of a '**Core**' or '**Critical Tiger Habitat**', which is to be managed as an inviolate area, and a '**Buffer**' or **Peripheral area** immediately abutting a Core area, which may be accorded a lesser degree of habitat protection.

Distinction Between National Park, Sanctuary and Biosphere Reserve		
National Park	Sanctuary	Biosphere Reserve
(i) Habitat for particular wild animal species.	Generally species-oriented such as citrus, pitcher plant, etc.	Hitched to the whole ecosystem, i.e., totality of all forms of life, i.e., ecosystem-oriented.
(ii) In India, most common average size is 100-500 sq km (in about 40 per cent cases) and 500-1000 sq km (about 15 per cent cases). The general size range is 0.04 to 3162 sq km.	Size range is 0.61 to 7818 sq km. Most common (in about 40 per cent) is 100-500 sq km. In 25 per cent, the size varies between 500 and 1000 sq km.	Size range over 5670 sq km.
(iii) Boundaries fixed by legislation.	Boundaries are not sacrosanct.	Fixed by legislation.
(iv) Except the buffer zone, no biotic interference.	Limited biotic interference.	Except the buffer zone, no biotic interference.
(v) Tourism permissible.	Permissible.	Normally not permissible.
(vi) Research and scientific management lacking.	Lacking.	Managed.
(vii) So far no attention to gene-pools and conservation.	So far no such attention.	Attention given.

#### Chinese Paddlefish Declared Extinct

- China's Yangtze River, the world's third longest river, which is a home to 378 known species of Chinese paddlefish, once a common freshwater fish in the region, is no longer a member of this vast ecosystem.
- After over a decade of searching, researchers say the species **completely disappeared (extinct)** between 2005 and 2010, with the last confirmed sighting in 2003.

#### About Chinese Paddlefish

- The Chinese paddlefish also known as the **Chinese swordfish** and sometimes called the **panda of the Yangtze** was one of the world's largest freshwater fish species. It could grow as long as **23 feet** and weigh up to **992 pounds**.
- While hunting, Chinese paddlefish used their long snouts to sense electrical activity and find their prey.
- The construction of the **Gezhouba Dam** split the paddlefish population in two, which disrupted migration patterns and prevented breeding upstream. Thus, the disruption caused the paddlefish to become functionally extinct, meaning the species lacked numbers to meaningfully reproduce.

**Blue Flag Tag**

- The Ministry of Environment, Forest and Climate Change has **identified 13 beaches** across the country for the Blue Flag certification. **Chandrabhaga beach** of Odisha was the first to complete the tag certification process.
- Moreover, the Centre has also issued an extraordinary Gazette Notification declaring a list of activities and facilities that would be **permissible in the Coastal Regulation Zone (CRZ)** areas of certain beaches, which have been identified for obtaining the 'Blue Flag' certification.

**About Blue Flag certification:**

- The 'Blue Flag' is a certification that can be obtained by a beach, marina, or sustainable boating tourism operator and **serves as an eco-label**.
- The certification is awarded by the Denmark-based non-profit **Foundation for Environmental Education (FEE)**, which sets stringent environmental, educational, safety-related and access-related criteria that applicants must meet and maintain. It is awarded annually to beaches and marinas in FEE member countries.
- The world-renowned certification is known as an indication of high environmental and quality standards. **Forty-seven countries currently participate** in the program and **4,573 beaches, marinas, and boats** have this certification.
- In July 2019, the Environment Ministry identified the **following beaches in India for Blue Flag certification**: Shivrajpur (Devbhumi Dwarka, Gujarat), Bhogave (Sindhudurg, Maharashtra), Ghoghla (Diu, Daman and Diu), Miramar (Panjim, Goa), Kasarkod (Karwar, Karnataka), Padubidri (Udupi, Karnataka), Kappad (Kozhikode, Kerala), Eden (Puducherry), Mahabalipuram (Kanchipuram, Tamil Nadu), Rushikonda (Visakhapatnam, Andhra Pradesh), Golden (Puri, Odisha), and Radhanagar (Port Blair, Andaman & Nicobar).

**NIC TechConclave 2020**

- The **second edition** of the TechConclave was inaugurated in New Delhi by Union Minister of Electronics and Information Technology.
- **Organised by** - National Informatics Centre (NIC)
- **Theme** - 'Technologies for NextGen Governance'
- **Aim** – To contribute immensely to the capacity building of Government officers across the country and help in delivering high-quality citizen-centric services.
- National Informatics Centre (NIC) was established in 1976. It has been deeply associated with the Government for effective Governance.
- Since its inception, the NIC has been providing e-Governance & Information and Communications Technology (ICT) support to the Government.

