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Union Budget 2021-22 Budget Speech of Finance Minister Nirmala Sitharaman

Costliest Mushroom in India

Padma Awards

Trans Fats!

Say no to Transfats

Security Council

India becomes non-permanent
member of UNSC for the 8th time

Indian farmers' protest

Director's message

Dear Aspirants,

Smt. Nirmala Sitharaman, Union Minister of Finance and Corporate Affairs, presented the first ever digital Union Budget on 1st February 2021 during which she stated that India's fight against COVID-19 continues into 2021 and that this moment in history, when the political, economic, and strategic relations in the post-COVID world are changing, is the dawn of a new era – one in which India is well-poised to truly be the land of promise and hope. While the budget 2020-21 was woven around three themes namely, aspirational India, economic development for all and caring society, the Union Budget for 2021-22 rests on six pillars namely a) Health and well-being, b) Physical, financial Capital and Infrastructure, c) Inclusive development for aspirational India, d) Reinvigorating human capital, e) Innovation and R&D and f)minimum government and maximum governance.

Finance Minister Smt Sitharaman presented an expansionary Budget for 2021-22 with a push for infrastructure and health care spending, even as she sought to reduce the fiscal deficit from an estimated 9.5% of GDP this year without ostensibly raising the tax burden. The Union Budget 2021 embodies the 'less is more' approach in an effort to purge the Indian economy afflicted by a year long slowdown caused by the coronavirus outbreak. Whilst there were no populist tax breaks offered by the Finance Minister this year, the Government did extend the sunset dates for some incentives such as tax holidays for start-ups and affordable housing project by one year. Notably, however, there were a series of well intended measures proposed to cleanse the tax system in an attempt to bring more transparency, ease of doing business, and eliminate redundancies in the tax administration.

While there was no direct support for the middle classes, there was some relief as the Budget refrained from levying a COVID cess or surcharge. The Finance Minister set aside ₹35,000 Crore for the COVID-19 vaccination program with a promise to provide more if the need arises. The overall Budget outlay for 'Health and Wellbeing', she said, is ₹2.23 lakh Core, marking a 137% rise over 2020-21. Direct succor for some of the sectors and sections worst-affected by the pandemic may be short, but the government is betting on a real GDP growth of 10%-10.5% in the coming year after the estimated 7.7% decline in 2020-21. It hopes to ride on the multiplier effect of infrastructure spending which the minister said would also spur demand and job creation.

Invoking Rabindranath Tagore's aphorism 'Faith is the bird that feels the light and sings when the dawn is still dark', the Finance Minister compared the Budget to Team India's successful comeback in the test series against Australia and said it provides every opportunity for 'our economy to raise and capture the pace that it needs for sustainable growth'. "I want to confidently state that our government is fully prepared to support and facilitate the economy's reset," she asserted, before unveiling a few big-ticket reform signals for global investors.

The foreign direct investment limit in the insurance sector will be raised to 74% from 49% and a 'bare minimum' number of Public Sector Enterprises will be retained even in strategic sectors like Defence,

under an ambitious new strategic disinvestment policy that will kick off with the sale of two Public Sector Banks and a General Insurance Company in 2021-22. A new development finance institution is being set up to fund infrastructure projects under the National Infrastructure Pipeline, while an asset reconstruction firm or 'bad bank' will be tasked with taking over Public Sector Banks' bad loans to cope with rising NPAs.

Proposing a capital expenditure of ₹5.54 lakh Crore in the year, 34.5% higher than 2020-21, the Finance Minister has targeted a fiscal deficit of 6.8% of GDP with gross market borrowings of about ₹12 lakh crores. "We plan to continue with our path of fiscal consolidation and intend to reach a fiscal deficit level below 4.5% of GDP by 2025-2026 with a fairly steady decline over the period. We hope to achieve the consolidation by first, increasing the buoyancy of tax revenue through improved compliance, and secondly, by increased receipts from monetisation of assets, including Public Sector Enterprises and land," she said.

An agriculture infrastructure development cess has been announced on several items including Petrol and Diesel but the Minister said there will be no impact on consumers as these entailed reducing certain customs duties and adding a cess component to those products. This will ensure that funds are carved out for the sole purpose of building farm infrastructure, Ms. Sithraman said, emphasising the government's commitment to the farm sector at a time it is facing protests over recent farm law changes.

On the tax administration front, in a bid to reduce unwarranted litigation, the Government proposes to completely revamp the procedure for re-opening of assessments. Currently, a tax assessment can be reopened upto 4 assessment years (and upto 6 assessment years in case income has escaped assessment because of non-disclosure of information by the taxpayer). In cases of indirect transfers, where foreign assets may be involved, assessments could be re-opened up to 16 years from the end of the relevant assessment year. The Bill now proposes to reduce the limitation period for re-opening of assessments to 3 years (and 10 years in cases where income exceeding Rs. 50 lakhs has escaped assessment). Further, Tax Officers will be bound to take permission from very senior tax officials. This measure is bound to be seen in positive light by Foreign Investors.

As India Inc. adapts to the new normal, the Finance Minister displayed colours of restraint, resilience and self-reliance, a formula that the Government has long been working on and one that might just be the vaccine India Inc. needs right now. The Finance Minister seems to have taken the opportunity to introduce this budget in the backdrop of an unprecedented global pandemic to re-inforce investor confidence through a slew of housekeeping and rationalization measures to remove difficulties of taxpayers. In all, effective implementation of these measures, listening to stakeholders and rolling out further clarifications where due is going to be key for the success of this fiscal's Union Budget.

Best wishes.

K. Rajendra Kumar IPS (Retd.)

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1. NATIONAL

1.1 Expert panel gives nod to Covaxin for restricted use

- A subject expert committee (SEC) of the Drugs Controller General of India (DCGI) approved Covishield, the vaccine candidate from the Pune based Serum Institute of India.

- Bharat Biotech has been asked to furnish more data demonstrating the efficacy of its candidate, Covaxin.

- The SEC gives its recommendation to the DCGI which is the approving authority for drugs and vaccines.

- The recommendation is enormously significant, as it paves the way for India to get its first vaccine against the novel coronavirus.

- Covishield is similar to the 'Oxford vaccine' that is developed by the Oxford University vaccine group and marketed by AstraZeneca.

- 'Oxford vaccine' was recently approved by the health regulator in the U.K. under emergency use conditions. Under this, the company is allowed to deploy its vaccines to priority groups and then the larger public, even though a full safety assessment hasn't been completed.

- The Union Ministry of Health of India has also introduced an elaborate communication strategy.

- The idea is to make sure that the information on the COVID-19 vaccines and vaccination process reaches all people, across all States in the country. The strategy also seeks to build trust and enable greater confidence in the COVID-19 vaccine amongst all people by employing transparency in communication, while also managing any mis/disinformation and rumours around it.

1.2 Rajya Sabha saw the lowest number of sittings ever in 2020

- The government refused to call the winter session of Parliament, and the Rajya Sabha sat for just 33 days in 2020, its lowest ever tally of sittings in a year.

- The Budget and the monsoon sessions had to be cut short due to COVID-19.

- The Budget session was reduced from 31 sittings to 23 sessions.

- Similarly, the monsoon session was reduced from 18 sittings to 10 sittings amid strict restrictions, as the number of COVID-19 positive cases among parliamentarians and the supporting staff increased.

- There are only three other occasions when the Rajya Sabha met for fewer than 50 sittings in a year — 48 in 1999 and 46 each in 2004 and 2008.

- The last time the winter session was cancelled was 36 years ago in 1984 after other two other instances in 1979 and 1975.

- As per an analysis by the Rajya Sabha Secretariat, the limited number of sittings did not hurt the productivity. During the year 2020, the annual productivity has been 82.7%, the highest annual productivity during the last 11 years.
- A total of 39 Bills have been passed by the House during 2020, including 12 during the Budget session and 27 during the monsoon session including recent the three controversial farm laws.
- Year 2020 also saw an unprecedented suspension of eight Opposition MPs and the Opposition moving a notice for the removal of Deputy Chairman.

1.3 Deaths due to lightning strikes dip by 37%: CROPC Report

- According to a report published by the Climate Resilient Observing Systems Promotion Council (CROPC), the number of deaths due to lightning strikes reduced by nearly 37 percent.
- The deaths have been reduced from 2,800 deaths between April 1, 2018, to March 31, 2019, to 1,771 during the same period in 2019-20.
- The report has pointed out several loopholes in the government's approach towards the problem while praising certain measures taken by the authorities.
- According to the report, lightning-linked fatalities formed 33 percent of total deaths in natural disasters, according to data for the corresponding period in 2019-20.
- More than 60 percent of deaths in lightning incidents in 2019-20 were reported from Uttar Pradesh (293), Madhya Pradesh (248), Bihar (221), Odisha (200) and Jharkhand (172). Despite the casualties, the Centre has not notified lightning as a disaster.

1.4 Government sets up academy to promote Tamil culture

- The Department of Art, Culture & Language of the Delhi government set up and notified Tamil academy to promote Tamil language and culture.
- The Tamil language and culture have a long tradition in the history of Indian culture as well as in Delhi.
- The new academy will introduce various awards to promote and reward the good works of people in the Tamil language and culture.
- The government will also provide language courses through this academy.
- The Delhi government will also celebrate and organize cultural festivals for the people of Tamil Nadu.
- The culture of the Tamil people is rooted in several forms of expression such as dance, music, literature, folk arts.
- Being the birthplace for one of the oldest civilizations, the Tamil identity and its culture is strongly center around its language which is fondly referred to as the Tamilannai (The Tamil Mother).

- The Tamil language is recognized as a classical language by the Indian government and a lot of Tamil literature is centuries old. Works of Kambar and Thiruvalluvar have gained an international reputation.
- The most prominent visual art forms of the region are the Chola bronze sculptures and the Tanjore painting.
- Most Tamil dance forms have origins in the older temple dances, which were performed by Devadasis and courtesans. One of such dance forms is Bharatanatyam, which is a modern form of the ancient dance of Carter Kacceri.
- Some other important dances from the culture are Oliyattam, Puliyattam, Karakattam, and Koothu.

1.5 Banana Grit from Nendran for the health conscious

- Scientists at the CSIR-National Institute for Interdisciplinary Science and Technology (NIIST) in Kerala introduced a new product, Banana Grit, developed from raw Nendran bananas.
- Banana Grit can be used for making a wide range of dishes. It bears a resemblance to 'Rava' and broken wheat.
- Nendran banana is consumed ripe and it also used in typical Kerala dishes such as 'evil' and 'thoran' The grit, or granules, can be used for making up, or it can be mixed with banana powder for making porridge with milk or coconut milk for use as a health drink. The banana powder can be used in cake and bread preparation, along with refined wheat flour.
- The concept was introduced to utilize the presence of resistant starch in bananas, which is reported to improve gut health. Hence, the dishes prepared with Banana Grit and its byproduct banana powder incline to the new focus on gut health.
- Developing new uses for Nendran also comes as a boon to farmers who have often been struggling against falling prices.

1.6 Change rules on confiscation of animals, SC tells Centre

- The Supreme Court asked the Centre to amend the Prevention of Cruelty to Animals (Care and Maintenance of Case Property Animals) Rules, 2017 and Prevention of Cruelty to Animals (Regulation of Livestock Markets) Rules, 2017.
- These rules of 2017 allow the confiscation of the animals of traders and transporters during "the pendency of trials in cases under The Prevention of Cruelty to Animals Act, 1960". In other words, these rules allow confiscation of animals before the accused is convicted under the legislation.
- This show that the contrary nature of the Rules, 2017 as compared to the provisions of the Act, 1960 as provisions of the very law allow such confiscation only in case of conviction.
- Animals are a source of livelihood. People live on the basis of their animals.

- The 2017 rules allow a magistrate to forfeit the cattle of an owner facing trial under the Act and send them to infirmaries, goshalas etc.
- Section 29 of the Act says that a person tried for an offence under the Act can be deprived of the ownership of the animal only upon conviction.
- The Rules 2017 were being used to forcibly deprive even legitimate owners of cattle and that it had emboldened "anti-social elements" to take matters into their own hands and loot cattle traders.
- Such incidents act as "triggers for communal polarisation of society".

1.7 2020, 8th warmest year in India in 121 years: IMD

- The Climate Research and Services (CRS) of the India Meteorological Department (IMD) has issued a Statement on Climate of India during 2020 and highlighted that 2020 was the eighth warmest year India recorded in the last 121 years.
- As per the World Meteorological Organisation (WMO), 2020 was on the way to becoming one of the warmest years recorded in the last 15 years.
- Temperature: Last year, the annual mean land surface air temperature average was 0.29 degrees Celsius above normal, for the period average considered between 1981 and 2010. However, it was much lower than 2016 (+0.71 degrees Celsius), which remains the warmest ever year the country has recorded since 1901.
- The other warm years over India, all of them post 2005 have been — 2009, 2017, 2010 and 2015.
- The monsoon (+0.43 degrees Celsius) and the post-monsoon (+0.53 degrees Celsius) seasons contributed towards this warming.
- The global mean surface temperature (till October 2020) was 1.2 degrees Celsius above normal, making it the warmest ever decade (2011 – 2020) recorded, globally.
- Rainfall: Rainfall during the June to September 2020 over the country remained 9 per cent above normal, but several high-impact events like extremely heavy rain, floods, cold wave and thunderstorms led to significant loss of lives and properties.
- Tropical Storms in the Indian Seas: The Indian Ocean region — the Arabian Sea and the Bay of Bengal, together reported five cyclones — three of which were of either severe or above in intensity category. Five cyclones — Amphan, Nisarga, Gati, Nivar and Burevi — were reported in 2020. Super cyclone Amphan remained the strongest, which hit the West Bengal coast. Maharashtra, too, had braved cyclone Nisarga in early June 2020.
- High Impact Weather Events: The country also experienced other high impact weather events like, extremely heavy rainfall, floods, landslide, thunderstorm, lightning, cold waves, etc. Bihar & Uttar Pradesh were the most adversely affected states during the year due to thunderstorm, lightning & cold wave events.

1.8 Aurangabad renamed as Sambhaji Nagar

- Shiv Sena's demand to rename Aurangabad as Sambhajinagar (Mughal emperor Aurangzeb who killed SambhajiRaje is buried near Aurangabad, hence the city should be called Sambhajinagar) has caused unease in the Government in Maharashtra.

- English poet and playwright William Shakespeare famously quoted that "what is in the name?" It seems to hold much relevance for modern India. Names in India are never just names as there seems to be a lot in the name.

- The naming and renaming of places is not new in India. For example, the British renamed Kochi to Cochin, derived the name Calcutta from Kolkata and affirmed their power through urban planning and architecture.

- The current renaming of historical cities named after Muslim personalities or of Urdu dialect is mostly based on the cultural and ethnoreligious grounds rather than linguistic one - even though the Urdu language is one of the official languages. In, renaming the city, the government has to spend crores of rupees.

- This campaign to rename city is being seen by many as an attempt to rewrite history and undermine the historical personalities of a particular community.

- Sometimes renaming is not only about religion, but this comes as an outcome of unspoken custom and culture of the particular place. Political parties also use the name-game for creating vote banks.

- Raise a request in form of a resolution by any Member of Legislative Assembly (MLA) which proposes the renaming of any particular city or street.

- Then there is a deliberation over the request of the renaming of the city or the street.

- Then comes, voting of the validity of the resolution. The majority here involves a simple majority.

- The State Legislation on the basis of the majority view shall make the necessary changes in the name of the state or city.

1.9 Bombay High Court permits transgender to contest polls from women's category

- The Bombay High Court has allowed a transgender to contest village panchayat polls in women's category, as such persons have the right to "self-perceived gender identity".

- Union government has introduced the Transgender Persons (Protection of Rights) Act, 2019 and has permitted a transgender person to have a right to self-perceived gender identity.

- Act defines a transgender person as one whose gender does not match the gender assigned at birth. It includes transmen and trans-women, persons with intersex variations, gender-queers, and persons with socio-cultural identities, such as kinnar and hijra.

- It seeks to ensure the fundamental rights of those who do not conform to the binary notions of gender identity.

- It seeks to provide rights of health facilities to transgender persons including separate HIV surveillance centres, and sex reassignment surgeries.

- It states that the government shall review medical curriculum to address health issues of transgender persons, and provide comprehensive medical insurance schemes for them.

- It calls for establishing a National Council for Transgender persons (NCT).

- The Act is progressive in that it allows self perception of gender identity, but regresses by mandating that each person would have to be recognised as 'transgender' on the basis of a certificate of identity issued by a District Magistrate, rejecting the recommendation from the 2016 Standing Committee to have a screening committee.

1.10 Centre to form panel to resolve issues relating to Ladakh land, culture

- The Centre has decided to form a committee to find a solution to issues associated with preservation of Ladakh's land, culture and language apart from demands from the region to be included under the Sixth Schedule of the Constitution.

- The delegation have expressed concern over threat to the region's unique culture, language and demography due to recent changes brought about by the Centre to the status of the region in August 2019.

- In order to find an appropriate solution to the issues related to language, culture and conservation of land in Ladakh, a committee was constituted under the leadership of G.Kishan Reddy, Minister of State (Home).

- The committee would comprise of elected members from Ladakh, members of the Ladakh Autonomous Hill Development Council (LAHDC) and ex-officio members representing the Government of India and the Ladakh administration.

1.11 Meeting India's air quality targets across South Asia may prevent 7% of pregnancy losses: Lancet study

- According to a modelling study published in The Lancet Planetary Health journal, pregnant women in South Asia like India, Pakistan, Bangladesh are exposed to poor air quality, and may be at higher risk of still births and miscarriages.

- Air pollution could be a major contributor to pregnancy loss in south Asia, so controlling air pollution is vital for improving maternal health.

- The study was unable to distinguish between natural pregnancy loss and abortions, which may have led to an underestimation of the effect of air pollution on natural pregnancy loss.

- This is the first study to quantify the burden in south Asia, which is the most populous region in the world and has the highest rate of pregnancy loss. Therefore, understanding the risk factors for pregnancy loss in south Asia is crucial to improving maternal health regionally and globally.

- South Asia has the highest burden of pregnancy loss globally and is one of the most PM2.5 polluted regions in the world. Poor air quality could be responsible for a considerable burden of pregnancy loss in the region.

- Losing a pregnancy can have knock-on mental, physical and economic effects on women, including increased risk of postnatal depressive disorders, infant mortality during subsequent pregnancy, and increase the costs related to pregnancy, such as loss of labour. Therefore, reducing pregnancy loss may also lead to knock-on improvements in gender equality.

- The increase in risk was greater for mothers from rural areas or those who became pregnant at an older age, compared to younger mothers from urban areas.

- Pregnancy loss associated with air pollution was more common in the Northern plains region in India and Pakistan. Although the total burden of pregnancy loss was predominantly borne by rural women aged under 30 years old in recent years, the burden attributable to PM2.5 also affected older mothers (aged 30 years or over) in rural areas because of their high susceptibility to the adverse effects of PM2.5.

- Although WHO's guidelines aims for a safer level of air pollution, India's standard is a more realistic target level, given the high average levels of air pollution in the region and there is a need to balance practical governance and public health.

1.12 Supreme Court: Fixing notional income for homemaker step towards social equality, dignity

- The Supreme Court has ruled that household work is no mean feat and fixing notional income for a non-earning "homemaker is a step towards the constitutional vision of social equality and ensuring dignity of life to all individuals".

- The ruling pointed out that according to the 2011 Census, nearly 159.85 million women stated that "household work" was their main occupation, as compared to only 5.79 million men.

- On an average, women spend nearly 299 minutes a day on unpaid domestic services for household members versus 97 minutes spent by men on average. Thus, women spend more time on "unpaid care giving services for household members" as compared to men.

- There are legal complexities regarding the calculation of notional income of a non-earning homemaker. Women dedicates sheer amount of time and effort to household work as they perform plethora of activities like cooking food for the entire family, manages the procurement of groceries and other household shopping needs, cleans and manages the house and its surroundings, undertakes decoration, repairs and maintenance work, looks after the needs of the children and any aged member of the household, manages budgets and so much more.

- In rural households, they often also assist in the sowing, harvesting and transplanting activities in the field, apart from tending cattle.

- There is a conception that housemakers do not 'work' or that they do not add economic value to the household is a problematic idea that has persisted for many years and must be overcome. The issue of fixing notional income for a homemaker serves extremely important functions.

1.13 SC to study anti-conversion laws of Uttarakhand and U.P

- The Supreme Court (SC) agreed to examine the constitutional validity of laws enacted by States, such as Uttar Pradesh and Uttarakhand, that criminalise religious conversion via marriage and mandate prior official clearance before marrying into another faith.

- SC did not stay the implementation of the Prohibition of Unlawful Conversion of Religion Ordinance, 2020 and the Uttarakhand Freedom of Religion Act, 2018.

- Those who are found guilty under these laws stare at a 10year prison sentence. The offences are non-bailable.

- Laws passed by the states violates fundamental rights of dignity and liberty enshrined under Article 21. They had been enacted despite a series of judgments by the SC, including in the Hadiya case, that right to marry a person of one's choice was part of an adult's privacy.

- A series of Supreme Court verdicts underline that the choice of a life partner, whether by marriage or outside it, was part of an individual's "personhood and identity".

- Under the laws, a person marrying into another faith should give a month's prior notice to the authorities. There will be an inquiry. The provisions are oppressive.

- These laws will create fear in society and become a potent tool in the hands of bad elements to falsely implicate anyone. A grave injustice will be done by the ordinances. They will create a chaotic situation.

- The court had said in its Hadiya case judgment, "Matters of dress and of food, of ideas and ideologies, of love and partnership are within the central aspects of identity.

- Neither the State nor the law can dictate a choice of partners or limit the free ability of every person to decide on these matters."

- In the K.S. Puttaswamy case, or 'privacy,' judgment, a Constitution Bench said the autonomy of the individual was the ability to make decisions in vital matters of concern to life.

- Any interference by the State in an adult's right to love and marry had a "chilling effect" on freedom. Intimacies of marriage lie within a core zone of privacy, which is inviolable.

- "The absolute right of an individual to choose a life partner is not in the least affected by matters of faith".

1.14 Using God's name to sell articles illegal, rules Bombay High Court

- The Aurangabad bench of the Bombay High Court has declared that advertisement of any article using the name of any God and claiming that it has supernatural qualities, is "illegal" and falls

under the Maharashtra Prevention and Eradication of Human Sacrifice and other Inhuman, Evil and Aghori Practices and Black Magic Act.

- Telemarketers change the names of companies, Gods and Babas to show that each was a different Yantra.

- With the representation that these articles have special, miraculous and supernatural properties and that they will help people to become happy, make progress in business, see advancement in career, show improved performance in education, recover from disease etc., is illegal.

- The court directed the State and Vigilance Officers to register such crimes, giving reports against persons who make such advertisements and sell such articles.

- The court also directed the State and Central governments to create separate cells in Mumbai to ensure that no such features were telecast, either as advertisement or in the name of programmes, in Maharashtra.

1.15 Karnataka CM lays foundation stone for 'New Anubhava Mantapa' at Basavakalyan

- Karnataka CM laid the foundation stone for the 'New Anubhava Mantapa' in Basavakalyan, the place where 12th century poet philosopher Basaveshwara lived for most of his life.

- It is a 500 crore project and will be completed within two years on a 7.5 acre area.

- This project highlights the teachings of Basaveshwara (an icon of the Veerashaiva Lingayat community).

- The Project was first proposed back in 2016. Basavakalyan, an important pilgrim centre for Lingayats.

- The New Anubhava Mantapa, as envisaged now, will be a six floor structure.

- It will showcase the 12th Century Anubhava Mantapa (often referred to as the "first Parliament of the world") established by him in Basavakalyan, where philosophers and social reformers held debates.

- The building will adopt the Kalyana Chalukya style of architecture.

1.16 India begins 8th term as non-permanent member of UNSC, promises to promote peace

- Together with Norway, Mexico, Ireland and Kenya, India formally serves as a non-permanent member of the UN Security Council for a two-year term. On June 17, 2020, India was elected to the Security Council with a total of 192 votes and 184.

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- A member state needs to obtain a two-thirds majority in the General Assembly to become a non-permanent member. This is the 8th time for India to be elected as a non-permanent member.

- India will serve as a permanent member of the UN Security Council in August 2021, and will also serve as a permanent member of the UN Security Council for another month in 2022. According to the English alphabetical order of the member states, each member of the Security Council will serve as the President of the Security Council for one month. name.

1.17 Centre approves Rs 28,400 crore industrial developmental scheme to boost J&K economy

- The Centre has approved a new industrial development scheme with an outlay of Rs 28,400 crore for Jammu and Kashmir that will focus on generating employment, developing skills and attracting new investment, especially in far-flung areas of the Union Territory.

- The scheme will come into force from the date of its notification till 2037, and "give direct and indirect employment to about 4.5 lakh persons".

- It will also provide interest subvention on working capital loans that will indirectly support 35,000 people.

- This is the first such scheme by the Centre that aims to take industrial development to the block level in J&K.

- The new initiative will nurture existing schemes in the manufacturing and service sectors, and attract "unprecedented investment".

- The scheme will offer incentives on the basis of location: capital incentive at the rate of 30 per cent in Zone-A, which will cover far-flung areas, and 50 per cent in Zone-B on investment made in plant and machinery (manufacturing), or construction of buildings and other durable physical assets (service).

- Units with investment up to Rs 50 crore will be eligible for the incentive -- the maximum incentive available in areas under Zone A is Rs 5 crore and under Zone B Rs 7.5 crore.

- The scheme provides for 6 per cent interest subvention for a maximum of seven years on loans up to Rs 500 crore for investment in plant and machinery (manufacturing), or ten years for construction in building and all other durable physical assets (service).

- Government has provided for a GST-linked approach under which financial incentive will be based on Gross GST to ensure less compliance burden without compromising on transparency.

- Existing units can avail working capital interest incentive at the annual rate of 5 per cent for a maximum of five years, with a cap of Rs 1 crore.

- Even smaller units with an investment uptoRs 50 crore in plant and machinery will get capital incentive uptoRs 7.5 crore and capital interest subvention at the rate of 6 per cent per annum for a maximum of seven years.

1.18 Centre merges J&K cadre officers with AGMUT

- The Centre merged Jammu and Kashmir cadre IAS, IPS and IFS officers with that of Arunachal Pradesh, Goa, Mizoram and Union Territory (AGMUT), also called the Union Territory cadre, through an ordinance.

- The move will allow officers posted in these states and UTs to work in J&K and vice versa.

- President has promulgated an ordinance to amend J&K Reorganisation Act, 2019. It's a follow-up to J&K turning into UT and merging into the mainstream.

- The ordinance has replaced sub-sections 2-6 of the law with two sub-sections, which say that members of IAS, IPS and IFS for the existing J&K cadre "shall be borne and become part of the Arunachal Pradesh, Goa, Mizoram and Union territories cadre, and all future allocations of All India Services Officers for the Union territory of Jammu and Kashmir and Union territory of Ladakh shall be made to Arunachal Pradesh, Goa, Mizoram and Union territories cadre.

- Officers "so borne or allocated" on AGMUT cadre shall function in accordance with rules framed by the Centre.

- The move was also necessitated by paucity of officers in Ladakh. Since the region is harsh, most officers are unwilling to serve there.

- Section 13 of the Act: "On and from the appointed day, the provisions contained in article 239A, which are applicable to "Union territory of Puducherry", shall also apply to the "Union territory of Jammu and Kashmir".

- The ordinance is likely to have significant bearing on the administration of the two UTs. It will give the government access to a larger talent pool at a time it is trying to quicken the pace of development in the erstwhile state.

- The merger of the existing J&K cadre of IAS, IPS and IFS officers is both a political and administrative move. It sends the message of total integration of J&K with the Centre while putting a question mark on the time it may take to return the region's statehood.

1.19 Karnataka's Brahmin marriage schemes

- Karnataka State Brahmin Development Board has obtained approvals to launch two marriage schemes (Arundhati and Maitreyi) on a pilot basis – one offering financial bonds of Rs3 lakh to 25 Brahmin women who marry priests from economically weak background and the other offering Rs 25,000 each for the marriage of 550 women from economically weak families from the community.

- These two schemes aim to assist weaker sections of the community.

- Arundhati scheme: 550 Brahmin women from poor background will be given Rs 25,000 each for their marriage.

- Maitreyi scheme: A financial bond of Rs 3 lakh, which is to be used over three years, will be created for 25 women who marry Brahmin priests from poor background. Initially, this scheme

with the Rs 3 lakh financial bond was proposed in the name of the bride who marries BPL Brahmin farmers or cooks or priests. This scheme will require the couples to stay married for three years to avail the entire bond of Rs 3 lakh. Installments of Rs 1 lakh will be paid at the end of each year of the marriage.

- Around three per cent of the six crore population in Karnataka belongs to the Brahmin community.

- The marriage assistance scheme is on the lines of another scheme– Shaadi Bhagya – that was launched in 2013 to provide Rs 50,000 for the marriage of women from economically weak minority families.

- Rs 14 crore has also been set aside to help students from poor Brahmin families in the form of scholarships, payment of fees and providing training to those who have passed the preliminary stage of examinations such as the UPSC.

- To avail benefits of the schemes, applicants have to certify that they do not own five or more acres of agricultural land, a residential flat that is more than 1,000 sqft, that they do not belong to backward classes or scheduled castes and that the family income is below Rs 8 lakh per annum.

1.20 IRDAI to introduce standard home insurance policy Bharat GrihaRaksha

- The policy introduced is to replace the Standard Fire and Special Perils Policies. It has 3 key components which include Bharat Laghu Udyam Suraksha, Bharat Griha Raksha, and Bharat Sookshma Udyam Suraksha.

- According to the Bharat Griha Raksha policy, IRDAI (Insurance Regulatory Development Authority of India) will introduce a standard housing insurance policy that will cover fire risks and other related hazards.

- The policy will cover various hazards such as Natural catastrophs like cyclone, storm, tsunami, Hurricane, floods, earthquake, landslide, fires, bushfires, impact damages of any kind, strike, riot, acts of terrorism, malicious damage of, overflowing of water tanks, pipe leakage from automatic sprinkler installations, bursting of water tanks and tested within 7 days after the occurrence.

- In addition to housing construction insurance, the policy will also provide "General Home Content Insurance". The policy will provide 20% of the insurance amount of the building, up to 10 lakh rupees.

- Bharat Laghu Udyam Suraksha will cover companies with insurable asset classes in the region whose total risk value exceeds Rs 5 crores.

- Bharat Sookshma Udyam Suraksha is a standard product for enterprises, and its total value at risk does not exceed Rs 5 crore. It will cover machinery, buildings, factories, stocks and other assets.

1.21 Panel to study NFHS-5 finding

- The Health and Family Welfare Ministry has set up a technical expert group chaired by Joint Secretary Preeti Pant and includes experts from medicine and nutrition to examine the adverse findings from the National Family Health Survey (NHFS)-5.

- Panel aims to recommend programmatic and policy interventions to improve" indicators pertaining to malnutrition, stunting, anaemia, and C-section.

- The survey gives data of States and UTs on over 130 parameters. On various parameters, major number of states has worsened over the last round of survey (NFHS 4 – 2015-16).

- Increase in rising levels of anaemia and child malnutrition in women and pregnant women show that the children born during 2015-2019 might be suffering from deficiencies.

1.22 After Tamil, Delhi govt nod to set up Konkani language academy

- Delhi Government approved the setting up of a Konkani language academy in the capital.

- The academy will seek to facilitate the growth and promotion of the Konkani language and culture in the city.

- Currently, there are eight functional language academies in Delhi covering Urdu, Sanskrit, Punjabi, Hindi, Maithili-Bhojpuri, Garhwali-Kumaoni-Jaunsari, Sindhi and Tamil. Tamil was notified recently.

- Konkani is the official language of India's western and coastal state, Goa. However, the language is spoken widely across four states- Maharashtra, Goa, Karnataka and Kerala, albeit in different dialects, its use is somewhat limited to coastal regions only. It is the only Indian language written in five different scripts - Devnagari, Roman, Kannada, Malayalam and Persian-Arabic.

- Though Konkani was recognized as the official language of Goa on January 4, 1987, it was only after five more years, on August 20, 1992, it was given status of a national language in India, through the 71st Amendment to the Eighth Schedule of the Constitution of India. Konkani now features in the 15 languages in which the value is printed on Indian Rupee currency notes.

- However, a lot of ambiguity, sometimes controversial, exists over the origin of Konkani. While Konkani stands classified as language of Indo-Aryan origin, doubts persist over these claims.

- Generally, Konkani is called as a colloquial version of Marathi, the official language of Maharashtra state.

1.23 Hyderabad city cluster project launched, to link research, industry

- The Centre launched the Hyderabad iteration of its city cluster project to create a platform to bring together academia, R&D labs, industry and government to tackle challenges facing the city.

- The COVID-19 pandemic has emphasized this need and has also been an example of how successful these collaborations can be as science, industry and government came together to tackle the problem.

- There are over 39 labs in Hyderabad but the present challenge is that they don't work together but in silos. It is also important for all these institutions to work together for the social and economic development of the city.

- Like other countries, there needs to be a stress on cross-functional course credits. There are numerous instances in the US of a humanities student eventually becoming a doctorate in biotechnology.

- Two of the major challenges facing India are the lack of investment in R&D as compared to other countries, and the lack of investment by private enterprises.

- Also, as of 2018, India had 156 researchers per million citizens, far lower than the global average of 1,500. India's patent office ranked sixth by total number of patent applications received, with 46,582 applications.

1.24 Think tank claims over half of 13L Indian soldiers under severe stress, deletes report later

- According to the findings of a study by United Service Institution of India (USI), a Service think tank, more than half of Indian Army personnel seem to be under severe stress and the Army has been losing more personnel every year due to suicides, fratricides and untoward incidents than in response to any enemy or terrorist activities.

- The research was undertaken during 2019-20, which shows that there has been a significant increase in stress levels amongst Indian Army personnel during approximately last two decades due to operational and non-operational stressors.

- While operational stressors are well understood and accepted by Army personnel, but the non-operational stressors that add on "have compounding adverse effects on health and combat efficiency of soldiers and thus affecting their respective units too."

- Prolonged exposure of Indian Army personnel to Counter Insurgency and Counter Terrorism (CI/CT) environment has been one of the contributory factors for increased stress levels.

- The overall job satisfaction and pride in uniform remains high amongst Junior Commissioned Officers (JCO) and Other Ranks (OR).

- Various management measures implemented by the Army and Defence Ministry in the last 15 years have not been able to achieve the desired results.

1.25 J&K: Heavy snowfall declared state-specific natural calamity

- To expedite disbursement of relief and ex-gratia for damage caused by snowfall, Jammu and Kashmir's Lieutenant Governor declared 'Heavy Snowfall' as a state-specific natural calamity under the State Disaster Response Force (SDRF) norms.

- Earlier, 'Heavy Snowfall' did not figure in the list of Natural Calamities under SDRF norms, due to which disbursement of relief and ex-gratia for damage due to heavy snowfall was not possible for the districts' disaster management authorities.

- Now, processing of ex-gratia relief under SDRF will become faster, thereby giving huge relief to the affected people living in snowbound areas.

- It has been constituted by each state under the provisions of the Disaster Management act 2005.

- It was constituted based on the recommendations of the 13th Finance Commission.

- Heads: The state executive committee headed by the Chief Secretary is authorized to decide on all matters relating to the financing of the relief expenditure from the SDRF.

- Funding: The government of India contributes 75% and 90% of the total yearly allocation of SDRF to general states and special category states respectively.

- Disaster (s) covered under SDRF: Cyclone, drought, earthquake, fire, flood, tsunami, hailstorm, landslide, avalanche, cloudburst, pest attack, frost and cold waves.

1.26 "Period Room" set up for women at a public toilet in Maharashtra

- In a bid to help the women, residing in congested slums, during their menstruation days, a 'period room' has been set up at a public toilet by the Thane Municipal Corporation in collaboration with an NGO Muse Foundation, at a slum in Shanti Nagar locality of Wagle Estate area in Thane.

- The period room is equipped with several basic facilities, and it aims to facilitate menstrual hygiene among women dwelling in slums.

- Claimed to be the first-of-its-kind initiative, the 'period room' set up at a public toilet in a slum in Thane, was opened recently for women.

- The facility is set up keeping in mind the women living in small houses, who do not have a separate bathing section.

- Many times they find it difficult to change during periods. This facility will be a boon for such women and go a long way in promoting good hygiene.

- The NGO would be taking up the task of informing the women of the slum about the existence of such a room when they hold one of their regular sessions on menstrual hygiene.

1.27 SC stays three new farm laws; forms committee to resolve crisis

- The Supreme Court has put a stay on the implementation of the three farm laws until further orders. It has also set up a committee of agricultural experts to facilitate talks between the Centre and farmer unions to resolve the impasse. The Apex Court said, it was trying to solve the problem in the best way and had the power to suspend the laws.

- The bench headed by Chief Justice of India, S. A. Bobde and comprising Justices A. S. Bopanna and V. Ramasubramanian, said those genuinely interested in finding a solution would appear before

the committee. The bench was hearing a batch of petitions regarding the Constitutional validity of three farm laws passed by Parliament and a plea to disperse the protesting farmers.

- Cabinet approves MoU between India and UAE for scientific and technical cooperation
- The Union Cabinet, chaired by the Prime Minister Narendra Modi has given its approval to the Memorandum of Understanding on scientific and technical cooperation between National Centre of Meteorology of the United Arab Emirates and Ministry of Earth Sciences.
- The MoU will enable sharing of knowledge, data and operational products for meteorological, seismological and oceanic services between both the countries.
- This MoU will facilitate exchange of scientific and technical information, deployment of Meteorological observation networks over ocean, mutual cooperation in the development of special capacities and research of Tsunami models for faster and more reliable forecasts of Tsunamis. Sharing the real-time seismic data and cooperation in early warnings of sand and dust storms are the other key elements of the MoU.

1.28 Supreme Court 'intends' to stay farm laws

- The Supreme Court on 15th January, 2021 said it intended to stay the implementation of the controversial agricultural laws.
- It also proposed to form an independent committee chaired by a former Chief Justice of India to "amicably resolve" the stand-off between the protesting farmers and the Union government.
- A three-judge Bench led by CJI underlined its "disappointment" at the Centre's handling of the farmers' protest, including the string of failed talks, States "up in rebellion", suicides among protestors and the sight of aged farmers, women and children suffering.
- Farmers, from Punjab and Haryana, are protesting heavily against the Farm Bills 2020.
- The Farm Bill allows farmers to directly sell to private companies without relying on the APMC Mondays. Farmers fear this could lead to scrapping of MSP.
- The government has removed most agricultural products from the Essential Commodities List. Farmers expect this to lead to price volatility and hoarding.
- Effectively, the bills permit private sector investment into farm infrastructure. Farmers are skeptical that large corporates may squeeze out the traditional farmer.

1.29 Education reforms have impacted learning outcomes

- The seven-day Delhi Education Conference began on 14 January, 2021 with an independent report on the Delhi government's education reforms since 2015 being released by the Boston Consulting Group.
- Over the week, the conference will see 22 education experts from India and seven other countries, who will discuss the public education systems around the world.

- These include experts from India, the U.S., Finland, England, Germany, Singapore, Netherlands and Canada.

- In its report, the American management consulting committee said that the education reforms have definitely had an impact on learning outcomes.

- CBSE Board results have shown a steady increase and that there is improvement in Foundational Literacy and Numeracy (FLN) outcomes in Classes 6 to 8 as well, although much remains to be done.

- "New curricular elements such as Happiness Curriculum (HC) and Entrepreneurship Mindset Curriculum (EMC) have been received positively.

- Student attendance is improving and students also attested to increased teacher attendance and engagement during focus group discussions (FGDs)," the report said.

- It pointed out that the true impact of Delhi's reforms has been vitalizing the entire system and infusing a sense of renewed aspiration, belief, and deep motivation into every stakeholder.

1.30 Government defends in SC rules for animals' seizure for cruelty

- The Central government on 14 January, 2021 defended law to deprive owners possession of their animals, including cattle, on the suspicion that they are being subject to cruelty or illegally transported for slaughter.

- The Centre dismissed the argument that taking the animals from their owners divested them of their livelihood even before they were found guilty of cruelty by a court of law.

- The argument that owners are deprived of their right to livelihood is not sustainable. They have no right to do their business illegally.

- They have to transport the animals as per the requirements of the Transport of Animals Rules of 1978.

- A Bench led by Chief Justice of India S.A. Bobde was hearing a petition filed by the Buffalo Traders Welfare Association challenging the validity of the Prevention of Cruelty to Animals (Care and maintenance of case property animals) Rules 2017.

- In the previous hearing, the court had asked the government to delete the Rules, saying the law stripped people of their means to live.

- But the government said the Rules were in consonance with the Prevention of Cruelty to Animals Act of 1960.

1.31 Manipur becomes the 4th State to complete urban local bodies reforms. Additional borrowing permission of Rs.75 crore issued

- Manipur has become the 4th State in the country to successfully undertake "Urban Local Bodies (ULB)" reforms stipulated by the Department of Expenditure, Ministry of Finance, becoming

eligible to mobilize additional financial resources of Rs 2,508 crore through open market borrowings.

- The State has become eligible to mobilize additional financial resources of Rs.75 crore through Open Market Borrowings.

- The reforms stipulated by the Department of Expenditure to achieve these objectives are:

  ➢ The State will notify (a) floor rates of property tax in ULBs which are in consonance with the prevailing circle rates (i.e. guideline rates for property transactions) and (b) floor rates of user charges in respect of the provision of water-supply, drainage and sewerage which reflect current costs/ past inflation.

  ➢ The State will put in place a system of periodic increase in floor rates of property tax/ user charges in line with price increases.

- The four citizen-centric areas identified for reforms:

  ➢ Implementation of One Nation One Ration Card System,

  ➢ Ease of doing business reform,

  ➢ Urban Local body/ utility reforms and

  ➢ Power Sector reforms.

- Andhra Pradesh become the first state completion of Urban Local Bodies reform, followed by Madhya Pradesh, Manipur and Telangana.

1.32 School attendance low after reopening: 3 states to House panel

- A meeting was called to discuss "plans for bridging the learning gap caused due to school lockdown as well as review of online and offline instructions, examinations and plans for reopening schools".

- During this meeting, it was reported by Assam, UP and J&K representatives to the Parliamentary Standing Committee on education headed by Vinay Sahasra buddhe that schools continue to report low attendance after reopening.

- Assam: Schools recorded around 50% attendance

- Uttar Pradesh: 40%

- Jammu and Kashmir too reported low attendance during the interaction. It leads to learning loss that may have taken place due to the long absence of students from classrooms.

- Pupils missing out on almost half the year of schooling last year and then a patchwork of inequalities of missed schooling this term will impact on children's education.

- There'll be a widening of existing inequalities - particularly as it's tended to be quite disadvantaged council areas where pupils have missed out on most schooling.

- Though most absence during the term was due to disruption as a result of positive Covid cases, some families have been anxious about children going to school.
- Digital initiatives taken to continue learning during classroom lockdown and innovative measures adopted by different states to help students who lack access to online classes.

1.33 Free drinking water scheme launched in water-scarce Hyderabad

- Telangana Municipal Administration launched the free drinking water scheme in Rahmat Nagar and nine lakh families would stand to gain from it.
- In Hyderabad, water was being supplied from the Krishna and Godavari rivers.
- The government would bear an expenditure of Rs.400 Crore to Rs. 500 Crore towards it.
- Even as the State dealt with the COVID-19 pandemic, welfare measures including rice to the poor, pension payments, RythuBandhu and the 2BHK scheme had witnessed minor delay.

1.34 30-day notice period not mandatory under Special Marriage Act: Allahabad High Court

- Allahabad High Court (HC) has ruled that couples seeking to solemnise their marriage under the Special Marriage Act, 1954 can choose not to publish the mandatory 30-day notice of their intention to marry. Before that, in a judgment, the HC also removed hindrances to inter-faith marriages.
- Section 5 of the Special Marriage Act: The legislation that allows solemnisation of marriages irrespective of the religion of the couple, requires parties to give a 30-day public notice of their intention to marry. The public notice is displayed at the office of the marriage officer, inviting potential objections to the marriage.
- Uttar Pradesh Prohibition of Unlawful Conversion of Religion Ordinance, 2020, which declares conversion of religion by marriage to be unlawful, mandates a 60-day notice to the District Magistrate and also requires the Magistrate to conduct a police inquiry to ascertain the real intention behind the conversion.
- By interpreting Sections 6 and 7 read with Section 46 which contains the procedure of publication of notice and inviting objections to the intended marriage in Act of 1954, it has to be such that would uphold the fundamental rights of liberty and privacy, including within its sphere freedom to choose for marriage without interference from state and non-state actors, of the persons concerned and not violate the same.
- In case such individuals applying to solemnize their marriage under the Act of 1954 themselves by their free choice desire that they would like to have more information about their counterparts, they can definitely opt for publication of notice under Section 6 and further procedure with regard to objections to be followed.

- Such publication of notice and further procedure would not be violative of their fundamental rights as they adopt the same of their free will.

- As the Special Marriage Act is a central legislation, couples across the country seeking to marry under the law would benefit from the liberal reading of the provisions by the Allahabad High Court ruling.

- The Special Marriage Act to provide a framework for inter-caste and inter-religious marriages was originally enacted in 1872. Despite changes and versions, the 1954 law retained the Victorian-era protectionist provisions.

1.35 Adultery can't be decriminalised for Armed Forces, govt. tells SC

- The Centre has sought a clarification from the Supreme Court to the effect that the 2018 order decriminalising adultery would apply only to civilians and not defence personnel because not prosecuting soldiers for adultery could cause "instability" in the armed forces.

- Maintaining that "honour is the sine quo non of the services," and adultery must remain a valid ground to prosecute defence personnel under army laws.

- "Adultery can be defined as an 'unbecoming act' or punishable under "good order and discipline" rule under the army act. Such officers can be court martialed and cashiered.

- The armed forces required a completely different standard of discipline and that, therefore, the army act and other pertinent laws must be treated as outside the scope of the 2018 judgment.

- Personnel of the Army, Navy and the Air Force were a "distinct class". They were governed by special legislation, the Army Act, the Navy Act and the Air Force Act.

- The special laws imposed restrictions on the fundamental rights of the personnel, who function in peculiar situation requiring utmost discipline.

- The three laws were protected by Article 33 of the Constitution, which allowed the government to modify the fundamental rights of the armed forces personnel. The judgment of 2018 created 'instability'.

- It allowed a personnel charged with carrying on an adulterous or illicit relationship to take cover under the judgment.

- In September 2018, a five-judge constitution bench struck down Section 497 of the Indian Penal Code, declaring it to be unconstitutional and violative of right to equality of women in treating them as "chattel" (an item of property) and inferior to their husbands.

- Section 497 made adultery an offence only with respect to a man, who has a relationship with wife of someone else.

- The wife was considered neither adulterous nor an abettor in law, while the man could be jailed for up to five years. In that case, the Centre defended the law, saying it protected sanctity of marriages.

1.36 Lumpy skin disease: The deadly pandemic that has taken root among India's bovines

- A Lumpy Skin Disease (LSD) has been infecting India's bovines. The disease is being reported for the first time in India.

- The LSD is caused by infection of cattle or water buffalo with the poxvirus Lumpy skin disease virus (LSDV).

- The virus is one of three closely related species within the genus Capri pox virus, the other two species being Sheeppox virus and Goatpox virus.

- It appears as nodules of two to five centimetre diameter all over the body, particularly around the head, neck, limbs, udder (mammary gland of female cattle) and genitals.

- The lumps gradually open up like large and deep wounds.

- Other clinical signs include general malaise, ocular and nasal discharge, fever, and sudden decrease in milk production.

- According to the Food and Agriculture Organization (FAO) the mortality rate is less than 10%.

- It spreads through mosquitoes, flies and ticks and also through saliva and contaminated water and food.

- Control and prevention of lumpy skin disease relies on four tactics - movement control (quarantine), vaccination, slaughter campaigns and management strategies.

- There is no treatment for the virus, so prevention by vaccination is the most effective means of control.

- Secondary infections in the skin may be treated with Non-Steroidal Anti-Inflammatories (NSAIDs) and also antibiotics when appropriate.

- LSD is endemic to Africa and parts of West Asia, where it was first discovered in 1929.

- In Southeast Asia the first case of LSD was reported in Bangladesh in July 2019.

- In India, which has the world's highest 303 million heads of cattle, the disease has spread to 15 states within just 16 months.

1.37 3rd phase of Pradhan Mantri Kaushal Vikas Yojana launched in 600 districts across the country

- The Third Phase of Pradhan Mantri Kaushal Vikas Yojana (PMKVY 3.0) will be launched in 600 districts across the country.

- Spearheaded by the Ministry of Skill Development and Entrepreneurship, this phase will focus on new-age and COVID-related skills.

- Skill India Mission-PMKVY 3.0 envisages training of eight lakh candidates over a scheme period of 2020-2021 with an outlay of Rs.948.90 Crore rupees.

- The 729 Pradhan Mantri Kaushal Kendras, empaneled non-PMKK training centres and more than 200 ITIs under Skill India will be rolling out PMKVY 3.0 training to build a robust pool of skilled professionals.

- On the basis of the learning gained from PMKVY 1.0 and PMKVY 2.0, the Ministry has improved the newer version of the scheme to match the current policy doctrine and energize the skilling ecosystem affected due to the COVID-19 pandemic.

- The Skill India Mission launched by Prime Minister on 15 July 2015 has gained tremendous momentum through launch of its flagship scheme PMKVY to unlock the vision of making India the Skill Capital of the world.

1.38 Concentration of power in India Inc: Regulator reviews seven key sectors

- The Competition Commission of India (CCI) has launched a set of detailed investigations on the market dynamics of each sector amid the unprecedented concentration of power in at least seven core sectors in corporate India, from pharma and telecom to airports and ports.

- CCI has started a review of all model concession agreements — the legal contract that forms the basis of the public-private partnership — across four key infrastructure sectors: airports, ports, electricity and railways.

- The goal is to ensure that competition remains "vibrant" and "there are enough players who are able to participate in the award of concessions.

- In sectors such as airports, ports and highways, and electricity, concentration of power by itself was not a concern.

- The policy of the government is to make the economy more efficient, and, in that process, what the CCI can do is look at whether the dominance is abused or not. If there is abuse of dominance, CCI can take action under Section 4 of the Competition Act.

- Section 4 bars an enterprise from abusing its dominance and defines abuse through a range of steps that include denial of access, predatory pricing, limiting goods or services in a particular market.

1.39 Parakram Diwas

- On 125th birth anniversary (23rd January) of NetajiSubhash Chandra Bose, Government of India had decided to celebrate his birthday as 'ParakramDiwas' every year. He was born on 23rd January, 1897.

- A High Level Committee, headed by the Prime Minister has been constituted for deciding the programs, and to supervise and guide the commemoration.

- **Objective:** To remember Netaji's indomitable spirit and selfless service to the nation and to inspire people of the country, especially the youth, to act with fortitude in the face of adversity as Netaji did.

Important value additions

- Subhash Chandra Bose was twice elected President of the Indian National Congress, (1938-Haripur and 1939-Tripuri).

- Owing to political differences, he resigned from the Congress Presidentship in 1939 and organised the All India Forward Bloc a faction within the Congress in Bengal.

- In Calcutta, Bose organised mass protests and was arrested.

- He was later put under house arrest from where he escaped.

- He went to Germany via Afghanistan.

- However, in 1943 Bose lost hope that Germany could be of any help in gaining India's independence.

- He then turned to Asia where he finally came and raised the Indian National Army (INA).

- INA found support among expatriate Indians and Bose formed the Azad Hind government -which came to produce its own currency, postage stamps, court and civil code.

- It was recognised by Axis states.

- During the final two years of the war, Bose with considerable Japanese backing- led the forces of the Indian National Army into battle against the British.

- The I.N.A. was essentially non-communal, with Muslims quite prominent among its officers and ranks, and it also introduced the innovation of a women's detachment named after the Rani of Jhansi.

1.40 ACROSS Scheme

- Atmospheric and Climate Research-Modelling Observing Systems and Services (ACROSS)pertains to the atmospheric science programs of the Ministry of Earth Sciences (MoES).

- It addresses different aspects of weather and climate services, which includes warnings for cyclone, storm surges, heatwaves, thunderstorms, etc.

- The ACROSS scheme consists of nine sub-programmes which are multi-disciplinary and multi-institutional in nature and will be implemented in an integrated manner.

- As the objective of the ACROSS scheme is to provide reliable weather and climate forecast for the betterment of society, the scheme aims at improving the skill of weather and climate forecast through sustained observations, intensive R & D.

- The scheme provides improved weather, climate and ocean forecast and services, thereby ensuring the transfer of commensurate benefits to the various services.

1.41 New School Bag Policy, 2020

The Directorate of Education has issued a circular asking schools to follow the new 'School Bag Policy, 2020' released by the National Council of Educational Research and Training (NCERT).

Key takeaways

- According to the circular, schoolteachers should inform the students in advance about the books and notebooks to be brought to school on a particular day.

- They should frequently check their bags to ensure that they are not carrying unnecessary material.

- The weight of the school bags, as per the policy, should be: (i) 1.6 to 2.2 kg for Classes I and II students, (ii) 1.7 to 2.5 kg for Classes III, IV and V, (iii) 2 to 3 kg for Classes VI and VII, (iv) -2.5 to 4 kg for Class VIII, (v) 2.5 to 4.5 kg for Classes IX and X and (vi) 3.5 to 5 kg for Classes XI and XII.

- The teachers should take the responsibility of checking the weight of school bags of the students every three months on a day selected for the whole class.