**Wings India 2020**

- Wings India 2020 will held **at Begumpet Airport, Hyderabad** from 12th-15th March, 2020.
- It is a flagship event of the Indian Civil Aviation industry which organizes international exhibition and conference on the civil aviation sector.
- **Jointly organised by** - The Ministry of Civil Aviation, Airport Authority of India (AAI) and the Federation of Indian Chambers of Commerce and Industry (FICCI).



- **Theme** - “Flying for All”
- **Aim** – To provide focus on the new business acquisition, investments, policy formation and regional connectivity in the civil aviation industry.
- It will be **Asia’s largest** gathering in the aviation industry.

#### **Ladakh Hosts First Ever Food Processing Summit**

- The UT Ladakh hosted the **first ever Food Processing Summit** to attract investors to the region.
- **Jointly Organised** by - Ministry of Commerce and Industry, Ministry of Food Processing Industries, the UT Administration of Ladakh
- **Aimed at** - encouraging the entrepreneurs to begin a StartUp to tap the potential in the Food Processing Industries in Ladakh.
- **Theme** - Building Partnerships for Inclusive Growth in Food Processing Sector
- The **Ladakh Action Plan for Food Processing** to promote food processing was presented at the summit.

#### **Agricultural Scenario in Ladakh**

- Although the region has great potential, the agricultural activities have taken a back seat in the region mainly **due to rapid increase in tourism**.
- Low cropping intensity, short agriculture season, less productivity, harsh terrain etc. are other issues affecting the growth of agriculture in the region.

#### **Pulses Conclave 2020**

- The fifth edition '**The Pulses Conclave**' will be held from Feb. 12th to 14th, 2020 at **Amby Valley City in Lonavala**, Maharashtra.
- This announcement was made by the **India Pulses and Grains Association (IPGA)**, the nodal body for India's pulses trade and industry.
- Different stakeholders from India and key pulses exporting countries like the USA, Australia, Canada, Myanmar, Ethiopia, Uganda, Tanzania, Mozambique, Malawi, etc. will participate.
- The conclave will discuss increasing domestic production and consumption.
- It will also bring to fore other areas of the trade like improving processing efficiencies, increasing consumption, exports, value addition, protein extraction, post-harvest crop management, etc.

#### **International Summit on Women in STEM**

- International Summit on **Women in STEM (Science, Technology, Engineering and Mathematics)** was organized in New Delhi.
- Organised by - The Department of Biotechnology (Ministry of Science & Technology)
- **Theme** – “Visualizing the Future: New Skylines”
- **Aim** - To increase the participation of women in STEM field.
- Women are underrepresented in STEM. According to UNESCO, **women contribute only 29% of STEM R&D**.



**Antarrashtriya Yoga Diwas Media Samman**

- The Government has announced first 'Antarrashtriya Yoga Diwas Media Samman' for **several media houses**. The objective of this award is to acknowledge the **role of media in the outreach of Yoga in the world**.
- This award was **instituted in June 2019** and Information and Broadcasting Minister Prakash Javadekar will confer the first 'Antarrashtriya Yoga Diwas Media Samman'.
- **Various categories** of the award are - Best Media Coverage of Yoga in Newspapers, Best Media Coverage of Yoga in Television, Best Media Coverage of Yoga in Radio

**Few Important Dates**

- **January 4 - World Braille Day** in order to mark the birth anniversary of Louis Braille (first celebrated on January 4, 2019)
- **January 9 - Pravasi Bharatiya Divas** (On this day in 1915, Mahatma Gandhi, the greatest Pravasi, returned to India from South Africa). Established in 2003 the celebratory event is organised by the Ministry of External Affairs every year on this day. Since 2015, its format has been revised to **celebrate the PBD once every two years**. The 15th PBD Convention was held from 21 to 23 January 2019 in Varanasi with Uttar Pradesh as the Partner State.
- **January 10 – World Hindi Day** (Hindi is the fifth largely spoken language in the world). The **National Hindi Day** is celebrated on **September 14** every year.
- **January 15 - Army Day** (72<sup>nd</sup> edition was observed this year). On this day Field Marshal KM Cariappa took command of the Indian Army from General Francis Butcher in 1949.
- **January 19 – National Immunization Day**. It was observed all over India as a part of Pulse Polio Programme, 2020.
- **24 January – National Girl Child Day** (Initiated in 2008 by MWCD)
- **25 January - National Voters Day** (Initiated in 2011, **Theme for 2020** - 'Electoral Literacy for a Stronger Democracy')
- **30 January - World Neglected Tropical Diseases** day. This is the **first time** World NTD Day that is being observed to increase awareness in addressing the tropical diseases. The Neglected Tropical Diseases are caused by pathogens such as bacteria, helminths, viruses and protozoa.

- The World Health Organization has designated **2020 as the “Year of the Nurse and Midwife”**, in honour of the **200th birth anniversary of Florence Nightingale**.
- **“World Nursing Report”** is to be launched in 2020 by WHO.