- Any information about heavy bags should be communicated to the parents.

- To reduce the weight of the school bag, the school management should provide quality potable water in sufficient quantity to all the students in the school.

1.42 TRIFOOD Parks

- TRIFOOD Parks to be set up in Madhya Pradesh.

- It is a joint initiative of TRIFED (under the Ministry of Tribal Affairs) and the Ministry of Food Processing.

- TRIFOOD Parks are food processing centres aiming at promoting value addition to minor forest produce.

- It was launched under the Van DhanYojana in 2020.

- The parks procure raw materials from the Van Dhan Kendras and process them to be sold across the country through Tribes India outlets.

- The minimum support price for minor forest produce is fixed by the Tribal Affairs Ministry and it is revised every three years by a pricing cell constituted under the Ministry.

1.43 National Infrastructure Pipeline (NIP)

Finance Minister reviews NIP as part of infra spending push.

The NIP has been expanded from 6,385 projects at the time of its introduction a year ago, to more than 7,300 projects, and is making progress despite the pandemic.

About NIP:

- In the budget speech of 2019-2020, Finance Minister announced an outlay of Rs 100 lakh Crore for infrastructure projects over the next 5 years.

- NIP is a first-of-its-kind initiative to provide world-class infrastructure across the country and improve the quality of life for all citizens.

- It will improve project preparation, attract investments (both domestic & foreign) into infrastructure, and will be crucial for attaining the target of becoming a $5 trillion economy by FY 2025.
- Covers both economic and social infrastructure projects.

Important recommendations and observations made by Atanu Chakraborty taskforce:

- Investment needed: Rs. 111 lakh crore over the next five years (2020-2025) to build infrastructure projects and drive economic growth.
- Energy, roads, railways and urban projects are estimated to account for the bulk of projects (around 70%).
- The centre (39 percent) and state (40 percent) are expected to have an almost equal share in implementing the projects, while the private sector has 21 percent share.
- Aggressive push towards asset sales.
- Monetisation of infrastructure assets.
- Setting up of development finance institutions.
- Strengthening the municipal bond market.

1.44 Pravasi Bharatiya Divas (PBD) 2021

- Pravasi Bhartiya Diwas (Non Resident Day) is a biennial event held in January, to commemorate the return of Mahatma Gandhi from South Africa on 9th January 1915. This day marks the contribution of the overseas Indian community towards the country's development.
- The Conference aims at creating cultural bonds and an ecosystem for cultural propagation among the Diaspora.
- Indian Diaspora and various diaspora associations have played a very important role in the propagation of Indian culture in different parts of the world.
- This Conference would bring together eminent diaspora personalities and associations involved in propagation of Indian culture to discuss innovative ways of leveraging the Diaspora to enhance India's soft power in this field.
- The theme of 16th PBD Convention 2021 is "Contributing to Aatmanirbhar Bharat".

1.45 UAPA

Peoples Democratic Party leader Waheed Para has been booked under Unlawful Activities Prevention Act (UAPA).

About the Unlawful Activities (Prevention) Act:

- Passed in 1967, the law aims at effective prevention of unlawful activities associations in India.
- The Act assigns absolute power to the central government, by way of which if the Centre deems an activity as unlawful then it may, by way of an Official Gazette, declare it so.

- It has death penalty and life imprisonment as highest punishments.

Key points:

- Under UAPA, both Indian and foreign nationals can be charged.
- It will be applicable to the offenders in the same manner, even if crime is committed on a foreign land, outside India.
- Under the UAPA, the investigating agency can file a charge sheet in maximum 180 days after the arrests and the duration can be extended further after intimating the court.

As per amendments of 2019:

- The Act empowers the Director General of National Investigation Agency (NIA) to grant approval of seizure or attachment of property when the case is investigated by the said agency.
- The Act empowers the officers of the NIA, of the rank of Inspector or above, to investigate cases of terrorism in addition to those conducted by the DSP or ACP or above rank officer in the state.
- It also included the provision of designating an individual as a terrorist.

1.46 Prarambh

Indian Prime Minister interacts with startups and address 'Prarambh: Startup India International Summit'.

Key takeaways

- **Organized by:** Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry.
- The two-day Summit is being organised as a follow up of the announcement made by the Prime Minister at the fourth BIMSTEC Summit held in Kathmandu in August 2018 wherein India committed to host the BIMSTEC Startup Conclave.
- The Summit marks the 5th anniversary of the Startup India initiative, launched by the Prime Minister on 16 January, 2016.
- Over 25 countries and more than 200 global speakers shall participate.
- The Summit will be the largest startup confluence organised in India since the launch of the Startup India initiative.
- **Focus:** Enhancing multilateral cooperation and engagement with countries from around the globe to collectively develop and strengthen the startup ecosystems.

1.47 Janshatabdi Express from Ahmedabad-Kevadia to have a Vistadome coach

Indian Prime Minister recently flagged off eight trains from different parts of the country to Kevadia in Narmada district, Gujarat, where the Statue of Unity is located.

Out of these eight trains, the Janshatabdi Express from Ahmedabad-Kevadia has a Vistadome coach.

Key highlights

- The Vistadome coach is a state-of-the-art coach made by Indian Railways, designed to provide passengers with travel comfort as well as an enhanced viewing experience of their surroundings.
- The Vistadome coach in the Janshatabdi Express has been manufactured at the Integral Coach Factory in Chennai, Tamil Nadu.
- It is for the first time that the Vistadome coach has been made on the Linke Hofmann Busch (LHB) platform, made for passenger coaches for trains in India.
- Some of the features of the Vistadome coach are an observation lounge with a large window for passengers to experience the scenic route to Kevadia.
- The 44 recliner-180 degree rotatable seats ensure people can enjoy the view from both windows to their right and left, there are automatic sliding doors at both gates of the coach, glass rooftops offer a panoramic view, while there are five large windows on each side.

1.48 President's address

As many as 18 Opposition parties have announced their decision to boycott President Ram Nath Kovind's address to the joint sitting of Parliament at the start of the Budget session, in solidarity with the farmers protesting against the three farm laws.

President's Address to the Parliament- Constitutional Provisions:

- Article 87(1) says: "At the commencement of the first session after each general election to the House of the People and at the commencement of the first session of each year the President shall address both Houses of Parliament assembled together and inform Parliament of the causes of its summons."
- First Constitutional Amendment: Originally, the Constitution required the President to address both Houses of Parliament at the commencement of "every session". This requirement was changed by the First Amendment to the Constitution.

What is in President's address?

- The President's speech essentially highlights the government's policy priorities and plans for the upcoming year. It is drafted by the Cabinet, and provides a broad framework of the government's agenda and direction.

Motion of thanks:

- The address is followed by a motion of thanks moved in each House by ruling party MPs. During the session, political parties discuss the motion of thanks also suggesting amendments.

What procedures follow the address?

- After the President or Governor delivers the address, a debate takes place not only on the contents of the address but also the broad issues of governance in the Country. This then paves the way for discussion on the Budget.

- If the President disagrees with the text of the speech, are they still bound to read it?

- The President or a Governor cannot refuse to perform the constitutional duty of delivering an address to the legislature. But there can be situations when they deviate from the text of the speech prepared by the government.

- So far, there have been no instances of President doing so. But there has been an occasion when a Governor skipped a portion of the address to the Assembly.

- In 1969, the Governor of West Bengal, Dharma Vira, skipped two paragraphs of the address prepared by the United Front government. The skipped portion described as unconstitutional the dismissal of the first United Front government by the Congress-ruled central government.

Such provisions in other Countries

- In the United States, it is referred to as the "State of the Union". The phrase comes from an Article in the US Constitution which specifies that the President, "from time to time give to Congress information of the State of the Union and recommend to their Consideration such measures as he shall judge necessary and expedient."

- In the United Kingdom, it is referred to as the Queen's Speech and is part of the ceremony to mark the formal start of the parliamentary year.

1.49 DNA Technology (Use and Application) Regulation Bill, 2019

- Leaders of All India Majlis-e-Ittehad-ul-Muslimeen (AIMIM) and CPI have filed dissent notes to the parliamentary standing committee's report on the DNA Technology (Use and Application) Regulation Bill, 2019 on the following grounds:

- The bill does not take into account their concerns over privacy violations.

- If enacted, the Bill will target Dalits, Muslims and Adivasis by way of DNA sample collection and indefinite storage.

What are the main concerns and issues in the bill?

- The Bill proposes DNA sampling and profiling of citizens accused of crime or reported missing, and storing their unique genetic information for administrative purposes.

The fear is that:

- The law could be used for caste or community-based profiling.

- The Bill runs afoul with the standards set in the Puttaswamy and Subramanian Swamy judgments of the Supreme Court.

- In the absence of a statutory framework protecting the right to privacy, this Bill will cause irreversible damage to individuals' right to privacy as well as the criminal justice system.

- Without adequate statutory safeguard to protect against the opacity of the law on the sort of information being collected and its unrestricted usage for a variety of purposes this law is susceptible to future misuse and abuse.

Highlights of the Bill:

- As per the Bill, national and regional DNA data banks will be set up for maintaining a national database for identification of victims, suspects in cases, undertrials, missing persons and unidentified human remains.

- Punishment: Those leaking the DNA profile information to people or entities who are not entitled to have it, will be punished with a jail term of up to three years and a fine of up to Rs. 1 lakh.

- Usage: As per the bill, all DNA data, including DNA profiles, DNA samples and records, will only be used for identification of the person and not for "any other purpose".

- The bill's provisions will enable the cross-matching between persons who have been reported missing on the one hand and unidentified dead bodies found in various parts of the country on the other, and also for establishing the identity of victims in mass disasters.

- The Bill establishes a DNA Regulatory Board to accredit the DNA laboratories that analyse DNA samples to establish the identity of an individual.

1.50 Indian Telegraph Act, 1885

- Following violent protests, the Union Home Ministry has issued orders to suspend Internet in some areas in Delhi under the Temporary Suspension of Telecom Services (Public Emergency or Public Safety Rules 2017) of the Indian Telegraph Act, 1885.

- The order under this act had been issued only twice before — in Delhi on December 19 and 20, 2019, at the height of the protests against the Citizenship (Amendment) Act.

Implications:

- The rules framed in 2017 empower the Union Home Secretary and a State's Home Secretary to pass directions to suspend the telecom services, including the Internet, "due to public emergency or public safety."

About the Indian Telegraph Act, 1885

- It governs the use of wired and wireless telegraphy, telephones, teletype, radio communications and digital data communications.

- It gives the Government of India exclusive jurisdiction and privileges for establishing, maintaining, operating, licensing and oversight of all forms of wired and wireless communications within Indian territory.

- It also authorizes government law enforcement agencies to monitor/intercept communications and tap phone lines under conditions defined within the Indian Constitution.

- Section 5(2) of the act allows central and state governments to prevent the transmission of messaging during a "public emergency or in the interest of public safety", or "in the interests of the sovereignty and integrity of India, the security of the state".

1.51 Question Hour

- The Question Hour, which had been suspended by the government during the monsoon session, will resume when Parliament meets for the Budget session from January 29.

- The first hour of every parliamentary sitting is slotted for the Question Hour. However, in 2014 the Question Hour was shifted in the RajyaSabha from 11 am to 12 noon.

- During this one hour, Members of Parliament (MPs) ask questions to ministers and hold them accountable for the functioning of their ministries.

- The questions can also be asked to the private members (MPs who are not ministers).

- Regulation: It is regulated according to parliamentary rules.

- The presiding officers of the both Houses (RajyaSabha and LokSabha) are the final authority with respect to the conduct of Question Hour.

- Question Hour in both Houses is held on all days of the session. But there are two days when an exception is made:

  1.There is no Question Hour on the day the President addresses MPs from both Houses in the Central Hall.

  2.Question Hour is not scheduled on the day the Finance Minister presents the Budget.

1.52 Jallikattu

- With Assembly polls round the corner in Tamil Nadu, the Pongal festival and Jallikattu, the traditional bull-taming sport, have caught the attention of political parties.

- A tradition over 2,000 years old, Jallikattu is a competitive sport as well as an event to honour bull owners who rear them for mating.

- It is a violent sport in which contestants try to tame a bull for a prize; if they fail, the bull owner wins the prize.

- It is popular in Madurai, Tiruchirappalli, Theni, Pudukkottai and Dindigul districts of Tamil Nadu known as the Jallikattu belt.

Importance in Tamil Culture:

- Jallikattu is considered a traditional way for the peasant community to preserve their pure-breed native bulls.

- At a time when cattle breeding is often an artificial process, conservationists and peasants argue that Jallikattu is a way to protect these male animals which are otherwise used only for meat if not for ploughing.

- Kangayam, Pulikulam, Umbalachery, Bargur and MalaiMaadu are among the popular native cattle breeds used for Jallikattu. The owners of these premium breeds command respect locally.

Conflict to be Resolved:

- Whether the Jallikattu tradition can be protected as a cultural right of the people of Tamil Nadu which is a fundamental right.

- Article 29 (1) against Rights of animals.

- Article 29 (1) mandates that "any section of the citizens residing in the territory of India or any part thereof having a distinct language, script or culture of its own shall have the right to conserve the same".

1.53 Makaravilakku festival

- It is celebrated at the sacred grove of Lord Ayyappa at Sabarimala.

- It is an annual seven-day festival, beginning on the day of Makara Sankranti when the sun is in the summer solstice.

- The highlight of the festival is the appearance of Makarajyothi- a celestial star which appears on the day of Makara Sankranthi on top of Kantamala Hills.

- Makara Vilakku ends with the ritual called 'Guruthi', an offering made to appease the god and goddesses of the wilderness.

1.54 Rakshita

- The Delhi based DRDO laboratory named Institute of Nuclear Medicine and Allied Sciences (INMAS) handed over the Rakshita to the Central Reserve Police Force (CRPF). In total, 21 bikes were flagged off on the occasion.

- About Rakshita

- It is a bike-based casualty transport emergency vehicle or the Motor Bike Ambulance.

- This bike ambulance has been flagged off in order to help in overcoming the problems faced by the Indian security forces and emergency healthcare providers.

- It will be providing the life-saving aid for evacuation of injured patients from low intensity conflict areas.

- The bike ambulance will be beneficial for the congested streets and remote locations where access to ambulance is difficult.

- With this launch, the medical emergency need of patients can be fulfilled faster than by a four-wheeler because of its functionality and integrated emergency medical support system.

1.55 Kamalam

- The Chief Minister of Gujarat, Vijay Rupani, has announced that the government of Gujarat has decided to rename dragon fruit as 'Kamalam', which is a Sanskrit word. This decision to rename

fruit was taken as its outer shape looks like a lotus. The government has also applied for the patent of the dragon fruit to be called as 'Kamalam'.

Why the name was changed?

- The chief Minister highlighted that; the dragon fruit is grown in the Kutch district of Gujarat. So, the government came with the idea of giving it a local name too.

- He further said, the word dragon reminds one of China so it was more relevant giving a local name.

Dragon Fruit in India

- In India, the dragon fruit is cultivated in the states of Gujarat, Tamil Nadu, Andhra Pradesh, Karnataka. India mainly imports this fruit from Malaysia, Thailand, Vietnam and Sri Lanka. India could look for the potential export of the Dragon Fruit to countries like USA, Gulf and Europe.

1.56 Bharat Parv 2021

- The annual event Bharat Parv was celebrated from 26th to 31st January, 2021 on a virtual platform created by the Ministry of Tourism.

- On the occasion, the Ministry dedicated three virtual pavilions - DekhoApnaDesh, Statue of Unity & Incredible India.

- It envisages generating patriotic fervor and showcases the rich and varied cultural diversity of the country. This event celebrates the "Essence of India".

- The Ministry of Tourism organizes Bharat Parv every year since 2016 in front of the ramparts of the Red Fort on the occasion of Republic Day Celebrations from 26th to 31st January.

- Bharat Parv 2021 showcased many pavilions of Central Ministries, State Theme Pavilions, Handicrafts, Folk performances from various states and UTs etc.

DekhoApnaDesh' Campaign:

- It was launched by the Ministry of Tourism in 2020.

- It is an initiative to encourage the citizens to travel widely within the country and explore the wonders of India thus enabling the development of Domestic Tourism tourist facilities and infrastructure in tourism spots in the country.

- The Ministry has also organised a series of webinars on various cities, states, cultures, heritage, wildlife, adventure, etc.

1.57 Padma Awards

- 7 personalities have been awarded the Padma Vibhushan, 10 named for the Padma Bhushan and 102 named for Padma Shri.

About Padma Awards:

- The Padma Awards are one of the highest civilian honours of India announced annually on the eve of Republic Day.

- The award seeks to recognize achievements in all fields of activities or disciplines where an element of public service is involved.
- The Awards are conferred on the recommendations made by the Padma Awards Committee, which is constituted by the Prime Minister every year.

The Awards are given in three categories:

- Padma Vibhushan (for exceptional and distinguished service).
- Padma Bhushan (distinguished service of higher order).
- Padma Shri (distinguished service).

1.58 Kala Utsav

- Kala Utsav is an initiative of the Ministry of Human Resource Development (now called Ministry of Education) under RashtriyaMadhyamikShikshaAbhiyan, to promote arts in education by nurturing and showcasing the artistic talent of school students at the secondary stage in the country.
- In the context of education of arts (music, theatre, dance, visual arts and crafts), the initiative is guided by the recommendations of the National Curriculum Framework 2005 (NCF-2005).
- Kala Utsav 2020 was launched online in January 2021 through a digital platform.
- Many teams from various states/UTs participated in the competitions which included dancing, singing, instrumental music, visual arts, etc.

Importance:

- Introduction of Indigenous Toys and Games segment in Kala Utsav 2020 supported the 'Vocal for Local' initiative.
- It is in sync with the recommendations of National Education Policy 2020 which emphasises the promotion of arts and culture through education.
- It complements the Samagra Shiksha Scheme by enhancing aesthetics and artistic experiences for secondary-level students, which play a major role in creating awareness of India's rich cultural heritage and its vibrant diversity in line with 'Ek Bharat Shreshtha Bharat'.
- It enhances the students' reasoning, comprehensibility, problem solving, cognitive and decisive abilities, which are helpful in the all-round development of the student.

2. INTERNATIONAL RELATIONS

2.1 India to Chair 3 UNSC Committees

- India began its eighth term as a non-permanent member of the United Nations Security Council (UNSC) for the period of 2021-22 on January 1, 2021.

- India's stated objectives are to raise its voice against terrorism, to speak for the developing world and to bring human-centric inclusive solutions to matters of global peace and security.

- India would chair the following three committees of the UNSC.

- India will chair the **Counter terrorism Committee** in 2022, which coincides with the 75th Anniversary of India's Independence.

- This Committee was formed in 2001 after the 9/11 attack in New York.

- India had chaired this committee in the UNSC in 2011-12.

- Chairing the **Taliban Sanctions Committee** (1988 Sanctions Committee) will help keep the focus on the presence of terrorists and their sponsors, threatening the peace process in Afghanistan.

- **Libya Sanctions Committee** implements the sanctions regime, including a two-way arms embargo on Libya, an assets freeze, a travel ban, measures on illicit export of petroleum.

2.2 India and Mongolia have reviewed bilateral cooperation in hydrocarbons and steel sectors

- India reiterated its commitment to timely completion of the Mongol Refinery Project, the country's 1st oil refinery.

- The greenfield Mongol Refinery Project is being built under a Line of Credit from the Government of India.

- It is expected to cut some of Mongolia's fuel import dependence.

- The Project came in the backdrop of Mongolia, which has large uranium deposits signing an agreement for civil nuclear cooperation with India in 2009 and China unfolding its Belt and Road Initiative (BRI).

- India is opposed to the BRI, which seeks to invest about USD 8 trillion in infrastructure projects across Asia, Europe and Africa, as it says the initiative lures countries into debt traps and does not respect sovereignty or address environmental concerns.

- India welcomed the keenness of Mongolian companies in supplying coking coal to Indian steel industry. According to a recent report, India will overtake China as the largest importer of coking coal by 2025.

- Further, India looks forward to substantial partnerships with Mongolian companies in the areas of minerals, coal and steel.

- India expressed its willingness to further share its expertise in the oil and gas sector including capacity building in accordance with the developmental priorities of Mongolia.

- Historically India and Mongolia have interacted through Buddhism throughout history.

- Diplomatically India is the first country outside the former Soviet bloc of nations to open diplomatic relations with Mongolia in 1955, has upgraded ties with Mongolia to a strategic partnership.

- In 2015, Mongolia witnessed the first ever visit by the Prime Minister of India (a part of India's Act East policy).

- Mongolia has publicly reiterated its support for India's membership to the permanent seat of the expanded United Nations Security Council (UNSC).

- India has played an important role in getting Mongolia membership to key international forums, including the United Nations (UN), despite strong opposition from China and Taiwan. India also championed the inclusion of Mongolia in the Non-Aligned Movement.

- In a reciprocal gesture, Mongolia co-sponsored a 1972 UN resolution with India and Bhutan for the recognition of the newly liberated Bangladesh.

- Other Forums of which both the countries are members: Asia-Europe Meeting (ASEM), World Trade Organisation (WTO).

- India is a member whereas Mongolia is an observer state at the Shanghai Cooperation Organisation (SCO).

- Economically India - Mongolia bilateral trade was USD 38.3 million in 2019, down from USD 52.6 million in 2018.

2.3 Defence Cooperation:

- Joint defence exercises code-named Nomadic Elephant.

- India is also an active participant in an annual week-long joint training exercise called the Khaan Quest, hosted by Mongolia.

2.4 Cooperation over Environmental Issues: Part of the Bishkek Declaration (snow leopard).

- The Ministry of Culture (India) has taken up the project of reprinting 108 volumes of Mongolian Kanjur under the National Mission for Manuscripts (NMM).

- Solar energy is abundant and cooperation is solicited especially as India has emerged as the leader by way of International Solar Alliance and its very own ambitious alternate and renewable energy projects.

- Mongolia's mining sector including copper and Uranium hold exceptional cooperation possibilities.

- In the area of cooperatives, India has the capacity to share its expertise for the vastly dispersed farmers and milkmen in Mongolia.

2.5 Seventh Trade Policy Review (TPR) of India at the World Trade Organization (WTO)

Recently, the final session of India's seventh **Trade Policy Review (TPR)** concluded at the **World Trade Organization (WTO)** in Geneva, Switzerland

- The TPR is an important mechanism under the WTO's monitoring function in which member countries' trade and related policies are examined by the WTO with an aim to contribute towards improved adherence to WTO rules.
- India's last TPR took place in 2015.

Appreciation for India:

Introduction of Goods & Services Tax in 2016.

- India's efforts in the implementation of WTO's Trade Facilitation Agreement.
- Role played by India in furthering "Ease of Doing Business" in the country.
- India's improved ranking in "Trading across Borders" indicator under the Ease of Doing Business Report.

2.6 Trade Facilitation Agreement (TFA),

Aims to speed up Customs procedures and make trade easier, faster, and cheaper.

The steps taken by India for liberalizing its **Foreign Direct Investment (FDI)** regime and India's National Intellectual Property Rights Policy, 2016.

Concerns for India:

- India's trade policy remained largely unchanged since the previous review.
- India continues to rely on trade policy instruments such as the tariff, export taxes, minimum import prices, import and export restrictions, and licensing, WTO said.
- These are used to manage domestic demand and supply requirements, protect the economy from wide domestic price fluctuations, and ensure conservation and proper utilization of natural resources.
- As a result, frequent changes are made to tariff rates and other trade policy instruments, which create uncertainty for traders.

India's Request:

- The ongoing pandemic has again brought to the fore, the importance of food and livelihood security and urged for a permanent solution to Public Stock Holding (PSH) for food security.

Public Stockholding (PSH)

- It is a policy tool used by governments to procure, stockpile and distribute food when needed.
- Currently, public distribution programmes of developing countries are included under trade-distorting Amber Box measures that attract reduction commitments of WTO.
- India with the group of developing countries is demanding that the programmes for food security purposes be exempted from subsidy reduction commitments of WTO.

➢ India has repeatedly demanded a permanent solution for public stockholding issues.

Trade Policy Review Mechanism

➢ The Trade Policy Review Mechanism (TPRM) was an early result of the Uruguay Round.

➢ It is the main transparency instrument of the WTO, affording opportunities for a process of collective evaluation of the trade policies and practices of individual members.

Objectives:

➢ Facilitating the smooth functioning of the multilateral trading system by enhancing the transparency of Members' trade policies.

➢ To examine the impact of a Member's trade policies and practices on the multilateral trading system.

Mechanism:

➢ The reviews take place in the Trade Policy Review Body which is actually the WTO General Council — comprising the WTO's full membership — operating under special rules and procedures.

Function:

➢ The trade policy review allows members to put the overall trade and economic policies of a country under the scanner.

➢ The trade policies of developing countries are taken up for review every four years while developed ones face similar scrutiny every two years.

➢ The mandate of the TPRM was broadened to cover services trade and intellectual property.

➢ All WTO Members are subject to review under the TPRM.

2.7 India-Japan Loan Agreement

• **India and Japan** signed an agreement for **a loan of up to 50 billion yen** (about Rs. 3,550 crore) **to back India's economic support programmes** for the poor and vulnerable affected by the **Covid-19** crisis.

• It is a part of Japan's Official Development Assistance (ODA) loan.

• ODA is defined as government aid designed to promote the economic development and welfare of developing countries.

• Loans and credits for military purposes are excluded.

• The loan has an interest rate of 0.65% per annum and a repayment period of 15 years, including a five-year grace period.

• The financial support aims to support the Indian government's programmes such as Pradhan Mantri Garib Kalyan Yojana (PMGKY), which aims to mitigate socio-economic impacts and strengthen socio-economic institutions.

- This includes schemes for distributing food grains to the poor and vulnerable, provision of assistance and support to construction workers, and provision of special insurance for health workers fighting Covid-19.

- It is for the implementation of health and medical policy by the Government of India, and is expected to lead to the development of hospitals equipped with ICUs (Intensive Care Units) and infection prevention and management facilities.

- It is also expected to lead to the enhancement of telemedicine using digital technology in numerous villages across India.

2.8 CHINA's RISING INFLUENCE IN SOUTH ASIA

China has held its **third multilateral dialogue** virtually with countries from **South Asia** to take forward **closer cooperation on fighting Covid-19** and coordinating their **economic agendas,reflecting a new approach in Beijing's outreach to the region.**

Key Points;

- It brought together every country in the region **barring India, Bhutan andthe Maldives,** and was aimed at **"anti-epidemic cooperation and poverty reduction cooperation".**

- The recent meeting was attended by **all five countries** that have taken part in these dialogues: **Pakistan, Nepal, Afghanistan, Sri Lanka and Bangladesh.**

- All three dialogues have been attended by **Pakistan and Nepal.**

- Previously at the July **quadrilateral dialogue** with Afghanistan, Nepal and Pakistan, China's proposed extending the **China-Pakistan Economic Corridor** (CPEC) to Afghanistan, as well as taking forward an **economic corridor plan** with Nepal, called the **Trans-Himalayan Multi-dimensional Connectivity Network.**

- According to the **American Enterprise Institute's China Global Investment Tracker,** China has committed around **100 billion USD** in the economies of Afghanistan, Bangladesh, the Maldives, Pakistan, Nepal and Sri Lanka.

- China is now the **largest overseas investor** in the Maldives, Pakistan, and Sri Lanka.

- **Afghanistan:**

  Beijing was a part **of the trilateral China-Pakistan-Afghanistan foreign ministers dialogue** which focuses on facilitating Afghan domestic political reconciliation, enhancing regional connectivity, and improving regional common development.

- The trilateral discussions also agreed to push **"forward under the** Belt and Road Initiative **(BRI)"** and **"to enhance connectivity by extending the CPEC to Afghanistan".**

Bangladesh:

- China and Bangladesh pledged to deepen defense cooperation, especially in the areas of **"defense industry and trade, training, equipment and technology.**

- China is also the **largest arms supplier of the Bangladeshi military, providing 71.8%** of weapons from 2008 to 2018.

Bhutan: It **does not have diplomatic relations** with China.

Maldives: China's relationship with the Maldives is near-exclusively focused on leveraging BRI to develop Maldives as well as to raise Chinese influence there to counter India.

Nepal:

- Chinese President went to Nepal in 2019.

- This was the **first visit by a Chinese head of state in 23 years.**

- The countries have signed agreements to **accelerate Infrastructure building in Nepal and improve connectivity between them.**

- Both the countries have also announced the launch of a **feasibility study of the China-Nepal cross-border railway.**

Sri Lanka: Sri Lanka handed over **Hambantota port** on a 99-year lease to China to repay its loan back to china. **Hambantota is geostrategically located on the Indian Ocean,** potentially bolstering **Beijing's String of Pearls.**

Concerns for India:

- **Security Concerns:**
  - Growing cooperation between Pakistan and China.
  - Increasing nexus between Nepal and China.
  - Acceptance to China-Pakistan Economic Corridor by south asian countries.

- **Leadership Roles in South Asia:**
  - It shows increasing chinese presence in south asia and its acceptance by the countries as a torch bearer for the region which India wants for itself.

- **Economic Concerns:**
  - Over the past decade, China has replaced India as the **major trading partner** of **several South Asian countries.** For instance, the share of India's trade with Maldives was **3.4 times that of China's in 2008.** But by 2018, **China's total trade with Maldives slightly exceeded that of India.**
  - China's trade with **Bangladesh** is **now about twice that of India.** China's trade with Nepal and Sri Lanka **still lags India's trade with those countries but the gap has shrunk.**

2.9 INDIA – SRI LANKA

An India-funded **free ambulance service** is playing a vital role in Sri Lanka's **Covid-19** response.

Background:

- India provided a **grant of 7.56 million USD** for the **SuwaSeriya** [vehicle or journey for good health] **service** which was launched in 2016, on a pilot basis. Later, this was extended throughout the country with additional grants from India.

- Training and refresher programmes for **Sri Lankan emergency medical technicians** which further **generated employment** for the local population.

- It is India's **second largest grant project to Sri Lanka** after the **housing project** of more than **60,000 houses**, with a nearly 400 million USD grant.

Relations :

Geopolitical Significance of SriLanka:

- Sri Lanka's location in the **Indian Ocean region** has been of strategic geopolitical relevance to several major powers.

- China's string of pearl's strategy is aimed at encircling India to establish dominance in the Indian Ocean.

- China is building state of the art gigantic modern ports all along the Indian Ocean and to the south of it, in Gwadar (Pakistan), Chittagong (Bangladesh, KyaukPhru (Myanmar) and Hambantota (Sri Lanka). Thus Sri Lanka is vital for China's String of Pearls strategy**.**

- Sri Lanka has a list of highly strategic ports located among busiest sea lanes of communication.

Political Relations:

- The Reserve Bank of India (RBI) has signed an agreement for extending a USD 400 million currency swap facility to Sri Lanka to boost the foreign reserves and ensure financial stability of the country, which is badly hit by Covid-19 pandemic.

- Political relations between India and Sri Lanka have been marked by high-level exchanges of visits at regular intervals.

- Sri Lanka is a member of regional groupings like BIMSTEC (Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation) and SAARC in which India plays a leading role.

- India and Sri Lanka conduct joint Military (Mitra Shakti) and Naval (SLINEX) exercises.

Commercial Relations:

- Sri Lanka is one of India's largest trading partners among the SAARC countries. India in turn is Sri Lanka's largest trade partner globally.

- India's exports to Sri Lanka amounted to 5.3 billion USD in 2015-17 whereas its imports from the country were at 743 million USD.

- Trade between the two countries grew particularly rapidly after the India-Sri Lanka Free Trade Agreement which came into force in March 2000.

Cultural and Educational Relations:

- The Indian Cultural Centre in Colombo actively promotes awareness of Indian culture by offering classes in Indian music, dance, Hindi and Yoga. Every year, cultural troupes from both countries exchange visits.

- The India-Sri Lanka Foundation, set up in December 1998 as an intergovernmental initiative, also aims towards enhancement of scientific, technical, educational and cultural cooperation through civil society exchanges and enhancing contact between the younger generations of the two countries.

- The People of Indian Origin (PIOs) comprise Sindhis, Borahs, Gujaratis, Memons, Parsis, Malayalis and Telugu speaking persons who have settled down in Sri Lanka (most of them after partition) and are engaged in various business ventures.

- In April 2019, India and Sri Lanka also concluded agreement on countering Drug and Human trafficking.

Issues and Conflicts

China Factor:

- Sri Lanka also handed over the strategic port of Hambantota, which is expected to play a key role in China's Belt and Road Initiative, to China on a 99-year lease.

- China has also supplied arms as well as provided huge loans to Sri Lanka for its development.

- The two countries have signed a civil nuclear cooperation agreement which is Sri Lanka's first nuclear partnership with any country.

Fishermen issue:

- Given the proximity of the territorial waters of both countries, especially in the Palk Straits and the Gulf of Mannar, incidents of straying of fishermen are common.

- Fishermen often risk their lives and cross in to Srilankan rather than return empty-handed, but the Sri Lankan Navy is on alert, and have either arrested or destroyed fishing nets and vessels of those who have crossed the line.

- The 4th meeting under Joint Working Group (JWG) on fisheries was held recently between the Ministry of Agriculture and Farmers Welfare of India and Ministry of Fisheries and Aquatic Resources Development of Sri Lanka as the mechanism to help find a permanent solution to the fishermen issue.

2.10 41st **Gulf Cooperation Council (GCC) summit**

Recently, Gulf states signed a **'solidarity and stability'** deal at the 41st **Gulf Cooperation Council (GCC) summit** held in Al Ula, Saudi Arabia.

Background:

Sanctions on Qatar:

In June 2017, Saudi Arabia and its allies, the United Arab Emirates (UAE), Bahrain and Egypt severed ties with Qatar and imposed a Naval, Air And Land blockade on the country.

Reasons:

- Qatar was charged to be too close to Iran and backed radical Islamist groups.
- The Country was alleged to support and fund terror through its support of Iran and Muslim Brotherhood (a Sunni Islamist political group outlawed by both Saudi Arabia and the UAE).

Solidarity and Stability Deal:

- Members of the GCC signed a deal in AlUla, Saudi Arabia to remove all the sanctions over Qatar and re-open their Land, Sea and Air borders to Qatar.
- Bahrain, Kuwait, Oman, Qatar**,** Saudi Arabia and UAE are the members of GCC.

Reason:

- To unite efforts to promote the Gulf region and to confront challenges that surround them, especially the threats posed by the Iranian regime's nuclear and ballistic missile programme and its plans for sabotage and destruction.

India and GCC:

- The economic and political relationship of India with the GCC has improved in recent years.
- The friendly relation has been reflected in the **bilateral trade** of around USD 121 billion and **remittances** of USD 49 billion from a workforce of over nine million.
- GCC suppliers account for around **34% of India's crude imports.**

India and Iran:

- India has always **shared a friendly relationship with Iran.** But the India-Iran relation faces one of the most complex phases at all times due to the USA's pressure which has politico-economic impacts.
- In May 2018, the USA abandoned the nuclear deal **(Joint Comprehensive Plan of Action)** and **reinstated economic sanctions against Iran.**

India and Qatar:

- Recently, **India's External Affairs Minister met the top leaders of Qatar** and discussed strengthening the economic and security cooperation between the two countries.
- India shares a **friendly relation with Qatar** and even at the time of sanctions on Qatar, India maintained a cordial relation with the oil rich nation.

India's overall role in the Region:

- India has **avoided involvement in local or regional disputes** in the region, since Indian interests do not entail power projection but necessitate **peace and regional stability.**

- The Gulf is among India's **top trading partners.** The **deepening energy interdependence** is marked by growing volumes of energy imports into India. There is also the prospect of substantive investments from the Gulf into the **Indian hydrocarbon sector.**

- The number of Indian **migrant workers in the region** stands at more than **7 million.**

- The expansion of the political engagement has been matched by the **growing security cooperation, especially on counter-terrorism.**

- India and its Gulf partners are also **taking tentative steps towards defence cooperation.** For example participation of Saudi Arabia, Oman, Kuwait, and others in **India's mega multilateral Milan Exercise.**

2.11 India to chair three-key subsidiary bodies of UNSC

- It was announced by the Permanent Representative of India at the United Nations Security Council that India will be chairing three-key subsidiary bodies of the United Nations Security Council (UNSC).

- Panels: Counter-Terrorism Committee (for 2022), Taliban Sanctions Committee, and Libya Sanctions committee.

- India will chair the Counter-Terrorism Committee of UNSC in 2022. Chairing of this committee has a special resonance for India. This committee is at the forefront of fighting terrorism especially cross border terrorism and it is also been one of its biggest victims of terrorism.

- Taliban Sanctions Committee has a strong interest and commitment to peace, security, development, and progress of Afghanistan.

- India will be assuming the chair of the Libya Sanctions Committee at a critical juncture when there is an international focus on Libya and on the peace process.

2.12 Nepal raises Kalapani boundary issue with India

- Nepal has raised the Kalapani boundary dispute with India during the Joint Commission meeting between both countries Foreign ministers since the issue erupted in November 2019 prompting Nepal to unveil a new political map that showed the Kalapani-Lipulekh-Limpiyadhura region of Pithoragarh District as part of the Country's sovereign territory.

- Nepal also requires vaccines to fight the COVID-19 pandemic and it has approved Serum Institute of India's (SII) Covishield vaccine. Indo-Nepal boundary dispute existed in "two segments" and Kathmandu wished to find a solution to the matter urgently.

- Nepal has started the demarcation and mapping of the boundary since 1981. At that time, a Joint Technical Committee was founded which had tenure till 2007. It produced 182 strip maps which depicts the border but for various reasons [work on] two segments Susta and Kalapani were not completed.

What is the Kalapani territorial issue?

- Kalapani lies on the eastern most corner of Uttarakhand's Pithoragarh district, between Nepal and India.

- Both India and Nepal lay claim to Kalapani.

- The dispute was revived in November 2019 when India published a revised political map showing the newly created UTs of J&K and Ladakh.

- The map showed Kalapani as part of Pithoragarh District.

- Nepal protested immediately and drew attention to the issue.

- Very recently, India inaugurated the Darchula-Lipulekh pass link road, cutting across the disputed Kalapani area.

- The road is used by Indian pilgrims to Kailash Mansarovar.

- Nepal hit back by summoning the Indian Ambassador to Nepal, Vinay Mohan Kwatra, to convey a formal protest.

What are Nepal's claims based on?

- The Kalapani region derives its name from the river Kali. Nepal's claims to the region are based on this river.

- The River became the marker of the boundary of the kingdom of Nepal following the Treaty of Sugauli.

- This was signed between the Gurkha rulers of Kathmandu and the East India Company after the Gurkha War/Anglo-Nepal War (1814-16).

- According to the treaty, Nepal lost the regions of Kumaon-Garhwal in the west and Sikkim in the east.

- The King of Nepal gave up his claims over the region west of the river Kali which originates in the High Himalayas and flows into the great plains of the Indian subcontinent.

- According to the treaty, the British rulers recognised Nepal's right to the region that fell to the east of the river Kali.

- Here lies the historic origin of the dispute.

- According to Nepal's experts, the east of the Kali river should begin at the source of the river.

- The source according to them is in the mountains near Limpiyadhura, which is higher in altitude than the rest of the river's flow.

- Nepal claims that a land mass, high in the mountains that falls to the east of the entire stretch starting from Limpiyadhura downwards, is theirs.

- India on the other hand says the border begins at Kalapani which India says is where the river begins.

- The dispute is mainly because of the varying interpretation of the origin of the river and its various tributaries that slice through the mountains.

Is the road new?

- For India, the Lipulekh pass has always been part of the road to Tibet.

- Since 1981, when China re-opened the Kailash-Mansarovar pilgrimage route for Indians, they have also used the pass to walk into Tibet.

- It was mentioned as one of the border passes for trade in a 1954 agreement with China.

- India's part was also reaffirmed in another trade agreement in 2015.

- The road built now follows the same alignment, and would essentially cut down their travel time by 3 days each way.

- But India and China were in clear violation of Nepal's concerns during the 2015 Lipulekh agreement that renewed India's Mansarovar pilgrimage connection.

- Neither side consulted Nepal or sought its opinion before that agreement that boosted pilgrimage and trade to Tibet.

What is the tussle now?

- Nepal Prime Minister K.P. Sharma Oli took New Delhi by surprise with an aggressive posture on the Kalapani territorial issue.

- India has been even angered by Nepal's strong protests, followed by fiery speeches by Mr. Oli and Nepal's Foreign Minister.

- The Nepali cabinet also decided to adopt a new political map.

- That reportedly claims not only Lipulekh but also other areas that are in Indian territory that have been claimed by Nepal.

- Nepal claims this by invoking the 1816 Sugauli treaty with the British.

- The move was described by India's MEA as "artificial", "unilateral" and "unacceptable".

- But, the struggle within the ruling Nepal Communist Party has probably spurred Mr. Oli's more combative posture.

How is it being dealt with?

- Boundary disputes are common ground for countries that have an ancient history and shared borders.

- The Kalapani issue is one such dispute that India and Nepal have resolved to sort out.

- Unfortunately, the respective Foreign Secretaries, tasked by the PMs in 2014 to discuss the matter, have failed to find an acceptable date for a meeting since then.

- Sadly, India was delaying in responding to this.

- Even recently, when tensions prevailed in Kathmandu, the MEA said that it would convene the meeting after the pandemic had been dealt with.

- This was unnecessarily dismissive of an issue important to Kathmandu.

- Mr. Oli's government had raised it in November 2019 as well; its offer to send a political envoy to New Delhi was refused.

What is the way forward?

- Given the importance of ties with Nepal, India must not delay dealing with the matter.

- Amidst a pandemic situation as well as a faceoff with China in Ladakh and Sikkim, India must do all to put off the tensions with Nepal.

- The crisis appears to threaten the very basis of the two countries' special relationship which has notably nurtured open borders and free movement of people.
- India and Nepal must not let their differences grow into a full-blown diplomatic crisis.

2.13 Russia announces exit from Open Skies treaty after US departure

- Russia announced that it was pulling out of the Open Skies treaty as this pact allows unarmed surveillance flights over member countries, had been seriously compromised by the withdrawal of the US.
- The US left the Open Skies arms control and verification treaty in November, accusing Russia of violating it, something denied by Moscow as it had made specific proposals to other members to mitigate against the impact of the US exit but that those proposals were not backed by Washington's allies. Russia exited the pact reportedly after others refused to give assurances that they would not share this intelligence with US.

What is the "Open Skies" treaty?

- The treaty allows 34 countries to conduct unarmed surveillance flights over one another's territories — including the US and Russia. It was signed in 1992 and went into effect in 2002.
- Kyrgyzstan has signed, but not ratified the treaty.

Significance:

- It was agreed just after the Cold War to allow signatories to avoid nasty surprises by monitoring rival militaries.
- The treaty "was designed to enhance mutual understanding and confidence by giving all participants, regardless of size, a direct role in gathering information through aerial imaging on military forces and activities of concern to them."

Implementation of the treaty:

1. The treaty makes it possible to conduct joint unarmed observation flights over the territories and to take images using sensors of a predefined resolution.
2. And it also allows all signatories to request copies of all images taken during overflights carried out by others.
3. Over flights are governed by quotas, negotiated annually and assigned to specific aircraft. The United States, for example, is allowed to operate Boeing OC-135 planes with infrared scanners.
4. The country under surveillance is given 72 hours' warning of a flight and 24 hours notice of the route, to which it can suggest modifications.

5. The treaty lays down which air bases can be used for the flights and at which points they can cross into each other's air space. Russia and the U.S. have four such bases each.

6. A committee to oversee the implementation of the treaty meets in Vienna every month at the headquarters of the Organisation of Security and Cooperation (OSCE) in Europe.

Why does the US want to withdraw?

- Moscow and Washington have long accused the other of breaching its terms. The US has in the past accused Moscow of imposing restrictions on flights near its exclave of **Kaliningrad**, an area between Poland and Lithuania where the Russian military maintains a robust presence.

2.14 Trade with China shrank in 2020, deficit at five-year low

- According to new figures from China's General Administration of Customs (GAC), India's trade with China declined in 2020 to the lowest level since 2017.

- Trade deficit narrowed to a five-year low as India imported far fewer goods from China.

- Bilateral trade decreased 5.6% to $87.6 billion, India's imports from China shrank by 10.8% to $66.7 billion, marking the lowest level of inbound shipments since 2016.

- India's exports to China, however, jumped 16%, crossing the $20 billion-mark for the first time to a record high of $20.86 billion.

- The trade deficit, a source of friction in bilateral ties, shrank to $45.8 billion, the lowest level since 2015. India's biggest import in 2019 was electrical machinery and equipment, and fertilizers, while India's top exports that year were iron ore, organic chemicals, cotton and unfinished diamonds.

- Demand for iron ore increased in China, as new infrastructure projects aimed at reviving growth after the COVID-19 slump lifted consumption of steel. Total iron ore imports in Asia's largest economy rose 9.5% in 2020.

- The drop in India's imports from China largely mirrored a decline in overall inbound shipments last year as domestic demand slumped in the wake of the pandemic.

- That makes it difficult to determine whether 2020 is an exception or marks a turn away from the recent pattern of India's trade with China, especially since there is, as yet, no evidence to suggest India has replaced its import dependence on China by either sourcing those goods elsewhere or manufacturing them at home.

- China was "the world's only major economy to have registered positive growth in foreign trade in goods, with China's foreign trade and exports in the first 10 months of the year accounting for a record 12.8% and 14.2% share of the global totals, respectively.

- China posted sharp increases with most of its major trading partners. Exports to the ASEAN bloc, China's largest trading partner last year with bilateral trade rose 6.7%, while exports to the EU, China's second-largest trading partner, also rose 6.7% as total trade reached $649 billion. Despite the trade war with the U.S. and the pandemic, two-way trade was up 8.3% to $586 billion, with China's exports rising 7.9% to reach a record $451 billion.

2.15 Post COVID-19, ILO calls for national-level policy on those working from home

According to the International Labour Organization (ILO) in the report titled Working from home: From invisibility to decent work, there is a need to develop effective policies for home-based workers and ensure their proper implementation even as the practice had increased since the novel corona virus disease (COVID-19) pandemic.

- 10 countries had ratified the Convention on Homework nearly 25 years since it was adopted by the International Labour Conference June 20, 1996.

- Few governments had a comprehensive policy for working from home in place. As a result, those working from home, especially in low-income countries, continued to work in poor working conditions.

- Despite contributing significantly to the economy, home-based working had remained "invisible".

- It also noted that the propensity of women to work from home — 11.5 per cent — was much higher than that of men (5.6 per cent).

- Industrial home-based workers, who are involved in the production of goods including artisanal production, such as making of handicrafts, rolling of beedis, making of laces, etc

- Teleworkers, who use information and communication technologies to perform their work remotely

- Home-based digital platform workers, who are 'crowdworkers' that perform service-sector tasks as specified by employers or intermediaries

- Governments need to play a major role to protect home-workers. It strongly recommended them to adopt a national policy on home-based work.

- It called upon governments to develop and implement a gender-responsive legal and policy framework that provided equal treatment for all categories of home-based workers in relation to other wage earners.

- This included facilitating the transition of informal workers to formal employment.

- Home-based workers needed to be counted better to record their earnings, hours worked and other conditions of employment.

- The labour registries needed to be revised to incorporate "place of work" and count those home-based workers who went missing due to poor labour registries. Few countries had labour inspection schemes adapted for home-based work.
- Need for better compliance, legal protection, occupational safety and social security for industrial home-based workers.

2.16 UN Released International Migration 2020 Report

The United Nations (UN) released the International Migration 2020 Highlights report.

According to the report, Indian diaspora is the largest in the world. As of 2020, more than 18 million people from India are living outside India.

- Other diaspora countries are Mexico, China, Russia, and Syria.
- According to this report, Indian diasporas are distributed in many major countries, such as the UAE (3.5 million), Saudi Arabia (2.5 million) and the United States (2.7 million).
- Some other countries that receive high numbers of immigrants from India are Oman, Australia, Kuwait, Canada, Qatar, Pakistan and the United Kingdom.
- Between 2000 and 2020, the size of immigrant populations in all countries is increasing. During his tenure, India received the largest gain of nearly 10 million. India is followed closely by Syria, Venezuela, China and the Philippines.
- The places where the immigrant population increased during this period were Ukraine, Pakistan, Tanzania, Armenia, India, and Ukraine. Immigration to India is for labor and family reasons.
- The United States is the largest destination country for international immigrants. As of 2020, there are more than 51 million immigrants in the United States. This is equivalent to 18% of the world's total immigrant population.
- The United States is close behind. Germany has hosted the second largest immigrants in the world, with an immigrant population of more than 16 million. Germany is closely followed by Saudi Arabia, Russia and the United Kingdom.
- The number of international immigrants increased by 281 million. It was 221 million in 2010 and 173 million in 2000.
- Currently, the total number of international immigrants accounts for about 3.6% of the world's population.
- In terms of regional migration corridors, Central Asia and South Asia to North Africa and West Asia have seen the most growth. In these corridors, the immigrant population has almost tripled between 2000 and 2020.

2.17 PM Narendra Modi to attend G7 Summit in June 2021

British Prime Minister invited the Indian Prime Minister to the UK for the G7 summit in June 2021.

• The proposed summit will be the first in-person G-7 summit in almost two years, as it will be held in the English region of Cornwall from June 11 to 13.

• Besides India, Australia and South Korea have also been invited as guest countries as a testament to UK's commitment to ensuring multilateral institutions better reflect today's world.

• G7 PLUS India, Australia and South Korea is seen as a gathering of D-10 —10 leaders who represent over 60% of people living in democracies around the world. This is also seen as a signal to China.

• India had attended the G-7 summit in Biarritz in France in August 2019 and was also invited for the 2020 summit hosted by the US — which could not take place due to the pandemic.

• This is expected to be second G-7 summit in the tenure of present PM; his predecessor had attended the G-8 summit (it became G-7 from G-8 with the expulsion of Russia in 2014) five times between 2005 and 2009.

• G7 is the most prominent grouping of democratic countries, and it has long been the catalyst for decisive international action to tackle the greatest challenges. From cancelling developing world debt to our universal condemnation of Russia's annexation of Crimea, the world has looked to the G7 to apply our shared values and diplomatic might to create a more open and prosperous planet.

• The G7, which includes UK, Canada, France, Germany, Italy, Japan, the USA and the EU, is the only forum where the world's most influential and open societies and advanced economies gather for discussions.

• The summit itself will be held in the coastal town of Carbis Bay, supported by neighbouring St. Ives and other towns across the Cornwall region.

• In February, UK will assume the Presidency of the UN Security Council, and, later this year, it will host the COP26 climate summit in Glasgow and a global education conference.

2.18 India to send 20 lakh Covid-19 vaccines to Dhaka, Pakistan explores options

India plans to send 20 lakh doses of Covid-19 vaccines to Bangladesh and on the other hand, Pakistan is exploring options to get made-in-India vaccines, either through a global alliance for vaccines or through the bilateral route.

• On 20 January 2021, a specially equipped plane will carry 20 lakh doses of the Oxford Astra Zeneca vaccine—manufactured in India by the Serum Institute of India under the name Covishield — to Dhaka.

• The consignment will be handed over to the Bangladesh government by the Indian High Commission in Dhaka.

- Pakistan's move to source Indian vaccines comes after the country's drug regulator, the Drug Regulatory Authority of Pakistan (DRAP), approved Oxford-AstraZeneca's Covid-19 vaccine for emergency use.

- Pakistan is planning that it can get the vaccine through Covax, an alliance set up by the Global Alliance for Vaccines and Immunisation (GAVI), Coalition for Epidemic Preparedness Innovations (CEPI) and World Health Organisation.

- The alliance has pledged free vaccines for 20 per cent of the population of around 190 countries, including Pakistan. Pakistan expects to get the first consignment from Covax just after the start of the second quarter of 2021.

- But, for the remaining population, the Oxford-Astra Zeneca vaccine as well as Bharat Biotech-ICMR's Covaxin can be procured through bilateral arrangements.

- Alternatively, Pakistan can procure the India-made vaccines through a third country, but that may push up costs.

- While tensions between India and Pakistan have impacted bilateral trade between the two countries, the supply of "life-saving medicines" is exempted from restrictions.

- Bilateral trade between the two neighbours has almost come to a standstill — first after the Pulwama terror attack in February 2019 and later, after the special status of Jammu and Kashmir was withdrawn.

- Given the tensions, vaccine diplomacy could be key to unlocking the ties.

2.19 Italy 'Ndrangheta group: Biggest mafia trial in decades opens

Italian authorities believe that the Ndrangheta Mafia is responsible for controlling the large amount of cocaine entering Europe from South America. After the large-scale Mafia trial against the Ndrangheta group, the Italian government confirmed this.

- The Ndrangheta is a famous Italian Mafia in the region of Calabria. The Mafia began in the 18th century.

- During the reign of the Bourbon of Naples, the first official report of Ndrangheta was submitted in 1792.

- According to US, money laundering activities, drug trafficking accounts for 3% of Italy's GDP. Ndrangheta's annual revenue is approximately US$50 billion to US$60 billion.

- Ndrangheta is also active in other countries, such as Albania, Australia, Argentina, Belgium, Canada, Brazil, Colombia, the Netherlands, Germany, Malta, Switzerland, Slovakia, the United Kingdom, Uruguay and the United States.

- According to EUROPOL (European Union Agency for Law Enforcement Cooperation), in the whole world Ndrangheta is the most powerful organized crime group.

- Calabria is a region located in southern Italy. The region borders the Ionian Sea to the east and the Tyrrhenian Sea to the west. The Strait of Messina separates Calabria from Sicily. The Mafia in Sicily is considered to be one of Ndrangheta's closest allies.

- The Allies of the Ndrangheta Mafia are Camorra, Sacra Corona Unita, Societafoggiana, Stidda, Albanian Mafia, American Mafia, PrimeriroComando da Capital.

- The Camorra, Safian Mafia, Sacra Corona Unita, Stidda and Societafoggiana are located in Italy. Primeiro Comando da Capital is located in Brazil.

2.20 Henry Passport Index 2021; India ranks 85

India takes the 85th position in the most powerful passport report "Henry Passport Index 2021".

The Henry Passport Index is ranking of all passports in the world based on the number of destinations that the holder can enter without a prior visa.

- The Henry Index is an original ranking of all passports in the globe based on the number of destinations that the holder can enter without a prior visa.

- The ranking was originally created by Dr Christian H. Kaelin, Chairman of Henley & Partners. The Henry Index ranking is from the exclusive data from the IATA (International Air Transport Association). IATA maintains the world's largest and most accurate travel information database.

- Henry Passport Index was launched in 2006 and includes 199 different passports.

- Japan continues to rank first in the index, and passport holders can enter 191 destinations in the world visa-free.

- Singapore ranked second (with a score of 190), and South Korea tied for third with Germany (with a score of 189).

- Syria, Iraq and Afghanistan continue to be the countries with the worst passport holdings, with passport scores of 29, 28 and 26 respectively.

- India took 85th position with a visa-free score of 58. Indian passports rank higher in 2020 (84th) and 2019 (82nd). Pakistan ranks 107th and Nepal ranks 104th.

2.21 China GDP grows 2.3% in 2020, slowest in more than four decades

China's economy expanded in 2020 by 2.3%, the slowest pace of growth since the end of Mao Zedong's Cultural Revolution in 1976.

- China will, however, likely be the only major economy to have avoided a contraction in a pandemic-hit year, underlining its strong recovery after weeks of lockdown at the start of the year brought economic activity in the Asian giant to a near-standstill.

- China will be the only major economy to have avoided a contraction in a pandemic-hit year.

- It underlined its strong recovery after weeks of lockdown at the start of the year brought economic activity in the Asian giant to a near-standstill.

- China's economy contracted 6.8% in the first quarter. The stringent lockdown allowed it to curb the spread of COVID-19.

- The economy recovered to grow 3.2% in the second quarter, 4.9% in the third and 6.5% in the last quarter of 2020.

- While China is currently dealing with the return of clusters of local outbreaks, the fact that the spread was limited and controlled meant the impact on the economy would be "controllable".

- China had also crossed the landmark of 100 trillion yuan ($15.4 trillion) for the first time in 2020.

- A range of stimulus measures, largely led by spending on infrastructure projects, was the main driver of growth in 2020 along with a rebound in exports, which grew 10.9% in December and 4% last year.

- Value-added industrial output was up 2.8%, as the last quarter saw growth of 7.1%. Fixed asset investment grew 2.9%. Retail sales, however, contracted by 3.9% last year, after expanding 8% in 2019.

- The post-pandemic government support measures helped create 11.86 million new urban jobs, beating the 9 million target and marking a turnaround after the first quarter's massive job losses.

2.22 Government of India strengthens cargo handling capacity of Chabahar Port, Iran

The Indian government has strengthened the cargo handling capacity of Iran's Chabahar port.

- India has provided cargo of two Mobile Harbour Cranes (MHC) to Iran's Chabahar Port. According to the contract agreement, the total value of the contract exceeds USD 25 million and a total of 6 MHCs are supplied.

- This is a stage towards India's responsibility towards infrastructure development of Shahid Beheshti Port of Chabahar.

- The bilateral contract between the Islamic Republic of Iran and the Republic of India was signed in 2016, with a total value of USD 85 million, for the equipment, mechanization and start of operation at Shahid Beheshti Port of Chabahar development Phase- I.

- In order to achieve this ambitious goal, an SPV namely India Ports Global Limited (IPGL), Mumbai was incorporated under the ambit of the Ministry of Ports, Shipping and Waterways.

- The development of Chabahar Port is the anchor point for the expansion of economic and mutual relations between India and Iran, and it will further promote the maritime trade between both countries.

- The geographical location of Chabahar Port has strategic advantages and huge potential. It can establish connectivity between India, Iran, Afghanistan, Uzbekistan and other CIS countries (especially the eastern countries of the CIS) to increase these Trade between countries.

2.23 Indian- French Rafale fighters to take part in joint combat

India and France will hold ex-Desert Knight 21 exercises. This is a bilateral air exercise between the Indian Air Force and the French Air Force. Desert Knight 21 will be held in Jodhpur, Rajasthan.

- Rafale fighters will participate in the exercise.

- Under the leadership of the Indo-French Defense Cooperation Organization, the French Air Force and the Indian Air Force have so far conducted six air exercises called the "Eagle."

- The last of the six exercises was held at Mont-de-Marsan Air Force Base in France in 2019. In addition to the Garuda series of exercises, "Desert Front Knight 21" will also be held.

- About Former Desert Rider 21: The main purpose of this exercise is to provide operational risks and share best practices. Rafale flying jets from the French Aerospace Agency, multi-purpose tanker transport aircraft and approximately 175 personnel will participate in the exercise. Su-30 MKI, Mirage 2000 and IL-78 flying tankers from the Indian Air Force will participate in this exercise.

- The regular defense exercises between India and France are as follows:

- Shakti exercise was held between the Indian and French forces

- The Varuna exercise was held between the Indian Navy and the French Navy

- The Garuda exercise was held between the two air forces

- The three main pillars of the India-French strategic partnership are space, defense and civil nuclear cooperation.

- France has been supporting India as a permanent member of the UN Security Council. France has also received strong support from India in the missile technology control system, the Wassenaar arrangement, the Australian group and the nuclear supplier group.

- India joined the Wassenaar Arrangement and became the 42nd member. In addition, India joined the missile technology control regime in 2018. Since India is a non-signatory of the NPT, India's accession has been widely opposed.

2.24 PM Modi, Xi Jinping among world leaders to participate in virtual Davos summit

Prime Minister Narendra Modi and Chinese President Xi Jinping will attend the Davos Agenda Summit. The Davos Agenda Summit was organized by the World Economic Forum.

- The "Great Reset Initiative" of the World Economic Forum will be launched during the Davos Agenda Summit.

- The theme of the Davos Agenda Summit in 2021 is "Stakeholders Build a Cohesive and Sustainable World".

- The US priority policy of the United States has caused a huge collapse in international agreements in the past few years. It broke several global agreements including the Paris climate change agreement.

- Tensions in Iran: Under the authorization of US President Donald Trump, General Qassem Soleimani was killed by US troops in a drone attack. This has exacerbated geopolitical tensions between the United States and Iran.

- Since the Cold War, Russia's annexation of Crimea has put greater pressure on the tensions between the United States and Russia.

- In 2021, the World Economic Forum proposed a new bimodal system at its Davos meeting. One of the meetings is the usual Davos Agenda Summit, and the other is the new big reset initiative.

- Just like the Davos Agenda Summit, the Great Reset Initiative will convene world leaders and will mainly focus on managing the immediate consequences of the COVID-19 crisis. Basically, the big reset plan is being launched to recover the global economy from the COVID-19 crisis.

3. INDIAN ECONOMY

3.1 <u>**The Reserve Bank of India (RBI) has constructed a composite Digital Payments Index (DPI) to capture the extent of digitization of payments across the country.**</u>

- The RBI-DPI has been constructed with March 2018 as the base period.
- The DPI for March 2019 and March 2020 work out to 153.47 and 207.84 respectively, indicating appreciable growth.
- The RBI-DPI comprises five broad parameters, including
  1. Payment enablers (weight 25 per cent)
  2. Payment infrastructure–demand-side factors (10 per cent)
  3. Payment infrastructure – supply-side factors (15 per cent)
  4. Payment performance (45 per cent) and
  5. Consumer centricity (5 per cent)
- These parameters would enable measurement of deepening and penetration of digital payments in the country over different time periods.
- Each of these parameters have sub-parameters which, in turn, consist of various measurable indicators.
- The DPI reflects accurately the penetration and deepening of various digital payment modes.

3.2 <u>**RBI issues guidelines for fund to boost digital payment infra**</u>

- The Reserve Bank operationalised Payments Infrastructure Development Fund to create 30 lakh new touch points every year for digital payments in Tier-3 to Tier-6 centres.
- In June 2020, the RBI had announced the creation of Payments Infrastructure Development Fund (PIDF).
- The fund intended to subsidise deployment of payment acceptance infrastructure like Points of Sale (PoS) machines in Tier-3 to Tier-6 centres, with special focus on the north-eastern states.
- The POS machines allow businesses to accept e-payments, thereby reducing the need to deal in cash.
- An Advisory Council (AC) has been constituted to govern the PIDF but it will be managed and administered by the RBI..
- It will be operational for a period of three years from January 01, 2021, and maybe extended for two more years, depending upon the progress.
- The objective of PIDF is to increase the number of acceptance devices multi-fold in the country. The Scheme is expected to benefit the acquiring banks/non-banks and merchants by lowering overall acceptance infrastructure cost.

- The fund is also in line with the measures proposed by the vision document on payment and settlement systems in India 2019-2021.

3.3 PM unveils project for affordable housing

- Prime Minister laid the foundation stone of six Light House Projects in six cities as part of the Global Housing Technology Challenge India (GHTC-India) initiative.

- Aim is to build around 1,000 houses each in Indore (Madhya Pradesh), Rajkot (Gujarat), Chennai (Tamil Nadu), Ranchi (Jharkhand), Agartala (Tripura) and Lucknow (Uttar Pradesh) over a period of 12 months.

- Modern construction practices from countries such as France, Germany and Canada would be adopted.

- The GHTC provided the scope for incubating new technologies for construction and innovation, and called upon planners, architects and students to visit the project sites, learn from the technologies, and mould them for use in accordance with the local requirements.

- Major initiative — the Central rental housing complex project — was conceived last year, for migrant labourers. The project was being implemented in coordination with industrialists and other investors.

- **Prime Minister declared the year 2019-20 as 'Construction Technology Year' while inaugurating GHTC-India in March, 2019 to promote new and alternate technologies at a large scale.**

- LHPs are model housing projects with houses built with shortlisted alternate technology suitable to the geo-climatic and hazard conditions of the region.

- This will demonstrate and deliver ready to live houses with speed, economy and with better quality of construction in a sustainable manner.

- Approvals will be accorded through a fast track process by the concerned State Government.

- These LHPs shall serve as LIVE Laboratories for different aspects of Transfer of technologies to field application, such as planning, design, construction practices, testing etc.

- It will be available for both faculty and students, Builders, Professionals of Private and Public sectors and other stakeholders involved in such construction.

- Six Technology providers have been selected through rigorous online bidding process for construction of Light House Projects (LHPs) at six differnet locations in six states.

3.4 Maintaining inflation target at 4% is appropriate for India: RBI Working Paper

- A Reserve Bank of India (RBI) working paper has recommended that India should maintain the inflation target at 4 per cent.

- The paper, authored by Harendra Kumar Behera and Michael DebabrataPatra, comes amid the growing speculations that the Centre may ask the central bank to relax its inflation target to help push the economy back on the track.

- The working paper is published by the RBI's Department of Economic and Policy Research. It noted that central to monetary policy is the concept of 'Trend Inflation' to which actual inflation outcomes are expected to converge after short-run fluctuations die out.

- Accordingly, the inflation target needs to be fixed in alignment with trend inflation to avoid unhinging inflation expectations and flattening the aggregate supply curve or imparting a deflationary bias to the economy.

- "Results from a regime switching model applied to a 'hybrid New Keynesian Philips' curve suggest a steady decline in trend inflation since 2014 to 4.1-4.3 per cent just before Covid-19 struck. This points to maintaining the inflation target at 4 per cent for India," the paper authored by Harendra Kumar Behera and Michael Debabrata Patra of RBI.

- "Analogously, a target that is fixed above trend renders monetary policy too expansionary and prone to inflationary shocks and unanchored expectations. Hence, maintaining the inflation target at 4 per cent is appropriate for India," it said.

- The paper added the decline in trend inflation since 2014 is, however, coincident with a flattening of the 'Philips Curve'.

- Trend inflation provides key insights for monetary policy committee in at least three important ways.

- The Phillips curve is an economic concept that shows that inflation and unemployment have a stable and inverse relationship.

- "First, the level and variability of trend inflation indicate how anchored inflation expectations are. Second, it is a valuable gauge of the appropriateness of the monetary policy stance and the necessity or otherwise of additional monetary policy actions to achieve steady state inflation," it said.

- Third, trend inflation provides a centering point for the evaluation of inflation forecasts over various time periods and, this, in turn, can usefully inform the setting of monetary policy.

3.5 Govt extends deadline for 100% collection of toll charges on National Highways through FASTag till February 15

- The Ministry of Road Transport & Highways has extended the deadline for 100 percent collection of toll charges on the National Highway (NH) network through FASTag till February 15.

- Earlier, the National Highways Authority of India (NHAI) had announced to completely do away with cash transactions for paying toll charges from January 1.

- Currently, the share of transactions by FASTag is hovering around 75 to 80 percent. In a communication to NHAI, the ministry has said the highways authority can obtain the needed regulatory requirement from it for ensuring 100 percent cashless fee collection from February 15.

- In order to discourage cash transactions at toll plazas, all lanes barring one on each side have been made dedicated "FASTag lanes" and any vehicle entering these lanes without FASTag are liable to pay double the normal toll fee.

- The FASTag is a reloadable tag that allows automatic deduction of toll without having to stop for carrying out the cash transaction. The tag uses radio frequency identification (RFID) technology and is fixed on the windscreen of the vehicle once active.

- The tag is valid for five years and comes in seven different colours — violet, orange, yellow, green, pink, blue, black. Each colour is assigned to a particular category of vehicles.

- It was rolled out in April 2016, and the Government made it mandatory from December 1, 2017 for all new cars and trucks to be fitted with a FASTag before they were sold.

- To encourage the use of FASTags, the National Highway Authority of India (NHAI) refunds 5% of the total monthly transactions.

- Indian Highways Management Company Limited (IHMCL) (a company incorporated by National Highways Authority of India) and National Payment Corporation of India (NPCI) are implementing this program.

- FASTag is presently operational at both, national and state highways.

Benefits

- Ease of payment – No need to carry cash for the toll transactions, saves time.

- Near non-stop movement of vehicles leading to lower fuel cost.

- Other benefits are:
  - **Environmental benefit** : reduced air pollution, reduced use of paper.
  - **Social benefit :** reduced toll payment hassles ,analytics for better highway management.
  - **Economic benefit :** reduced effort in management at toll plaza, reduced effort in monitoring centrally.

3.6 FSSAI slashes limit for trans-fat levels in foods

- The Food Safety and Standards Authority of India (FSSAI) amended to the Food Safety and Standards (Prohibition and Restriction on Sales) Regulations.

- Now, it has capped the number of trans fatty acids (TFA) in oils and fats to 3% for 2021 and 2% by 2022 from the current permissible limit of 5% through an amendment.

● FSSAI, in 2020, issued a draft on the subject for consultation with stakeholders. The revised regulation applies to edible refined oils, vanaspati (partially hydrogenated oils), margarine, bakery shortenings, and other mediums of cooking such as vegetable fat spreads and mixed fat spreads.

● While the regulation comes into effect immediately, industry players were made to take a pledge back in 2018 that they would comply with WHO's call for action to reduce TFA by 3% by 2021 allowing them three years to comply with the latest regulation.

● It was in 2011 that India first passed a regulation that set a TFA limit of 10% in oils and fats, which was further reduced to 5% in 2015.

● These are the most harmful type of fats which can have much more adverse effects on our body than any other dietary constituent.

● Trans fats are associated with an increased risk of heart attacks and death from coronary heart disease. As per the World Health Organization (WHO), approximately 5.4 lakh deaths take place each year globally because of the intake of industrially produced trans-fatty acids. The WHO has also called for the global elimination of trans fats by 2023.

● WHO has also warned India, Pakistan, Bangladesh, Nepal and Bhutan as they were among countries that need to act urgently against trans-fat.

● FSSAI launched two initiatives for reducing consumption of trans fat i.e. Eat Right Movement and Heart Attack Rewind mass media campaign.

● The Ministry of Health & Family Welfare is the administrative Ministry for the implementation of FSSAI.

FSSAI Initiatives

● **Heart Attack Rewind –** It is the first mass media campaign of FSSAI. It is aimed to support FSSAI's target of eliminating trans fat in India by the year 2022.

● **FSSAI-CHIFSS –** It is collaboration between FSSAI and CII-HUL Initiative on Food Safety Sciences to promote collaborations between Industry, Scientific Community, Academia for food safety.

● **Swasth Bharat Yatra –** It is a Pan-India cycle movement called as 'Eat Right India' aimed to create consumer awareness about eating safe and nutritious food.

3.7 Chinese firm to build stretch of Delhi-Meerut RRTS project

● Shanghai Tunnel Engineering Company will build a 5.6-km underground stretch of the upcoming Delhi-Meerut RRTS project between New Ashok Nagar and Sahibabad.

● The National Capital Region Transport Corporation (NCRTC) is executing the country's first Delhi-Ghaziabad-Meerut Regional Rapid Rail Transit System (RRTS) project.

- The 82-km-long Delhi-Ghaziabad-Meerut RRTS corridor is being funded by the Asian Development Bank (ADB) and procurement is governed by the guidelines of the bank and the government.
- The 17-km priority corridor of the Delhi-Meerut RRTS from Sahibabad to Doha will be operational in 2023 and the entire corridor will be operational in 2025.
- The cost of the entire corridor has been pegged at Rs 3,0724 crore out of which, the UP government's share will be Rs 6,500 crore. Once completed, trains with an average speed of 100kmph will cover the 82km distance in 55 minutes

Features:

- It will have **lighting and temperature control systems** to enhance passenger experience and reduce energy consumption.
- It will also have **business class (one coach per train)** with spacious, comfortable and reclining seats which will be accessible through a special lounge at the platform-level
- The trains will be **lightweight and fully air-conditioned.**
- Each car will have six automatic plug-in type wide doors, three on each side for ease of access and exit.
- It will have transverse 2×2 seating with adequate legroom, optimised aisle width with grab handles and grab poles, for a comfortable journey for standing passengers, overhead luggage rack, mobile/laptop charging sockets and on-board Wi-Fi among other computer-centric features.

3.8 Donald Trump extends bans H-1B visa until March 31, Indian IT professionals to be hit

- US President extended pandemic related bans on green cards and work visas to large groups of applicants through 31st March 2021. This has made U.S. immigration policy more restrictive.
- In April 2019, US imposed a ban on green cards issued abroad that largely targets family members of people already in the U.S.
- Further in June 2019, US added H1B visas, which are widely used by American and Indian technology company workers and their families; H2B visas for nonagricultural seasonal workers; J1 visas for cultural exchanges; and L1 visas for managers and other key employees of multinational corporations.
- The effects of COVID-19 on the U.S. labour market and on the health of American communities is a matter of ongoing national concern for US. Hence, these measures would protect American jobs in a pandemic wracked economy, while on the other hand, this step would hamper a recovery.

3.9 **Cabinet approves Industrial Corridor nodes at Krishnapatnam and Tumakuru at estimated cost of 7,725 crore**

- The Cabinet approved the Industrial Corridor nodes at Krishnapatnam and Tumakuru under Chennai Bangalore Industrial Corridor (CBIC).

- The Cabinet has approved the Ministry of Industry and Internal Trade Promotion (DPIIT) proposal for the construction of various trunk line infrastructure components.

- The Cabinet has approved the proposal by the Ministry of Industry and Internal Trade Promotion (DPIIT) to build various trunk line infrastructure components for use in:
  - Krishnapatnam Industrial Zone, Andhra Pradesh
  - Tumakuru Industrial Zone, Karnataka

- Multi-Modal Logistics Hub - MMLH and Multi-Modal Transport Hub -MMTH in Greater Noida, Uttar Pradesh

- In November 2019, the government approved the creation of five industrial corridor projects, which will be implemented via National Industrial Corridor Development and Implementation Trust - NICDIT.

- Krishnapatnam Industrial Zone and Tumakuru Industrial Zone are under the Chennai Bangalore Industrial Corridor (CBIC).

- These greenfield industrial cities will be self-sufficient through world-class infrastructure, road and rail connections, in order to achieve freight transportation to and from ports and logistics hubs, as well as reliable electricity and high-quality social infrastructure.

- Multi-Modal Logistics Hub project will be developed into a world-class facility that can provide effective food storage for the dedicated freight channel (DFC).

- It will provide a one-stop destination for freight companies and customers. The facility provides standard container handling activities.

- It provides various value-added services to reduce logistics costs and increase operational efficiency.

- Multi-Modal Transport Hub - MMTH project will be located near the already existing Indian railway station in Boraki.

- It will serve as a transportation hub, providing passengers with rail, road and MRTS accessibility in a seamless manner.

- MMTH will provide space for interstate bus terminal (ISBT), local bus terminal (LBT), subway, commercial, retail and hotel spaces, and green open spaces.

- The project will provide world-class passenger transportation facilities for the growing population of the catchment area to cater to the upcoming development of the United States. The NCR sub-region thus eliminates the congestion in Delhi.
- This will also increase employment opportunities.

3.10 New Web Portal & Mobile App - E-Sampada

- In line with the objectives of boosting transparency and accountability while ensuring ease of living for the citizens, the Directorate of Estates, Ministry of Housing and Urban Affairs launched a new Web Portal and Mobile App, e-Sampada.
- The new application provides a single window for all these services including allotment for over one lakh government residential accommodations, office space allotment to government organisations, booking of 1,176 holiday home rooms and venues like 5, Ashoka Road for social functions etc.
- In its endeavour to provide 'One Nation, One System'.
- This is a significant step towards promotion of e-governance to boost transparency and accountability in providing various Estate Services like allotment, retention, regularisation, no dues certificate etc.
- E-Sampada will promote ease of living for Government of India officers / Departments as all services can be availed online on a single window with a live tracking of applications.
- The automated processes will minimize human intervention and will lead to greater transparency.
- The new Web Portal and Mobile App have been developed by NIC.
- The portal provides online facility to users across India to lodge complaints, submit documents and appear for virtual hearing. It will reduce administrative cost and will save time and resources by reducing visits to Directorate of Estate.
- E-Sampada Mobile App and Chatbot facility has been provided for better user experience.

3.11 Rule of 1% GST liability payable in cash may impact 45,000 units

- The Central Board of Indirect Taxes and Customs (CBIC) has made it mandatory for businesses with a monthly turnover of more than Rs. 50 lakh to pay at least 1% of their Goods and Services Tax (GST) liability in cash. It will be effective from 1st January 2021.
- The new rule restricts the use of Input Tax Credit (ITC) for discharging GST liability to 99%.
- So far, CBIC has booked about 12,000 ITC fraud cases and arrested 365 people so that this move will stop tax evasion through false invoices.
- Provide ITC to offset taxes on the purchase of raw materials, consumables, goods or services used to manufacture goods or services. This helps avoid the cascading effect of taxes and double taxation

This restriction does not apply to the following situations:

- The general manager or any partner paid more than Rs. 100,000 income tax, or

- The registered person has received a refund amount of more than Rs. 100,000 in the preceding financial year on account of unutilized input tax credit.

- This accounts for only 0.37% of the total number of companies registered in the GST system.

- In the total base of 12 billion GST taxpayers, only about 400,000 monthly supplies are worth more than Rs. 5000000

- Among them, only about 1.5 lakh pay less than 1% of their GST liability in cash, and when exclusions in the rule are applied, around 1.05 lakh taxpayers get further excluded.

- Therefore, the rule only applies to 40,000 to 45,000 taxpayers.

Criticism:

- People are worried that mandatory cash payments will adversely affect small businesses, increase their working capital needs, and make GST a more complicated indirect tax system.

- It is part of the Department of Revenue under the Ministry of Finance. The Central Board of Excise and Customs (CBEC) was renamed as the CBIC in 2018 after the GST rollout. It is responsible for formulating policies related to tariffs and collections, Central excise duties, Central GST (CGST) and Integrated GST (IGST).

3.12 Vietnam buys Indian rice for first time in decades

- Vietnam purchased Indian Rice for first time in decades. In December 2020, China started buying Indian rice for the first time in at least three decades

- Vietnam, the world's third biggest exporter of rice, has started buying the grain from rival India for the first time in decades due to limited domestic supplies and high prices.

- The purchases highlight tightening supplies in Asia, which could lift rice prices in 2021 and even force traditional buyers of rice from Thailand and Vietnam to switch to India - the world's biggest exporter of the grain.

- The shrinking supplies will heighten concerns about food insecurity with sub-Saharan Africa among the areas where import demand has been increasing due partly to population growth.

- According to the World Bank, chronic and acute hunger is on the rise, impacting vulnerable households in almost every country, with the COVID-19 pandemic reducing incomes and disrupting supply chains.

- Global pandemic has also prompted Vietnam and other countries to stockpile rice to ensure food availability amid coronavirus-driven supply chain disruptions worldwide.

- Robust demand from Asian and African countries has also been lifting Indian prices but they are still very competitive due to ample stocks.

- In December 2020, the world's biggest rice importer China started buying Indian rice for the first time in at least three decades due to tightening supplies from Thailand, Myanmar and Vietnam and an offer of sharply discounted prices. In 2020 India exported a record 14 million tonnes of rice.

What is the status of India's rice trade?

- India emerged the world's largest rice exporter in 2011-12, displacing Thailand from its leadership position.

- As opposed to exports of around 1,00,000 tons of non-basmati rice in 2010-11, exports soared to 4 million tons in 2011-12.

- Exports of basmati rice in those two years stood at 2.3 and 3.2 million tons respectively.

- The continuous increase in exports of non-basmati varieties since then, to 8.2 million tons in 2014-15.

- After a fall to 6.4 million tons in the subsequent year, a rise again to 8.6 million tons in 2017-18.

- The consequent increase in domestic prices obviously reduced the incentive to sell in export markets rather than to the government or in the local market.

- India was a major beneficiary, recording a sharp increase in exports of non-basmati varieties.

- India's share in world exports in recent years (2014-18) has stayed at 25-26 per cent, Thailand's has fluctuated between 22 and 25 per cent, and Vietnam's between 13 and 16 per cent.

What is the reason behind such trend?

- Union government at 2011-12, decide to lift a four-year ban on exports of non-basmati varieties of rice, paving the way for a rise in exports of those varieties.

- The then Thai government also decided to favor farmers by strengthening a Rice Pledging Scheme under which it promised to procure unlimited stocks at an enhanced price that reflected a 50 per cent increase over 2010.

- Despite significant price difference between basmati and non-basmati rice varieties, the difference in foreign exchange earned from exports of these varieties has narrowed considerably.

- The increase in non-basmati exports occurred despite the fact that the enhanced pledging scheme in Thailand was suspended in early 2014, that production in India did not rise much till 2016-17.

What are the significant outcomes?

- The exports to production ratio for rice in India rose from 2.4 per cent in 2009-10 to 6.8 per cent in 2011-12 and 9.6 per cent in 2012-13, after which it has fluctuated between 9.9 and 11.3 per cent.

- In normal circumstances, this should have resulted in a degree of price buoyancy in domestic markets, and discouraged exports.

- But the incentive to export seems to have remained high and persistent.
- Due to this over a relatively long period domestic demand for rice has remained below domestic availability, even after taking rising export ratios into account.
- The minimum support price (MSP) (adjusted for the paddy to rice conversion) at which rice was procured by the government, presumably setting a floor to market prices, rose over time but remained consistently below the export price for Grade A rice from India until mid-2015
- So rather than the procurement price, it may be the quantum of procurement that has been kept at levels that have not affected the incentive to export rice.
- This limited effect of procurement on the incentive to export is reflected in the relationship between the export price and wholesale prices in three metro cities, for example.
- Wholesale prices have more or less matched the export price in Delhi and Mumbai, though the wholesale price in Chennai is afflicted by unusual volatility that needs a separate explanation.
- Going by this trend, it appears that after non-basmati exports were liberalized, the international price has set the range of domestic prices, resulting in an implicit calibration of domestic prices with border prices.

How this trend favored capitalists instead farmers?

- Domestic demand for rice has remained below domestic availability, despite the rising share of exports to domestic production.
- This subdued demand hits farmers, who find cultivation increasingly unviable despite rising rice exports.
- Moreover, the benefit of a "disciplining" international price does not seem to have accrued to consumers.
- Retail prices in all metropolitan cities have remained well above the export price showing high and rising distribution margins.
- So the liberalization of the rice trade seems to have benefited only one section, the merchant capitalists, and not the actual producers or consumers

3.13 COVID-19 restrictions to continue for budget session of Parliament

- The budget session of Parliament is expected to be held under similar COVID-19 safety measures and restrictions, including strict physical distancing norms, that were in place for the monsoon session.
- The Parliament is expected to be convened in the fourth week of January. The Budget as a norm is presented on February 1.

- For the first time ever, the Members of Parliament are likely to be seated in three different places — the Rajya Sabha chamber, the Lok Sabha chamber and the central hall — for President Ram NathKovind's address at the beginning of the session.

- So far there is no clarity on whether the Question Hour which was suspended during the monsoon session as part of the COVID-19 restrictions will resume in the budget session.

- The Rajya Sabha chamber can accomodate 60 members, while the Lok Sabha chamber can seat 132. The remaining members will be accommodated in the visitors' gallery of both the Houses.

- The government had canceled the winter session of Parliament citing the COVID-19 situation.

- The two sessions that were held last year — the budget session and the monsoon session — also had to be cut short. The budget session, which was scheduled to have 31 sittings, was brought to a close after 23 sittings. Similarly, the monsoon session could manage only 10 sittings instead of the scheduled 18.

3.14 Faceless tax scheme delivers 24,000 final orders

The faceless tax assessment scheme of Government of India has managed to deliver about 24,000 final orders since August 2020.

- The introduction of scheme of faceless e-assessment was proposed by the Finance Minister in the Union Budget 2019.

- This scheme removes individual tax officials' discretion and potential harassment for income tax payers.

- The main objective is to remove physical interaction as much as possible.

- It also allows for appropriate cases where a certain hearing is necessary, so then after following protocols, a hearing is given.

About the scheme

- In the first phase, the I-T Department has selected 58,322 cases for scrutiny, for which e-notices have been served before September 30, belonging to cases of Assessment Year 2018-19, the Department said in a statement.

- Cases for scrutiny in first phase has been identified based on risk parameters and are computer generated.

- The NeAC will be based in Delhi, and will look after the functioning of the e-Assessment scheme. The body would be headed by Principal Chief Commissioner of Income Tax.

- There would be eight Regional e-Assessment Centres (ReAC) in Delhi, Mumbai, Chennai, Kolkata Ahmedabad, Pune, Bengaluru and Hyderabad.

- Apart from assessment units, these centres would also be home to review, technical and verification units.

- Each ReAC will be headed by Chief Commissioner of Income Tax.

- Cases for the specified work shall be assigned by the NeAC to different units by way of automated allocation systems.

- Under the new system of faceless e-Assessment, a tax payer will receive notice on their registered e-mail as well as on registered account on the web portal with real time alert by way of SMS on the registered mobile number, specifying the issues for which the case has been selected for scrutiny.

- The reply to the notice can be prepared at ease by the taxpayer at their own residence or office and can be sent by email to the NeAC by uploading the same on the designated web portal.

3.15 Govt launches 'ToyCathon 2021' to make India a global hub for toy manufacturing

- The government launched "Toycathon" -- a hackathon for students, teachers, experts and startups to crowdsource ideas for developing innovative toys and games based on Indian culture and ethos.

- The ministries of education, women and child development (WCD), textiles, commerce and industry; MSME, information and broadcasting, and the All India Council for Technical Education have jointly launched Toycathon-2021.

- India imports most of its toys and the government is working towards promoting the indigenous toy industry for making the country self-reliant in the sector.

- The size of the toy market in India is about USD 1 billion but unfortunately 80 per cent of the toys are imported.

- The launch of Toycathon is an endeavour by the government to create an ecosystem for the domestic toy industry and the local manufacturers, tapping the untapped resources and utilising their potential.

- This Toycathon is aimed to conceptualize innovative toys based on the Indian value system which will inculcate the positive behaviour and good values among the children.

- The Toycathon is based on nine themes -- Indian culture, history, knowledge of India and ethos; learning, education and schooling; social and human values; occupations and specific fields; environment; divyang ; fitness and sport; out-of-the-box, creative and logical thinking and rediscovering traditional Indian toys.

- The Toycathon will have three levels -- junior, senior and startup.

- While this will greatly help India develop into a global hub for toys and games, it will also help our children to understand the ethos and values of Indian culture as envisaged in the National Education Policy 2020.

- National Education Policy-2020 also lays emphasis on innovation and research in learning, starting from primary education.

- Aligned with the goals of National Education Policy, the Toycathon aims to capture innovative prowess of 33 crore students across the country.

- The collaboration with the Ministry of Education paves the way for the participation of students, faculties from all schools, colleges and universities with regards to needs of the MSME industry.

- This is the first time when school children will innovate, design and conceptualise toys also for specially-abled "divyang children".

3.16 World Bank expects global economy to expand by 4% in 2021

- The World Bank highlighted in its January 2021 Global Economic Prospects that the global economy is expected to expand 4% in 2021 after shrinking 4.3% in 2020.

- Although global economic output is recovering from the collapse triggered by COVID-19, it will remain below pre-pandemic trends for a prolonged period. The pandemic has exacerbated the risks associated with a decade-long wave of global debt accumulation. It is also likely to steepen the long-expected slowdown in potential growth over the next decade.

- It also warned that rising COVID-19 infections and delays in vaccine distribution could limit the recovery to just 1.6% in 2021.

- The World Bank showed the collapse in activity due to the coronavirus pandemic was slightly less severe than previously forecast, but the recovery was also more subdued and still subject to considerable downside risk.

- With successful pandemic control and a faster vaccination process, global growth could accelerate to nearly 5%.

- Shallower contractions in advanced economies and a more robust recovery in China helped avert a bigger collapse in overall global output, but disruptions were more acute in most other emerging market and developing economies.

- Aggregate gross domestic product in emerging markets and developing economies - including China - is expected to grow 5% in 2021 after a contraction of 2.6% in 2020.

- Excluding China, emerging market and developing economies were seen expanding 3.4% in 2021 after shrinking 5% in 2020.

- Per capita incomes have dropped in 90% of emerging market and developing economies, tipping millions back into poverty, with reduced investor confidence, increasing unemployment and loss of education time seen dampening prospects for future poverty reduction.

- The crisis also triggered a surge in debt levels among emerging market and developing economies, with government debt up by 9 percentage points of GDP - the largest one-year spike since the late 1980s.

3.17 'Recovery to bank on economic activities, increased mobility'

- According to the Finance Ministry in its Monthly Economic Review for December 2020, post-vaccination, the resumption in economic activity and increased mobility are expected to lead towards a path of economic recovery in the aftermath of the Covid-19 pandemic.

- The approval of the vaccine and initiation of vaccination drives in countries gives strength to optimism on both health and economic fronts despite continuing surge in global cases.

- The approval of the vaccines across the world has ignited optimism for economic recovery in 2021.

- So far, two vaccines – Serum Institute of India's Covishield and Bharat Biotech's Covaxin – have been approved for emergency use while various other vaccines have successfully hit trial status in India.

- Prospects of faster recovery in emerging economies and potential growth prospects driven by vaccine availability have bolstered market sentiment.

- Vaccine prospects are also expected to boost oil demand in the country.

- The effective management of COVID-19 spread despite the festive season and onset of the winter season, combined with sustained improvement in high-frequency indicators and V-shaped recovery along with easing of lockdown restrictions distinguish Indian economy as one riding against the COVID-19 wave.

- The liquidity situation remains comfortable as the accumulation of dollars along with the growth of currency in circulation are enhancing liquidity in the banking system despite the average daily net absorptions by the RBI rising in December 2020, compared to the preceding month.

3.18 Government looks to launch seaplane services with airline operators: Ports Min

- The Ministry of Ports, Shipping and Waterways is starting the ambitious Project of Sagarmala Seaplane Services (SSPS) with potential airline operators.

- A seaplane is a fixed-wing aeroplane designed for taking off and landing on water.

- The project is being initiated under a Special Purpose Vehicle (SPV) framework through prospective airline operators.

- The project execution and implementation would be through Sagarmala Development Company Ltd (SDCL), which is under the administrative control of the Ministry of Ports, Shipping and Waterways.

- Airline operators will be invited to form a SPV with SDCL.

- The routes may be operated under the government's subsidised udedeshkaaamnagrik (UDAN) scheme.

- The seaplanes services will provide a supplementary means of faster and comfortable transportation in India.
- It will provide infrastructure enhancements at the places of operations.
- It will provide air connectivity to various remote religious/tourist places.
- It will save travel time and stimulate localized short distance travelling especially in the hilly regions or across the rivers/lakes etc.
- It will generate employment opportunities.
- It will boost tourism for domestic and international holiday makers.

3.19 Exim Bank raises Rs 1 billion through 10-year dollar bond at record low coupon rate

- The Export-Import Bank has raised US$1 billion through the sale of US dollar bonds to international investors.
- The Export-Import Bank of India is a specialized financial institution wholly-owned by the Indian government and was established in 1982 to provide financing, facilitation and promotion of trade in India.
- The Export-Import Bank provides financial assistance to exporters and importers.
- It is the main financial institution responsible for coordinating the work of institutions engaged in financing the import & export of goods and services to promote international trade in the country.

3.20 'India lost $2.8 bn in 2020 to Internet shutdowns; over double of 20 others'

- According to a report by the UK-based privacy and security research firm Top10VPN, India suffered the biggest economic impact in the world in 2020 due to Internet shutdowns, adding up to 8,927 hours and $2.8 billion losses.
- Actual economic impact for India may be even higher than the $2.8 billion figure — which itself was double the combined losses on account of Internet shutdowns in 2019 for the next 20 countries in the list, with businesses in 2020 anyway hit due to the COVID-19 lockdown.
- As in previous years, India continued to restrict Internet access more than any other country — over 75 times in 2020.
- The majority of these short blackouts were highly targeted, affecting groups of villages or individual city districts, and so were not included in this report, which focuses on larger region-wide shutdowns.
- The report made a separate mention of the extended curbs on Internet use in Kashmir, with suspension of services lasting from August 2019 to March 2020, and still availability of 2G access. It called it as "the longest Internet shutdown in a democracy".

- The restrictions have negatively impacted the distribution of medicine, businesses and schools. According to the latest Telecom Regulatory Authority of India data, as of October 31, there were 11.70 million wireless subscribers in the J&K circle.

- While the economic impact due to Internet curbs surged in India in 2020, globally, at $4.01 billion, this came down by 50 per cent from 2019.

- India witnessed restrictions in J&K which accounted for the highest share of Internet blackouts in the country, but localised shutdowns were also seen in regions in Arunachal Pradesh, and Meghalaya.

- The world saw 93 major shutdowns during the pandemic-stricken year. Apart from India, the report features Belarus, Myanmar, Yemen, Ethiopia, Azerbaijan, Turkey, Syria, Iran, Tanzania, Venezuela and Somalia.

- Countries such as China and North Korea, which are known to restrict access to the Internet, are not in the list prepared by Top10VPN.

3.21 Number of India's elderly to triple by 2050

- Union Ministry for Health & Family Welfare released INDIA REPORT on Longitudinal Ageing Study of India (LASI) Wave-1 today on the virtual platform.

- In 2011 census, the 60+ population accounted for 8.6% of India's population, accounting for 103 million elderly people. Growing at around 3% annually, the number of elderly age population will rise to 319 million in 2050.75% of the elderly people suffer from one or the other chronic disease.

- 40% of the elderly people have one or the other disability and 20% have issues related to mental health.

- Around 23 per cent of the elderly population (age 60 years and above) have multi-morbidities; elderly women are more likely to have multi-morbidity conditions.

- The results of the survey encapsulated data from more than 42,000 households, covering over 72,000 older adults across all states and union territories except Sikkim.

- Self-reported presence of major chronic health conditions and multi-morbidities among those aged 45 and above increased with age.

- The chronic health conditions are pronounced among those aged 75 and above and are dominated by cardiovascular diseases (CVD) and hypertension.

- The percentage of people without morbidity consistently declined with age. About 73 per cent of the population below age 45 are found to be having no morbid conditions and this share is reduced to 44 per cent in the age group 75 and above. The decline, however, is slower from age 60 onward.

- One fifth of the population below 45 years had a single morbid condition and amongst the oldest old, one out of every three possessed a morbid condition.

- A tenth of the people in the age group 45-49 had multi-morbidity while 26 per cent among the elderly of age 70-74 have these conditions. However, this reduced by two percentage points for the next age group of 75-79.

- Cardiovascular diseases (CVD) are the most prominent among those above 45.

- Bone or joint diseases and diabetes are also observed to be high among the elderly.

- Chronic lung diseases show a fluctuating pattern with rise in age. Neurological or psychiatric conditions constitute small part of the morbid conditions found among the elderly and the rate sees a noticeable rise after age 74.

- Share of people living with cancer was only around 0.7 per cent among the senior citizens. The prevalence of high cholesterol and stroke among the same demographic is about 2.5 and 2.7 per cent respectively.

- By 2030, 45 per cent of the total burden of diseases, majorly non-communicable, is expected to be borne by the old-age population. Adequate investment in elderly healthcare and efficacious policies and their timely management are thus imperative.

- The evidence from LASI will be used to further strengthen and broaden the scope of National Programme for Health Care of the Elderly and also help in establishing a range of preventive and health care programmes for older population and most vulnerable among them.

- This report will provide base for national and state level programmes and policies for elderly population.

- LASI data shall assist in addressing the broad aims of the Decade of Healthy Ageing and will lead to convergence within various national health programs and also promote inter-sectoral coordination with other line Departments/Ministries.

- For the best medical care to elderly, India has one of the ambitious programme of the world, Ayushman Bharat Yojana which focuses on expansion of the healthcare facilities.

3.22 GDP of the current fiscal will be around Rs 134.4-lakh crore

- Recently, NSO projected that GDP of the current fiscal will be around Rs 134.4-lakh crore in constant prices rebounding after pandemic-induced slump of the preceding two quarters.

- After contracting by almost 16% in the April-September period, GDP is just short of Rs 10,400 crore when compared to the second half of the earlier figure.

- NSO has assumed that output will recover vigorously in the third and fourth quarters & it is highly optimistic about the expenditure side and gross value added of various industries.

- NSO expects manufacturing sector to shrink 9.4% this fiscal & the GVA of services components- trade, hotels, transport- to contract over 21.4% over the 12-month period.
- COVID-19 mandated social distancing norms has severely affected services sector which contributes almost a fifth to overall GVA.
- Private consumption expenditure — the single biggest component propelling GDP— is estimated to shrink 9.5% in the full year after contracting nearly 19% in the first half.
- This reflects the fact that consumers had shed their suspicion in spending in the face of COVID-19.
- They will now begin to consume goods and services close to pre-pandemic levels & this will reduce the instances of job losses.
- The NSO projects that government final consumption expenditure (GFCE) will jump to 17% in the second half after first-half's contraction & boost to a growth of 5.8%.
- But the end-November fiscal deficit data shows that the government is lagging well behind its budgeted revenue & capital expenditure targets.
- Hence it is hard to project how GFCE can increase so appreciably in the second half.
- So these estimates are likely to undergo revisions & upcoming Economic Survey could move away from these overly optimistic assumptions with more clear assessment of the economy.

3.23 Role of agriculture - Economic Slump

- The National Statistical Office's first advance estimates released recently show a 7.2% fall in gross value added (GVA) for 2020-21.
- While this would be the sharpest fall ever recorded in India, a more significant aspect is to do with the driving factor (economic sector).

HISTORY

- There have been four earlier occasions when the country's GVA has suffered contraction.
  - ➢ GVA is GDP net of all taxes and subsidies on products. It is thus a more accurate measure of economic activity.
- The extent of negative growth in those four years was lower than the 7.2% being projected for the current fiscal.
  - ➢ 1979-80 (minus 5.2%), 1972-73 (minus 0.3%), 1965-66 (minus 3.7%) and 1957-58 (minus 1.2%)
- In each of those four previous years, the primary cause was agriculture.
- All four were drought years and the farm sector (agriculture, forestry and fishing) registered minus growth.

➢ minus 12.8% in 1979-80, minus 5% in 1972-73, minus 11% in 1965-66 and minus 4.5% in 1957-58

What is different this time?

- The low growth in agriculture in the previous years, in turn affected the rest of the economy.

- However, this is not the case in 2020-21.

- So, beyond the bigger decline in GVA/GDP this time, it is the sector that is behind the decline that is more significant.

- While overall GVA is expected to shrink 7.2%, agriculture and allied activities are set to post 3.4% growth.

- During the worst phase of Covid-19 and the nationwide lockdown, it is the farm sector that kept the rest of the economy going.

- If the farm sector had not grown at all, the GVA decline would have worked out to 7.7%, not 7.2%.

- Incidentally, in 2019-20 as well, agricultural growth at 4% surpassed the 3.9% for the economy as a whole.

- **Reasons:**
  - ➢ Agriculture's relatively better performance in the last 2 years is largely a result of consecutive years of good monsoon (and also post-monsoon) rains.
  - ➢ Recharged groundwater tables and reservoirs getting filled to near capacity led to increase in crop acreages and higher production.
  - ➢ Besides these, farming operations being exempted from lockdown restrictions also helped.

Why has this not prevented the economic slump?

- The farm sector doing well has not however prevented the current worst economic slump.

- This is because in 1979-80, agriculture's share in India's GDP at constant prices was 33.9%; in 1957-58, it was 48.2%.

- In effect, a drought year in those times invariably translated into low/negative growth rates and vice versa.

- However, the condition is different today. The share of agriculture in real GVA was only 14.6% in 2019-20.

- This is estimated to go up to 16.3% this fiscal, but not enough to make a big difference in the economy even in a bountiful monsoon year.

3.24 Electric Mobility

- A shift to electric vehicles will help in the growth of lithium and cobalt industry.

- Government has drafted policies that act as catalysts in propelling the acceptance of electric vehicles.
- Under the Faster Adoption and Manufacturing of Hybrid and Electric Vehicles (FAME), government has allocated $1.3 billion as incentives for buying electric buses, 3-wheelers and 4-wheelers.
- They will be used for commercial purposes till 2022 & another $135 million is earmarked for charging stations.
- NITI Aayog has given a proposal that a $4.6 billion subsidy will be given for battery makers.
- In September 2019, a consortium was formed by Japanese automobile Suzuki Motor to set a manufacturing unit in Gujarat for producing lithium-ion batteries & electrodes.
- These policies are embedded with the vision to have 30% electric vehicles plying the roads by 2030.

Where are Lithium reserves available?

- Latin America has the famous lithium triangle region.
- These regions comprise of lithium deposits under the salt flats of northwest Argentina, northern Chile, and southwest Bolivia.
- They hold about 80% of the explored lithium of the world & most of the production comes from these countries.

How India does meets its Lithium demands?

- At present, India's lithium-ion battery demand is fulfilled by imports from China, Vietnam, and Hong Kong.
- But India has a growing thirst for lithium-ion batteries in the last 2 years & its lithium imports have tripled from $384 mn to $1.2 bn.
- In 2019, India's National Aluminium Company (NALCO), Hindustan Copper Limited (HCL) and Mineral Exploration Corporation Ltd (MECL) signed a joint venture agreement.
- They formed Khanij Bidesh India Limited (KABIL) to search strategic mineral -lithium and cobalt- abroad for commercial use & to meet domestic requirement.
- India plans to buy lithium from the resource-rich Latin American countries.

How will lithium imports change India's trading relations with Latin America?

- Today Lithium is used as a drug to treat bipolar disorder & soon it will become the metal to treat a world polluted by excessive carbon emissions.
- India's biggest trading partners in Latin America are Brazil, Mexico, and Venezuela & we import 14%-20% of total crude oil from these countries.

- With the progression to electric vehicles, India will start importing lithium and cobalt rather than crude oil.
- This will support battery manufacturers & India's goal in switching to electric mobility.
- This will also influence India's foreign policy as our energy security dependence will shift from West Asia to Latin America.
- India also sent a high-level delegation to have a clear understanding about the availability of lithium and the possibilities of joint ventures.
- This will supply lithium to domestic markets and drive international markets.
- Moreover it provides long-term solution to clean our cities, build new markets, and skill people for new jobs towards an 'Atmanirbhar Bharat'.

3.25 Government: Equalisation levy not discriminatory, will take appropriate action

- The Office of the United States Trade Representative (USTR) Section 301 has said that the digital taxation regime in India, Italy and Turkey is not in sync with US companies such as Google, Facebook, Apple and Amazon.com, referred to as the GAFA tax and are inconsistent with international tax principles.
- The issues of contention are the application of taxation to revenue rather than income, extraterritorial application, and failure to provide tax certainty.
- USTR is responsible for developing and coordinating US international trade, commodity, and direct investment policy, and overseeing negotiations with other countries. It is an agency of professionals dealing with trade issues.
- The Section 301 report (US Trade Act), a flagship publication of USTR, gives the USTR broad authority to investigate and respond to a foreign country's action which may be unfair or discriminatory as well as negatively affect US commerce. It also allows the US President to impose tariffs or other curbs on foreign nations.
- India has described the 2% equalisation levy as a fair, reasonable and non-discriminatory tax against U.S. companies aimed at all offshore digital economy firms accessing the local market. It applies uniformly across all non-resident e-commerce operators.
- According to the Commerce and Industry Ministry, the intention of imposing such a levy is to create an ecosystem that fosters fair competition and reasonableness.
- It also aims to exercise the sovereign right of the government to tax businesses that have a close nexus with the Indian market through their digital operations.

3.26 Growth silver lining but food inflation may be dark cloud

- United Nations (UN) Food and Agriculture Organization (FAO) released its latest Food Price Index (FPI) number for December 2020.

- This index – reflecting international prices of a basket of food commodities against a base year (2014-16) value of 100– averaged 107.5 points for the month. It was the highest since November 2014. This marks the seventh month of consecutive increase.

- FPI has soared since May 2020. From falling to a four year low of 91 points then, it has hit a more than six-year high in December.

- This extreme global price volatility can be seen across farm commodities.

- There are three main reasons for international agri-commodity prices firming up in the past few months.

- The first is a steady normalization of demand as most countries, including India, have unlocked their economies after May 2020. Even as demand has gradually recovered, restoration of supply chains post-Covid is taking time. Dry weather in major producing countries such as Thailand, Brazil, Argentina and Ukraine, plus a shortage of shipping containers, has only aggravated the supply- demand imbalances.

- The second reason is stockpiling by China, which has stepped up imports of everything – from corn, wheat, soyabean and barley to sugar and milk powder– to build strategic food reserves amid rising geopolitical tensions and pandemic uncertainties.

- The third reason may have to do the ultra-low global interest rates and floodgates of liquidity opened by major central banks. This money, which has already flowed into equity markets, could well find a home next in agricommodities– more so, in a scenario of tightening world supplies.

3.27 Single window clearance for coal

- Recently, the Union government has announced a new online single window clearance portal for the coal sector.

- The coal sector can be the biggest contributor towards the target of India becoming a USD 5 trillion economy by 2025.

- Despite having the world's fourth-largest coal reserves, India is importing coal.

- The next tranche of commercial mining auction would be launched in January 2021.

- It is aimed at allowing faster clearances, including environmental and forest clearances, from a single portal with progress monitoring, instead of having to go to multiple authorities.

- Presently, about 19 major approvals, or clearances are required before starting the coal mine in the country.

- The portal will allow successful bidders to operationalise coal mines more quickly.

- It is in the spirit of minimum government and maximum governance.

- It will further ease of doing business in the country's coal sector.

- It will help in bringing huge investment and creating employment.

Future Plan:

- PARIVESH Mechanism for forest and environment related clearances would likely be merged into this single window clearancemechanism which is expected to help with the operationalisation of the coals blocks that are set to be auctioned in the upcoming auctions.

- PARIVESH is a web-based application which has been developed for online submission and monitoring of the proposals submitted by the proponents for seeking Environment, Forest, Wildlife and Coastal Regulation Zones (CRZ) Clearances from Central, State and district level authorities.

Recent Initiatives:

- **Atmanirbhar Abhiyaan:** Commercial mining of coal allowed, with 50 blocks to be offered to the private sector.

- Entry norms will be liberalised as it has done away with the regulation requiring power plants to use "washed" coal.

- Coal blocks to be offered to private companies on revenue sharing basis in place of fixed cost.

- Coal gasification/liquefaction to be incentivised through rebate in revenue share.

- Coal bed methane (CBM) extraction rights to be auctioned from Coal India's coal mines.

- UTTAM (Unlocking Transparency by Third Party Assessment of Mined Coal): In April 2018, the Ministry of Coal launched UTTAM Application for coal quality monitoring.

- **Scheme for Harnessing and Allocating Koyala (Coal) Transparently in India (SHAKTI):** Launched in May 2017, for allocation of future coal linkages in a transparent manner for the power sector.

3.28 Indian economy 'weak,' credit growth bottoming out: BofA

- According to the American brokerage BofA Securities, the Indian economy continues to be 'weak,' pointing to activity indicators tracked by it.

- It has been noted that on the positive side, credit demand is decreasing and the real lending rates, adjusted for wholesale price inflation, are falling. It can also be noted that there has been a slew of reports lately about a stronger recovery being underway after the jolt caused by the pandemic. The government expects the GDP to contract 7.7% in financial year 2021 because of the reverses.

- The continued drop in our BofA India Activity Indicator reinforces our view that the economy still remains weak. The indicator fell by 0.6% in November on top of the 0.8% decline in October, and 4.6% drop in the September quarter.

- This supports our call of GVA (Gross Value Added) contractions of 1% in the December quarter and 6.7% in FY21.

- The credit growth for FY22 will come at 12%. It can be noted that credit growth had been declining for the last few years, in sync with a dip in the overall economic growth which has been on a downward spiral since demonetization in late 2016 as borrowers went slow on expansion.
- The real lending rates adjusted for WPI will be one of the prime reasons for the faster credit growth estimate in financial year 2022.

3.29 PM Kisan payout went to 20 lakh undeserving beneficiaries: RTI info

PM-KISAN payments worth Rs.1,364 Crore have been wrongly made to more than 20 lakh ineligible beneficiaries and income tax payer farmers, according to information provided by the Agriculture Ministry in response to an RTI request from activist Venkatesh Nayak.

- There are 11 crore beneficiaries registered under the scheme.
- Punjab tops the list of States, accounting for 23% of those who wrongly received the money.
- Maharashtra and Assam also saw large numbers of such payments.
- A number of State Agriculture Departments have now been tasked with recovering the money wrongly paid.
- Until July 2020, 20.5 lakh people who should have been excluded had wrongly received PM-Kisan payouts.
- According to the Agriculture Ministry data, 56% of these undeserving persons belonged to the "income tax payee" category, while the remainder belongs to the "ineligible farmers" category.
- However, 72% of the payout amount was paid to the income tax payees, indicating that this category continued to receive money for multiple installments before their ineligible status was discovered and they were weeded out of the scheme's beneficiary database.
- Punjab (23%), Maharashtra (17%) and Assam (14%) account for more than half of the beneficiaries of wrong payments, followed by Gujarat and Uttar Pradesh with 8% each.
- Almost all the wrong payments in Punjab and Assam went to those in the "ineligible farmers" category, while Maharashtra had the highest number of payouts to "income tax payee" farmers.

3.30 Centre notifies modified financial assistance scheme to ramp up ethanol distillation

Department of Food & Public Distribution has notified the modified scheme for extending financial assistance to project proponents for enhancement of their ethanol distillation capacity or to set up distilleries for producing 1st Generation (1G) ethanol from feed stocks such as cereals (rice, wheat, barley, corn & sorghum), sugarcane, sugar beet etc. or converting molasses-based distilleries to dual feedstock.

- It aims to achieve 20% blending by 2025 as well as to meet out the requirement of ethanol production capacity in the country.

● Under the scheme, Government would bear interest subvention for five years including one-year moratorium against the loan availed by project proponents from banks for setting up of new distilleries or expansion of existing distilleries or converting molasses-based distilleries to dual feedstock.

● Due to upcoming investment in capacity addition / new distilleries, various new employment opportunities will be created in rural areas.

● For production of ethanol, there is sufficient availability of feed stocks; & Government has also fixed remunerative prices of ethanol derived from various feed stocks.

3.31 NCAVES India Forum 2021

The Ministry of Statistics & Programme Implementation is conducting three live sessions of "Natural Capital Accounting and Valuation of Ecosystem Services" (NCAVES) India Forum 2021 are scheduled to be held on January 14, 21 and 28, 2021 in collaboration with United Nations Statistics Division (UNSD), European Union and UN Environment.

● It aims to disseminate the activities taken up by the Ministry under the Project and to highlight the uses to which natural capital accounts can be put, especially in the areas of decision making and policy analysis.

● The first session of the event on 14 January 2021 was dedicated to the discussions on the efforts made by India and the international agencies in the domain of natural capital accounting and valuation of the ecosystem services.

● Through the forum, the Ministry targets to showcase Government's efforts in making environment a key dimension in our policy paradigm and welcomes active participation of all stakeholders in the NCAVES India Forum 2021.

● In 2017, the European Union initiated a project, NCAVES in 2017 to help nations advance the knowledge on environmental-economic accounting, in particular ecosystem accounting that can help in ensuring sustainable economic growth.

● The NCAVES Project is being implemented in five countries – India, Brazil, China, Mexico and South Africa - by the United Nations Statistics Division (UNSD), United Nations Environment Programme (UNEP) and the Secretariat of the Convention of Biological Diversity (CBD).

● The Ministry of Statistics & Programme Implementation has taken up several initiatives under the NCAVES Project during the past three years.

3.32 New Foreign Trade Policy to come into effect from April 1

The meeting of the Parliamentary Consultative Committee of the Ministry of Commerce and Industry was held on the subject "New Foreign Trade Policy 2021-26".

- During the meeting, it was informed that that the new Foreign Trade Policy-FTP will come into effect from 1st April 2021 for a period of five years. District Export Hubs initiative will form an important component of the new FTP.
- The policy will strive to make India a leader in the area of international trade and channelize the synergies gained through merchandise and services exports for growth and employment with a goal to make India a 5 trillion dollar economy.
- The FTP 2015-20 came into effect on 1st April 2015 and the same was extended by one year till 31 March this year due to Covid-19 pandemic.

3.33 India's budget seen raising import duties by 5%-10% on dozens of items

India is considering raising import duties by 5%-10% on more than 50 items including smartphones, electronic components and appliances in the upcoming budget.

- The move to increase import duties is part of Prime Minister's self-reliant India campaign that aims to promote and support domestic manufacturing.
- Government was seeking to target additional revenue of about 200 billion to 210 billion, as it looks to shore up revenue amid the COVID-19 pandemic-driven slowdown that has stung the economy.
- The list of items likely to attract steeper duties is set to include appliances such as refrigerators and air conditioners too.
- Last year, India raised duties on a range of products such as footwear, furniture, toys, electrical and electronics items by up to 20%.

3.34 PCRA launches 'Saksham' campaign in Guntur

PCRA has launched a one-month mass awareness campaign "SAKSHAM" to spread awareness about "Green and Clean Energy".

- The SAKSHAM (Sanrakshan Kshamta Mahotsav) is a campaign launched by Petroleum Conservation Research Association (PCRA).
- The main aim of this campaign is to make the public aware of the protection and effective use of petroleum products, which will bring better health and the environment.
- The campaign aims to raise awareness of the adverse health and environmental effects of increased carbon footprint.
- The idea behind the initiative is to persuade consumers to switch to cleaner fuels and make behavioural changes to use fossil fuels intelligently.
- The campaign carried out various pan-Indian activities, such as cyclothon, farmer workshops, seminars, painting competitions, CNG car driving competitions, etc., will popularize the benefits of using clean fuels among the general public.

- Key driving factors include: moving toward a gas-based economy, using fossil fuels more cleanly, relying more on domestic resources to drive biofuels, achieving renewable targets within a prescribed period, and increasing the use of electric vehicles to reduce carbon emissions from transportation, clean fuels such as hydrogen, and digital innovations in all energy systems.

3.35 Railways ministry nod to new iron ore policy

The Ministry of Railways approved a new iron ore policy. This policy will take effect on February 10, 2021. The iron ore policy governs the distribution and transportation of iron ore.

- The rake distribution system module will be updated by the Centre Railway Information System (CRIS).

- The policy will give priority to shipping iron ore to domestic manufacturing. In the domestic movement, steel, sponge iron, pig iron, pellets or sinter plants with customers will be given higher priority and special sliding will be carried out at the loading and unloading end. These customers will follow closely, relying on private residences to slide on their own.

- The policy classifies the flow of iron ore based on the availability of railway infrastructure developed by customers. Similarly, the essence of movement will be to maximize the railway movement of iron ore.

- Iron ore is the second most important traffic flow for Indian Railways. Iron ore and steel together account for more than 17% of the total freight volume of Indian railways (data for 2019-20).

- The total freight volume of Indian Railways is 1,210 tons. Among them, iron ore is 15335 million tons and steel are 538.1 million tons.

- India's total recoverable iron ore reserves are 9.602 billion tons of hematite and 3.408 billion tons of magnetite. The main states that produce iron ore in India are Chhattisgarh, Karnataka, Madhya Pradesh, Orissa, Jharkhand, Maharashtra, Goa, Kerala, Tamil Nadu and Rajasthan.

3.36 To spur growth & jobs, booster for construction and low-cost housing

Budget 2021-22 is expected to give a special focus to construction development and affordable housing as increased activity in these areas provide a higher boost to overall demand in the economy because of their forward and backward linkages.

- The government plans further liberalisation of foreign direct investment (FDI) regulations for the construction development sector while a higher allocation is expected towards a credit-linked subsidy scheme for affordable housing.

- One factor behind the exodus of migrants from cities during the pandemic was their lack of access to safe, affordable housing in urban clusters.

- Significantly, as part of the pandemic slowdown stimulus, several state governments provided various concessions in stamp duty and other charges to kickstart transaction activity in the

construction and real estate sector. The Centre, too, set up a fund to provide last-mile funding to stressed housing projects across the country.

- Revival of construction development sector is also seen as crucial for employment creation. While 100 per cent FDI is already permitted in construction development sector, certain legal structures such as LLP are not allowed to receive foreign investment in this sector.

- There has also been demand to raise allocation under Pradhan Mantri Awas Yojana (PMAY) from the Rs 27,500 crore allocated in the Union Budget 2020-21 to ensure every Indian has a home in the near future.

- To provide relief to stressed home buyers, funds could also be set aside for the National Building Construction Corporation to complete stalled projects which have been stuck due to fund shortage.

- This would boost consumer sentiment and revive up the demand cycle. There could be a provision to recover the costs involved once the project is completed.

3.37 Finance Ministry releases weekly installment of Rs 6,000 cr to states to meet GST compensation shortfall

The 12th instalment of Rs. 6,000 crore was issued as back-to-back loans to the states to make up for the shortfall in GST compensation.

- The Ministry of Finance, Department of Expenditure released the 12th weekly instalment of Rs. 6,000 crore was allocated to the states to make up for the shortfall in compensation for GST.

- The funds have been provided to 23 States and 3 UTs of GST council members.

- Due to the implementation of GST, the remaining 5 states (Arunachal Pradesh, Manipur, Mizoram, Nagaland and Sikkim) have no income gap.

- The Indian government has set up a special borrowing window in October 2020 to cover the estimated income gap of Rs.1.10 Lakh crore due to the implementation of GST.

- The borrowings are being done through this window by the Government of India for the benefit of the States and UTs. Since October 2020, 12 rounds of borrowings have been completed.

GST Compensation

- After the introduction of GST States have very limited taxation rights as most of the taxes, barring those on petroleum, alcohol, and stamp duty, were subsumed under GST.

- GST accounts for almost 42% of states' own tax revenues, and tax revenues account for around 60% of states' total revenues.

- Under the **GST (Compensation to States) Act, 2017**, states are guaranteed compensation for loss of revenue on account of implementation of GST for a transition period of five years between 2017 and 22.

- The compensation is calculated based on the difference between the states' current GST revenue and the protected revenue after estimating an annualised 14% growth rate from the base year of 2015-16.

Logic Behind GST Compensation

- In theory the GST should generate as much revenue as the previous tax regime.
- However, the new tax regime is taxed on consumption and not manufacturing.
- This means that tax won't be levied at the place of production which also means manufacturing states would lose out and hence several states strongly opposed the idea of GST.
- It was to assuage these states that the idea of compensation was mooted.
- To make this promise watertight, the idea of compensation was both written into the Constitution and its finer details passed by way of central legislation.

Issues

- The Union Finance Minister in a recently held 41st GST Council meeting asserted that the Centre will not be able to compensate the States.
- The Central Government is asserting that GST collections have sharply come down this year due to the Covid-19 pandemic.
- The GST compensation requirement is estimated to be around Rs 3 lakh crore this year, while the cess collection is expected to be around Rs 65,000 crore. Thus there is an estimated compensation shortfall of Rs 2.35 lakh crore.

Centre's Recommendation

- States have been given two options to remedy the situation and both require them to borrow from the market.
- The Centre contends that only Rs. 97,000 crore of the revenue shortfall is from implementation of the GST, while Rs.1.38-lakh crore is due to extraordinary circumstances posed by an **'Act of God' (The Covid-19 pandemic).**
- States can either borrow Rs.97,000 crore, without having it added to their debt and with the principal and interest paid out from future cess collections, or they can borrow the entire Rs.2.35-lakh crore shortfall, but will have to provide for interest payments themselves.
- The Finance Ministry has argued that higher borrowing by the Centre will push up interest rates and dent India's fiscal parameters.

State's Objection

- Five states and Union Territories of Kerala, Punjab, West Bengal, Puducherry and Delhi have voiced their concerns over the proposals.

- They are stating that the Finances of the states are under severe strain, resulting in delays in salary payments and sharp cuts in capital expenditure outlays due to the pandemic and lockdowns.
- They are also battling the Virus and hence they need to spend on their healthcare too.
- In light of these circumstances several states have rejected both the options and have urged the Centre to rethink.
- They say that while the Centre chose to pin much of the blame for the delays on GST compensation payments on the pandemic it started before the pandemic.
    - The payments due for August-September 2019 was delayed and since then, all subsequent payouts have seen cascading delays.
- In Fact the Centre had admitted to problems on compensation payment in the 37th GST Council meeting held in Goa in September 2019 itself.

4. ENVIRONMENT

4.1 ARTIFICIAL INTELLIGENCE IN ELEPHANT SURVEY

- Recently, the researchers from the University of Oxford Wildlife Conservation Research Unit and Machine Learning Research Group have detected the elephants in South Africa using the Artificial Intelligence from space. This survey is being claimed as more accurate as compared to the detection by Human. For the purpose of survey, researchers used the highest resolution satellite imagery called Worldview3.

- Earlier, the elephants were traced by manned aircrafts methodology. It was the most common method of survey to keep eyes on elephant populations in savannah environments. Under it, aerial counts were undertaken from manned aircraft.

About the new methodology

- Under the new methodology, the satellite images are appeared as grey blobs depicting as elephants wandering through the trees. This elephant counting is done through machine learning which is a computer algorithm that has been trained to identify elephants.

Significance of AI based methodology

- The new methodology is accurate. Thus, it will help in and improve the Conservation of the elephant. It will also help in counting and monitoring the movement of the elephants which in turn would help in anti-poaching work.

- There are some 24,000 elephants in South Africa. The population of elephant has risen from the 1920s. In 1920s there were less than 150 elephants there. In one of the famous parks of South Africa, Kruger Park, there are about 17,000 elephants against its planned limit of about 7,500.

4.2 WILDFIRE IN DZUKOU VALLEY

- The wildfire at Dzukou Valley straddling the Manipur-Nagaland border has been doused after it raged for two weeks. The Dzukou Valley, situated at an average altitude of 2,452 metres, is a popular trekking destination known for its exotic beauty.

Dzukou valley

- It is situated at the border of Nagaland and Manipur states, The valley and the hills surrounding it have an area of about 27 sq. km.

- The elevation ranges from 2400 m in the valley to 2994 m above the mean sea level in the surrounding hills.

- Geologically the area is of recent origin. The soil is black in colour indicating that it is rich in humus.

- The natural drainage system is maintained by a number of streams which have their origin in the hills and later join in the valley to form the main Dzukou river.

- The river flows down the valley criss cross towards the west to Paren district of Nagaland and down to Assam plains.

- The climate is warm temperate monsoon with an annual rainfall of more or less 2000–2500 mm.

- The vegetation of the area can be briefly described as temperate to sub-alpine (2400–2994 m).

- The hills surrounding Dzukou valley have rich temperate forest vegetation besides the thick dwarf bamboo vegetation on the hill-slopes.

- The dominant tree species found in this forest are Betulautilis, Rhododendron spp., Gaultheria spp., Peirisformosa, Lyoniaovalifolia, Lithocarpuspachyphylla,etc.

How are forest fires detected in India?

- When a forest fire is detected in India by the MODIS and VIIRS instruments (installed on satellites), the information is passed to the Forest Survey of India (FSI). The FSI analyses the data overlaying the digitised boundaries and pinpoints the location to the exact forest department. The Divisional Forest Officer in charge of the forest is then informed about the raging fire.

What is MODIS and VIIRS role in detecting forest fires in India?

- MODIS is Moderate Resolution Imaging Spectrometer of NASA. VIIRS is Visible Infrared Imaging Radiometer Suite. According to Forest Survey of India, MODIS detected 29,547 fires in India. The VIIRS provides data on clouds, ocean colour, sea surface temperature, polar winds, aerosols, forest fires, snow and ice.

4.3 40TH INDIAN SCIENTIFIC EXPEDITION TO ANTARCTICA

- India launched the 40th scientific expedition to Antarctica.

Key takeaways

- This Indian expedition marks four decades of India's scientific endeavour to the Antarctica.

- The 40th expedition journey will be flagged off from Goa on January 5, 2021, with 43 members onboard.

- The chartered ice-class vessel MV Vasiliy Golovnin will make this journey and will reach Antarctica in 30 days.

- After leaving behind a team of 40 members, it would return to India in April 2021.

- On return, it will also bring back the winter team of the preceding trip.

Do you know?

- The Indian Antarctic expeditions began in 1981.

- The Indian Antarctic programme has now been credited to have built three permanent research base stations in Antarctica—named DakshinGangotri, Maitri, and Bharati.

- As of today, India has two operational research stations in Antarctica named Maitri and Bharati.

- The National Centre for Polar and Ocean Research (NCPOR), Goa, manages the entire Indian Antarctic program.

4.4 ADVISORY FOR MANAGEMENT OF HUMAN-WILDLIFE CONFLICT

- Recently, the Standing Committee of National Board of Wildlife (SC-NBWL) in its 60th meeting has approved the advisory for management of Human-Wildlife Conflict (HWC) in the country.
- In the meeting approval was given for including Caracal, a medium sized wildcat into the list of critically endangered species for taking up conservation efforts with financial support under centrally sponsored scheme Integrated Development of Wildlife Habitat.

Key measures approved

- Empowering gram panchayats in dealing with the problematic wild animals as per the section 11 (1) (b) of Wildlife (Protection) Act, 1972.
- Utilising add-on coverage under the Pradhan Mantri Fasal Bima Yojna for crop compensation against crop damage due to HWC.
- Augmenting fodder and water sources within the forest areas.
- Payment of a portion of ex-gratia as interim relief within 24 hours of the incident to the victim/family.
- Prescribing inter-departmental committees at local/state level.
- Adoption of early warning systems
- Creation of barriers
- Dedicated circle wise Control Rooms with toll free hotline numbers which could be operated on 24X7 basis.
- Identification of hotspots and formulation and implementation of special plans for improved stall-fed farm animals etc.
- Inclusion of Caracal, a medium size wild cat found in some parts of Rajasthan and Gujarat, into the list of critically endangered species.

Human-Wildlife/Animal Conflict

- It refers to the interaction between wild animals and humans which results in a negative impact on people, animals, resources, and habitats.
- Causes:
- Urbanization: In modern times rapid urbanization and industrialisation have led to the diversion of forest land to non-forest purposes, as a result, the wildlife habitat is shrinking.
- Transport Network: The expansion of road and rail network through forest ranges has resulted in animals getting killed or injured in accidents on roads or railway tracks.

- Population: The increasing population has also led to many human settlements coming up near the peripheries of protected areas and encroachment in the forest lands by local people for cultivation and collection of food and fodder etc. therefore increasing pressure on limited natural resources in the forests.

Recent Initiatives/Developments:

- Recently, the Supreme Court (SC) affirmed the right of passage of the Elephants and the closure of resorts in the Nilgiris elephant corridor. It held that it was the State's duty to protect a "keystone species" like elephants.

- The Odisha Government has started casting seed balls (or bombs) inside different reserve forest areas to enrich food stock for wild elephants.

- The Uttarakhand government carried out bio-fencing by growing various species of plants in the areas in order to reduce the man-animal conflict, prevent wild animals from entering residential areas, and protect agricultural crops and livestock in areas adjoining the forests.

- In 2018, the Uttar Pradesh government has given its in-principle approval to bring man-animal conflict under listed disasters in the State Disaster Response Fund to ensure better coordination and relief during such incidents.

- In the Western Ghats of India, a new conservation initiative has utilized texting as an early warning system to prevent human-elephant encounters. Elephant tracking collars embedded with SMS chips automatically text nearby residents, warning them of recent elephant movements.

The caracal

- It is a medium-sized wild cat native to Africa, the Middle East, Central Asia, and India.
- It is Typically nocturnal.
- The caracal is highly secretive and difficult to observe.
- It is territorial.
- It lives mainly alone or in pairs.
- The caracal is a carnivore
- Caracals were tamed and used for hunting in ancient Egypt.
- In India, the caracal occurs in Sariska Tiger Reserve and Ranthambhore Tiger Reserve.
- In IUCN Red List ,Caracal is considered to be Least Concerned since 2002.0

4.5 KHADI PRAKRITIK PAINT

- Union Minister for MSME launched an innovative new paint developed by Khadi and Village Industries Commission recently.

Key Highlights

- The eco-friendly, non-toxic paint is called Khadi Prakritik Paint.

- It is a first-of-its-kind product, with anti-fungal, anti-bacterial properties.

- The paint has been certified by Bureau of Indian Standards.

- Khadi Prakritik Paint is available in two forms – distemper paint and plastic emulsion paint.

- Based on cow dung as its main ingredient, the paint is cost-effective and odorless.

- The paint is free from heavy metals like lead, mercury, chromium, arsenic, cadmium and others.

Benefits:

- It will boost local manufacturing, and will create sustainable local employment through technology transfer.

- It will strengthen the rural economy and protect cows (cows will become a source of income even if they are non-milching cows.)

- It will increase consumption of cow dung as a raw material for eco-friendly products and will generate additional revenue to farmers and gaushalas.

- Utilization of cow dung will also clean the environment and prevent clogging of drains.

- It will arrest migration of rural populace to metropolises like Delhi, Mumbai, Chennai, Bangalore, and Kolkata.

The Khadi and Village Industries Commission (KVIC)

- It is a statutory body formed in April 1957 (as per an RTI) by the Government of India, under the Act of Parliament, 'Khadi and Village Industries Commission Act of 1956'.

- It is an apex organisation under the Ministry of Micro, Small and Medium Enterprises.

- Vision – To plan, promote, facilitate, organise and assist in the establishment and development of khadi and village industries in the rural areas in coordination with other agencies engaged in rural development wherever necessary.

- In April 1957, it took over the work of former All India Khadi and Village Industries Board.

- It's head office is in Mumbai with six zonal offices in Delhi, Bhopal, Bangalore, Kolkata, Mumbai and Guwahati.

4.6 GUCCHI MUSHROOM

- A geographical indication (GI) tag has been sought for one of the costliest mushrooms in the world that grows in Jammu and Kashmir's Doda district.

   1.Locally called Gucchi, or Morel, the mushroom, priced at over Rs.20,000 a kg, is a forest produce collected by local farmers and tribals.

   2.It is said to have medicinal and anti-inflammatory properties.

   3.They also have antioxidant and anti-microbial properties. They are also considered a rich source of protein, carbohydrates and Vitamin B.

   4.It is found in the temperate forests.

About GI tag:

- A GI is primarily an agricultural, natural or a manufactured product (handicrafts and industrial goods) originating from a definite geographical territory.

- Typically, such a name conveys an assurance of quality and distinctiveness, which is essentially attributable to the place of its origin.

- The registration of a geographical indication is valid for a period of 10 years.

- It can be renewed from time to time for further period of 10 years each.

4.7 GREAT GREEN WALL INITIATIVE

- This initiative aims to transform the lives of 100 million Africans by growing 8000 km long and 15 km wide mosaic of trees, vegetation, grasslands, plants.

- Recently Great Green Wall for Sahel and Sahara Initiative received $14 billion funds at the recent One Planet Summit for Biodiversity. The funding is to be used to restore degraded land, strengthen resilience, create green jobs and protect biodiversity.

- It is an African-led initiative. It was started in the year 2007 by the African Union to combat desertification, land degradation, drought. The project aims to restore 100 million hectares of degraded land by 2030. So far between 2007 and 2019, the Great Green Wall initiative has restored only 4 million hectares of land.

- This initiative will contribute fifteen of the 17 UN Sustainable Development Goals. The main objective of the UN Convention to Combat Desertification is to reach Land neutrality by 2030. Thus, the Great Green Wall initiative will help achieve this.

4.8 CLIMATE ADAPTATION SUMMIT 2021

- The climate adaptation summit was hosted by the Netherlands government on January 25, 2021.

- The summit was held online and it is being called "CAS Online".

- The summit was built on the advances of the UN Climate Action Summit.

- The summit also showcased the pioneering solutions of the climate emergency and sustaining momentum through UNFCCC's COP26.

- CAS will help in delivering the action and inspire the change to help the societies build back better.

- The summit was organized with the aim of realizing the transitions which is required for a climate-resilient world.

4.9 NATIONAL MARINE TURTLE ACTION PLAN

- The Ministry of Environment, Forests and Climate Change (MoEF&CC) has released 'Marine Mega Fauna Stranding Guidelines' and 'National Marine Turtle Action Plan'.

Key takeaways

- The documents contain ways and means to guide improved coordination amongst the government, civil society, and all relevant stakeholders on the response to cases of stranding, entanglement, injury or mortality of marine mammals, and also conservation of marine turtles.

These two documents highlight:

- actions to be taken for handling stranded animals on the shore, stranded or entangled animals in the sea or on a boat,

- management actions for improved coordination,

- reducing threats to marine species and their habitats,

- rehabilitation of degraded habitats,

- enhancing people's participation,

- advance scientific research and exchange of information on marine mammals and marine turtles and their habitats.

Need of such a project

- India has rich marine biodiversity along a vast coastline of over 7,500 km.

- It has significant nesting and feeding grounds for four species of marine turtles, namely leatherback (Dermochelyscoriacea), green (Cheloniamydas), hawksbill (Eretmochelysimbricata) and olive ridley (Lepidochelysolivacea)

- Even though all four species are listed under Schedule I of the Indian Wild Life (Protection) Act, 1972, their populations in the Indian waters are under threat.

4.10 FLINT WATER CRISIS

- The Flint Water Crisis is an ongoing investigation on public health crisis. The issue began when the City of Flint in the state of Michigan shifted its water supply from Lake Huron to Flint river. The city has a population of 100,000 people. The shift caused water distribution pipes to corrode. This resulted in leaching of lead and other contaminants into the municipal drinking water. The city suffered from an outbreak of Legionnaires' disease due to the leaching of lead. This is referred to as Flint Water crisis.

Legionnaires' disease

- The disease is a serious type of pneumonia caused by Legionella bacteria. According to US Centre for Disease Control and Prevention, people get sick from the disease if they breathe or accidentally swallow the bacteria containing water. There are no vaccines available for the disease. The disease can be prevented by good maintenance of water systems.

4.11 ASIAN WATERBIRD CENSUS

- The two-day Asian Waterbird Census-2020 commenced in Andhra Pradesh.

About AWC:

- Asian Waterbird Census is an annual event in which thousands of volunteers across Asia and Australasia count waterbirds in the wetlands of their country.
- This event happens every January.
- This event is coordinated by wetlands International and forms part of global waterbird monitoring programme called the International Waterbird Census (IWC).
- It was started in the year 1987.
- Its main focus is to monitor the status of waterbirds and the wetlands.
- In India, the AWC is annually coordinated by the Bombay Natural history Society (BNHS) and Wetlands International.

What are waterbirds?

- According to Wetlands International (WI), waterbirds are defined as species of birds that are ecologically dependent on wetlands. These birds are considered to be an important health indicator of wetlands of a region.

Why waterbird census?

- Long-term monitoring of waterbirds by continental-scale censuses provide crucial information which underpins the conservation of waterbirds and their wetland habitats.
- Waterbirds are well-known indicators of the quality of certain types of wetlands.
- It is also used by BirdLife International in the identification of Important Bird Areas(IBAs) in wetlands throughout the world.
- Standardised monitoring of Arctic breeding species, and species dependent on inter-tidal habitats is even more important in the light of human induced climate change.
- The census will be used to monitor on an annual basis the status and condition of wetlands.
- It will also encourage greater interest in waterbirds and wetlands amongst citizens.

4.12 GLOBAL CLIMATE RISK INDEX 2021

- The Global Climate Risk Index was recently released by Germanwatch-a NGO based in Bonn, Germany. In the index, India has been ranked at seventh position among the countries that are most effected by climate change in 2019.

Key findings

- As per the report by German Watch, there were 11,000 extreme weather events globally between 2000 and 2019. Due to these events, over 4,75,000 people lost their lives and economic losses were around the US $2.56 trillion (in purchasing power parities).
- Top 3 countries: Mozambique, Zimbabwe, and the Bahamas were respectively the top three countries, most affected in 2019.

- Top 3 Countries most affected in the past 20 years: Between 2000-2019, Puerto Rico, Myanmar and Haiti were the countries most affected by the impacts of such weather events.

Key Findings of the report for India:

- India ranked at 7th Position in Climate Risk Index 2021. It means India is the 7th worst-hit country by extreme weathers. In 2020, India ranked 5th on the index.

- In 2019, the monsoon continued for a month longer than normal in India. 110% of the long-period average was recorded, between June to September 2019.

- Flooding caused by heavy rain was responsible for 1,800 deaths across 14 states. It led to the displacement of 1.8 million people.

- There were 8 tropical cyclones in India. 6 of them intensified to become "very severe". 'Extremely Severe' Cyclone Fani affected 28 million people killing 90 people in India and Bangladesh causing economic loss to the tune of US$8.1 billion.

About Global Climate Risk Index

- The Global Climate Risk Index, CRI is tasked to analyse quantified impacts of extreme weather situations, in terms of the fatalities and economic losses, both. This index is based on data received from Munich Re'sNatCatSERVICE.

Germanwatch

- It is a non-profit non-governmental organization that was founded in 1991. The NGO is based in Bonn, Germany. It was established with the objective of influencing the public policy on trade and environment.

4.13 GLOBAL CLIMATE LITIGATION REPORT 2021

- The United Nations Environment Programme (UNEP) has released its "Global Climate Litigation Report 2021". The report was published by the UNEP in cooperation with the Sabin Center for Climate Change Law at Columbia University.

- The report highlights that the Climate litigation cases have increased in recent years. The litigations have made the courtroom increasingly relevant to efforts to address the climate change across the world.

Key Findings of the report

- As per the report, climate cases have nearly doubled over the last three years.

- Increasing climates cases are increasingly compelling the governments and corporate actors to implement their climate commitments.

- The cases are also compelling the government to pursue more ambitious climate change mitigation and adaptation goals.

- As per the data provided by the report, in 2017 884 cases were brought in 24 countries. While as of 2020, cases have increased to 1,550 filed in 38 countries and the European Union courts.

- Report finds that the climate litigation continues to be concentrated in high-income countries and the trend might further grow in the global south.

- The report has also identified the trends in climate litigation like Violations of "climate rights". That means the cases are increasingly relying on fundamental human rights such as right to life, food, health and water.

4.14 HOUBARA BUSTARD

- Members of the United Arab Emirates' (UAE) royal family arrived in Pakistan's Balochistan to hunt the internationally protected and highly vulnerable houbara bustard under a license issued by Pakistan's foreign ministry.

- Wealthy dignitaries from the UAE, Saudi Arabia and other Gulf countries arrive in the country to hunt the birds every year using hunting gear and falcons. They kill the bird for sport and also because its meat is supposed to have aphrodisiac qualities

- Pakistan has been hosting wealthy dignitaries for last few decades. But, the Supreme Court imposed a ban on hunting the houbara bustard in 2015.

About Houbara Bustard

- Bustards are large, terrestrial birds that belong to several species, including some of the largest flying birds.

- Two Distinct Species of Houbara Bustard: The International Union for Conservation of Nature (IUCN) recognises two distinct species found in:

  1.North Africa (Chlamydotisundulata) and

  2.Asia (Chlamydotismacqueenii).

- It is very similar to the critically endangered Great Indian Bustard (native to India).

- IUCN categorised it as vulnerable.

4.15 INDIAN PANGOLIN

- Scientists have, for the first time, radio-tagged the Indian pangolin an endangered animal, that is rarely sighted in forests here. The Indian pangolin, which resembles an ant-eater but dons a thick scaly skin, is hunted for meat and use in traditional Chinese medicine.

- Researchers say tagging the animal will help understand the habits of the reclusive, nocturnal animal.

Protection Status

- Out of the eight species of pangolin, the Indian Pangolin and the Chinese Pangolin are found in India.

- Both these species are listed under Schedule I Part I of the Wildlife (Protection) Act, 1972.
- In anti-poaching operations, during which pangolin scales are recovered, those animals are already dead.
- Given that several pangolins are rescued in the central Indian landscape, this new initiative by the Madhya Pradesh Forest Department and the Wildlife Conservation Trust (WCT) is to ensure better survival rates of these released individuals in the wild, and thus have a positive impact on the population of this endangered species.

Chinese Pangolin:

- China accorded the pangolin the highest level of protection and removed the scales of the endangered mammal from its list of approved traditional medicines.
- While China banned pangolin meat amid links between wild meat and the transmission of the SARS-CoV-2 virus, they remain sceptical on how seriously the ban on its scales ,which are believed to have various health benefits ,will be imposed.
- The move came about after the 2020 edition of the "Chinese Pharmacopoeia" excluded traditional medicines made from four species, and also listed alternatives sourced from species which are not endangered.

4.16 TWO NEW SPECIES OF A RARE ANT GENUS DISCOVERED IN INDIA

- Two new species of a rare ant genus have been discovered in India.
- The species of the ant genus Ooceraea found in Kerala, and Tamil Nadu add to the diversity of this rare genus.
- One of them found in the Periyar Tiger Reserve of Kerala, has been named Ooceraeajoshii, in honour of Prof. Amitabh Joshi, a distinguished evolutionary biologist.
- The newly discovered ant species with ten segmented antennae, establish an old world lineage that contains a species emerging as the only model organism among the ant subfamily.

4.17 INDIA HOME TO BOTH SPECIES OF RED PANDA: ZSI

- Scientists from the Zoological Survey of India have concluded that India is home to both the (sub) species — Himalayan red panda (Ailurusfulgens) and the Chinese red panda (Ailurusstyani).

Key highlights

- The Siang river in Arunachal Pradesh splits the red panda into these two phylogenetic species.
- The red panda was considered a monotypic species till 2020 until the scientists studied its genetic make-up with respect to the geographical distribution and described the occurrence of the two species.
- The reason for the reduction in the population size of the Himalayan red panda is due to the geological and climatic oscillations as the landscape was exposed to heavier topographic and

geological changes through repeated cycles of the wet and dry periods during the last glacial maxima and Pleistocene Era.

- It is considered an indicator species for ecological change, the red panda is shy, solitary and arboreal animal. It primarily feeds on bamboo and avoids human presence.

- Director of the ZSI, said the overall conservation of this ecologically sensitive species required an effort from both the national and international stakeholders and adequate awareness among the local communities.

- The red panda (Ailurusfulgens) is a mammal species native to the eastern Himalayas and southwestern China.

- It is listed as Endangered on the IUCN Red List

- Threats to it are habitat loss and fragmentation, poaching, and inbreeding depression.

- Despite its name, it is not closely related to the giant panda.

5. SCIENCE & TECHNOLOGY

5.1 WOODEN SATELLITES

- In order to solve the problem of space debris, Japanese researchers are to launch wooden satellites by 2023.

- A Japanese Company and Kyoto University have decided to collaborate to develop the world's first wooden satellites which will be made out of wood by 2023. The research has already started on tree growth and the use of wood materials in space.

- As more satellites are being launched by the countries globally, space junk is becoming an increasing problem. The collaborators will begin the experiment with different types of wood in extreme environments on Earth.

What is the issue of space debris?

- All the satellites that re-enter the earth atmosphere burn and create tiny Alumina particles. These particles float in upper atmosphere for many years. According to NASA, 95% of man-made objects in orbit were space junk. These objects are dangerous to functioning live satellite.

How is space debris created?

- According to European space agency, there are 128 million pieces of debris in the orbit. Out of these only 34000 objects are larger than 10. However, when these larger objects collide, they produce smaller ones. The smaller particles can travel more than 20000 miles per hour that collide with other particles to make even more smaller particles.

5.2 WORLD'S LARGEST FLOATING SOLAR ENERGY PROJECT IN OMKARESHWAR DAM

- The Government of India has announced the construction of the World's largest floating solar energy project.

What is Floating Solar Plant?

- A floating solar plant refers to an installation of solar power production that is mounted on a structure floating on a body of water. It may typically be on an artificial basin or a lake.

Key Features of the Project:

- The project is to have floating solar panels of 600 megawatts of power generation capacity.
- The solar panels are to be installed over the backwaters of the Omkareshwar Dam.
- Solar panels will float on the surface of the water in the reservoir. It will automatically adjust upward and downward based on the water level of the Dam. The floods and strong waves will not have any effect on the solar panels.

Types of Solar plants:

1. FPV or Floating photovoltaic plant which uses photovoltaic panels mounted on the platform.

2.The concentrated solar power plant which uses mirrors to redirect the solar power to a tower.

Significance:

- No land required: The project is mainly advantageous as they do not consume much land. There are limited surfaces that are required for electric cabinets and grid connections. The price is almost equal to the land-based plants.

- Installation and decommissioning: Floating Solar Power Plants are compact compared to land-based plants. Thus their management is easier along with their construction and decommissioning later.

- No fixed structures are involved in this type of plant which leads to easier uninstallation too.

- Water-Saving: The partial coverage of basin aids in the reduction of water evaporation. This result depends on climate conditions and the percentage of the covered surface. The water can be used for irrigation purposes too.

- Cooling: The floating power plant allows the usage of a simpler cooling system. The cooling mechanism although is natural but also can be activated by generating a water layer on the PV modules or using submerged PV modules.

- Storage is aided through the presence of water. The plants use gravity energy storage mainly while coupling with hydroelectric basins.

- Environment friendly: A side advantage of such a plant is in the containment of algal bloom, a serious problem in industrialized countries.

5.3 NATIONAL ATOMIC TIME SCALE

- The Prime Minister NarendraModi recently inaugurated the National Atomic Scale at the National Meteorology Conclave.

- Atomic Time provides the exact speed at which the clock ticks. In technical words, it measures the actual length of a second. Atomic Clocks deviate only one second in up to 100 million years.

- The time scale will enable India in becoming self-reliant in measuring the time within the range of a nano second and will also help the organisations such as the Indian Space Research Organisation (ISRO).

About International Atomic Time:

- It is an international time scale which is determined by taking the weighted average of more than 300 atomic clocks which are at more than 60 timing laboratories around the world. The International Atomic Time is also called the astronomical time which refers to the rotation of the Earth.

5.4 NASA TO TEST THE MOST POWERFUL ROCKET

- NASA is to launch the most powerful rocket in the world . NASA has named it as the "Space Launch System".

- The Space Launch System is to carry the first woman and the next man to the moon.

- It is 98 metres tall. On the other hand, Saturn V that carried Astronauts to the moon in 1960s was 110 metre tall.

- It has capacity to carry more than twenty-seven tonnes.

- The Space Launch System is to be hauled into the Lower Earth Orbit.

- It has four RS-25 engines.

Why is SLS the most powerful rocket?

- The SLS will generate 39.1 mega Newtons of thrust at launch. This is 15% more than Saturn V. This is the highest thrust level ever achieved.

- In 1960, Soviet Union built N1. N1 was built to reach moon. It could produce 45.4 mega Newtons of thrust. However, the N1 mission ended in failure.

What are the future high power rockets?

- The future version of SLS is called Block-2 cargo. It is expected that Block-2 of SLS will reach the thrust levels of N1.

- The vehicle called Starship being built by SpaceX is capable of producing 66.7 Mega Newtons of thrust. When launched, this will the most powerful rocket in the world.

5.5 ATAL TINKERING LABS

- The Indian Space Research Organisation (ISRO) has decided to adopt 100 Atal Tinkering Labs with an aim to promote education in the field of science, technology, engineering and mathematics (STEM), space education, and space technology-related innovations for school students.

- The Department of Space (DOS), Atal Innovation Mission and NITI Aayog will adopt 45 Atal Tinkering Labs in the first phase and then 55 others will be adopted by ISRO.

What are Atal Tinkering Labs?

- Atal Tinkering Labs (ATL) is an activity conducted under the umbrella mission named 'Atal Innovation Mission' (AIM). AIM is the Indian Government's flagship program to foster a culture of entrepreneurship and innovation.

- AIM establishes ATLs in schools across the country with a vision to 'Cultivate one Million children in India as Neoteric Innovators'.

- The chief objective of establishing ATLs is to promote curiosity, imagination, and creativity in the minds of school-going children.

- Other goals of the scheme include inculcating in children a design mindset, adaptive learning, computational thinking, physical computing, etc.

- The philosophy behind ATLs is that prize awards and incentives are a great start to generate an aggressive wave of innovation and entrepreneurship in school-going children.

5.6 CollabCAD SOFTWARE

- The National Informatics centre and the Central Board of Secondary Education (CBSE) jointly launched the CollabCAD software.
- The CollabCAD software provides engineering solution for students and Faculty of Engineering Graphics curriculum.
- It aims to provide a platform to students across the country to create and modify digital designs.
- The aim is to provide a good platform to the students of Atal tinkering labs across the country. With the software the students of Atal tinkering labs will be able to create and modify 3D designs with free flow of creativity. It will enable students to create data across the network and access the same design data for storage and visualisation.

5.7 MITOCHONDRIAL DNA BASED COVID-19 TEST

- The United States scientists have developed a new rapid COVID-19 test to measure mitochondrial DNA in the blood sample of the COVID-19 patients. The test will be highly helpful to identify people at the highest risk of the virus.
- The mitochondrial DNA is a unique type of genetic material that normally resides inside the energy factories of the cells. However, in COVID-19 patients the mitochondrial DNA is spilling out of the body cells into the bloodstream. This leads to cell death. Eventually the COVID-19 patients go into hyperinflammatory death.

Mitochondrial DNA

- The Mitochondrial DNA is located in the mitochondria of the body cells. Mitochondria converts chemical energy in food into Adenosine Triphosphate (ATP). The ATP provides energy for muscle contraction and nerve impulse propagation.The mitochondrial DNA is inherited from the mother.
- On average, mitochondrial DNA levels were about tenfold higher in Covid patients who developed severe lung dysfunction or eventually died. Those with elevated levels were almost six times more likely to be intubated, three times more likely to be admitted to the ICU and almost twice as likely to die compared with those with lower levels.

5.8 QUANTUM COMPUTING APPLICATIONS LAB BEING SET UP IN INDIA

- The Ministry of Electronics and Information Technology (MeitY) in India will establish a Quantum Computing Applications Lab in the country, in collaboration with Amazon Web Services (AWS), to accelerate quantum computing-led research and development and enable new scientific discoveries.

About the Lab

- The Lab will provide quantum computing as a service to government ministries and departments, researchers, scientists, academia, and developers, to enable advances in areas such as manufacturing, healthcare, agriculture, and aerospace engineering.
- AWS will provide hosting with technical and programmatic support for the Lab.
- The lab is World's first quantum computing applications lab on AWS to support a national government's mission to drive innovation.
- Amazon Web Services (AWS) is a subsidiary of Amazon providing on-demand cloud computing platforms and APIs to individuals, companies, and governments, on a metered pay-as-you-go basis.

5.9 ABELL 370

- Recently, the Hubble Space Telescope of NASA has shared the image of a huge cluster of galaxies.

About Abell 370

- It is a huge cluster of galaxies which is located approximately 4 billion light-years away from the Earth.
- The galaxy is located in the Cetus constellation.
- The core of the galaxy is made up of several hundred galaxies.
- The galaxy has been named after the George Abell, who had catalogued the cluster.
- This galaxy comprises of several arcs of light. The largest galaxy is the 30 inched in length.

Hubble Space Telescope

- This space telescope by NASA was launched into low Earth orbit in the year 1990. The telescope is still in operation. This telescope is one of the largest and most versatile telescopes. This telescope is well known for the vital research tool. It has been named after the astronomer Edwin Hubble. The telescope was developed by the United State Space Agency NASA and the European Space Agency. It orbits outside the distortion of Earth's atmosphere and captures the extremely high-resolution images with substantially lower background light.

5.10 KRAKEN MARE

- Recently, the astronomers have found that the "Kraken Mare" which is the largest sea on the surface of "Titan" is 1,000 feet deep at its centre which provides enough space for any robotic submarine to explore it.

Kraken Mare

- Kraken Mare is the huge water body of liquid ethane and methane.
- It is located near the North Pole of Titan.
- In all, the sea covers an area of around 154,000 square miles.
- The sea equals the size of all five Great Lakes together.
- The water body was discovered by the space probe Cassini.

- It was named after Kraken, who was a legendary sea monster, in the year 2008.

- The water body also contain an island named Mayda Insula.

- The composition, properties, depth and other properties of the Kraken Mare is still unclear.

About Titan

- It is the largest moon of Saturn and second-largest natural satellite of the Solar System.

- It is an exceptional moon that comprises of a dense atmosphere.

- Apart from Earth, it is the only body that provides a clear evidence of stable surface liquid.

- The moon was discovered by the Dutch astronomer Christiaan Huygens in 1955.

- The atmosphere of Titan is largely made up of nitrogen.

5.11 HUM OF THE UNIVERSE

- Recently, the North American Nanohertz Observatory for Gravitational Waves (NANOGrav) have heard the gravitational wave background which is also called as the resonant 'hum'. The findings from the observation have been published in the Astrophysical Journal Letters.

Highlights

- The NANOGrav has been deployed to study the signals from distant pulsars.

- These distant pulsars are usually referred as the timekeepers of the Universe.

- These pulsars emit the radio waves in order to collect the data that indicate the effects of gravitational waves.

- However, it is still unclear whether these strong signals are coming from the Gravitational force or not.

NANOGrav

- NANOGrav is an Observatory to study and detect the Gravitational Waves. The observatory also detects the any change in the Earth's position as a result of the stretching and shrinking of the gravitational wave. The change is detected by studying the timing of the regular signals coming from different pulsars which are scattered over the sky at the same time. It is known as a "pulsar timing array,". The NANOGrav mission has been implemented by the Parkes Pulsar Timing Array, European Pulsar Timing Array and International Pulsar Timing Array.

Gravitational Waves

- These are the disturbances in the curvature of spacetime. The gravitational waves are generated by accelerated masses propagating as waves at the speed of light. Henri Poincare had proposed the gravitational waves in the year 1905 and predicted by Albert Einstein 1916 after his general theory of relativity. These waves transport the energy as gravitational radiation.

5.12 MeerKAT RADIO TELESCOPE

- Recently MeerKAT Radio Telescope discovered 2 giant radio galaxies. These galaxies were discovered under the MIGHTEE survey.
- The new discovered galaxies are bigger than 93 per cent of any other giants discovered before. They were 62 times the size of Milky Way.

About MeerKAT Radio Telescope

- It is located in Northern Cape of South Africa. It is a radio telescope with 64 antennas.
- The array configuration of the Telescope has 61 per cent of antennas located within 1 km diameter circle and the remaining 39% per cent is distributed to a radius of 4 km.
- MeerKAT Radio Telescope is a follow up to Karoo Array Telescope (KAT 7). In simple words, KAT 7 is a precursor to MeerKAT. KAT 7 has seven dishes of Prime Focus Reflecting Telescope.
- MeerKAT is built in the semi-desert Karoo region of Northern Cape.
- It will address key questions of astrophysics such as how did the galaxies evolve, how are the galaxies formed, etc.
- It is one of the four precursors to the final Square km Array. The Square Kilometre Array is an intergovernmental radio telescope project built in South Africa and Australia.

About Square Kilometre Array

- The Square Kilometre Array is an international effort to build the world largest radio telescope. The Karoo region in South Africa and the Murchison Shire region in Australia were chosen for technical and scientific reasons. The atmospheric above the deserts are favourable with clear sky and provide maximum radio quietness.

5.13 BLUE JET LIGHTNING

- The International Space Station's Atmosphere-Space Interactions Monitor- ASIM observatory recently caught a single blue 'jet'. It is upward-shooting lightning from a thunderstorm cell, along with four elves.

What are the Blue Jets?

- The blue jets can generally not be seen from the ground but for under rarest circumstances. This happens because they are brief and are typically hidden due to clouds.
- It was only in 2019, the instruments on the International Space Station (ISS) recorded five blue flashes and a blue jet that shot into space from a storm cloud. It was recorded from near the island of Nauru in the Pacific Ocean.
- Each of the flashes recorded lasted between 10 and 20 milliseconds. The blue jet crossed an altitude of almost 32 miles above sea level.

What causes Blue Jets?

- The blue jets occur when some positively charged upper part of any cloud interacts with a negatively charged layer present immediately above it. This then briefly equalizes both opposing charges which result in a bright blue discharge of static electricity. This is called blue lighting.

Importance:

- Understanding Blue Jet Lightning is important because such events could affect the theories of how radio waves travel through the air. This can potentially impact communication technologies.

5.14 SpaceX LAUNCHES 143 SATELLITES ON SINGLE ROCKET

- A rocket from Elon Musk's SpaceX has created a new record by launching 143 satellites into space on January 24, 2021. The Falcon 9 rocket lifted off from the Space Launch Complex 40 at Florida's Cape Canaveral Space Force Station.

- SpaceX, an aerospace company, has also beaten the record of the Indian Space Research Organisation- ISRO where it deployed 104 satellites in February 2017 in a single launch.

- The reusable rocket launched 143 satellites to space, where 133 were government and commercial spacecraft and 10 were Starlink satellites which are part of the SmallSat Rideshare program of SpaceX.

Objective:

- With the launched satellites, Musk's SpaceX aims at providing near-global broadband internet coverage all over the world by 2021.

Falcon 9 rocket

- This rocket is a partially reusable two-stage-to-orbit medium-lift launch vehicle. It has been designed and manufactured by SpaceX. The launcher uses cryogenic liquid oxygen and rocket-grade kerosene (RP-1) as propellants. The name has been derived from the fictional Star Wars spacecraft, the Millennium Falcon.

Sun-synchronous orbit (SSO)

- It is also called as the heliosynchronous orbit. This is a polar orbit around a planet. In the orbit, satellite passes over any given point of the planet's surface at the same local mean solar time.

5.15 LOST GALAXY

- Scientists using the Hubble Space Telescope have published a new image showing a head-on view of a "ghostly" galaxy, the latest in a slew of incredible images of spiral galaxies much like our own Milky Way.

What and where is 'Lost Galaxy?'

- Known as the "Lost Galaxy," NGC 4535 is about 50 million light-years distant and found in the constellation of Virgo. It's one of the biggest galaxies in the massive Virgo Cluster of galaxies.

- NGC 4535 is a barred spiral galaxy that Hubble photographed as part of a new survey called PHANGS that's doing groundwork for the $10 billion James Webb Space Telescope, which is due to launch on October 31, 2021.

What is a spiral galaxy?

- A spiral galaxy is one of the most common type of galaxies in the Universe. They have a spiral shape with long arms filled with stars.
- Our own Milky Way is a spiral galaxy. The Solar System exists within the Orion Arm, a minor spiral arm of the Milky Way.

5.16 JAROSITE: RARE MINERAL FOUND IN ANTARCTICA

- A rare maritime mineral, Jarosite, has been found in the Antarctica ice. It was discovered after drilling deep into Antarctic ice.
- The recently discovered mineral was examined and it was found that it was formed in pockets within the ice. This supports the theory of presence of jarosite on MARS in as similar manner. It signifies that, the minerals are able to form in thick deposits on mars because the planet is a lot dustier than Antarctica.

What is Jarosite?

- Jarosite is a mineral from mars which is scarcely seen on earth.
- It is a sulphate of potassium and iron.
- The mineral can be formed by both water and acidic conditions.
- It was first discovered on Mars in 2004 by a rover named "opportunity".
- Other Jarosite minerals include silver, sodium, lead and ammonium.
- It can be found are in the mining and ore processing wastes where they act as sinks for other toxic elements such as lead and arsenic.
- When the jarosite is broken, it releases metals such as iron, potassium besides the hydrogen ions and sulphate.
- Jarosite is used in hydrometallurgy to control impurities.
- The name Jarosite was derived from a Spanish name of a yellow flower of genus Cistus.
- The mineral was described in 1852 by August Breithaupt for the first time.
- It is yellow to yellowish-brown in colour. It is brittle, hard and has crystal structure. The mineral appears translucent and opaque sometimes.

5.17 SMART ANTI-AIRFIELD WEAPON (SAAW)

- DRDO successfully conducted captive and release trial of indigenously developed Smart Anti-Airfield Weapon (SAAW) from Hawk-I of Hindustan Aeronautics Limited (HAL) off the Odisha coast.

Key highlights

- The smart weapon was successfully test fired from Indian Hawk-Mk132 of HAL.
- This was the 9th successful mission of SAAW conducted by DRDO till now.
- Indigenously designed and developed by: DRDO
- This is 125 Kg class smart weapon, capable of engaging ground enemy airfield assets such as radars, bunkers, taxi tracks, and runways etc. up to a range of 100 kms.
- The high precision guided bomb is light weight as compared to weapon system of the same class.

5.18 SAHAYAK-NG

- Defence Research and Development Organisation (DRDO) along with Indian Navy conducted the successful maiden test trial of 'SAHAYAK-NG' off the coast of Goa.
- It is India's first indigenously designed and developed Air Dropped Container from IL 38SD aircraft (Indian Navy).

Key takeaways

- The trial was conducted by Indian Navy to enhance its operational logistics capabilities and provide critical engineering stores to ships which are deployed more than 2000 km from the coast.
- It reduces the requirement of ships to come close to the coast to collect spares and stores.
- SAHAYAK-NG is an advanced version of SAHAYAK Mk I.
- The newly developed GPS aided air dropped container is having the capability to carry a payload that weighs upto 50 kg and can be dropped from heavy aircraft.

What is low-velocity airdrop?

- In a low-velocity airdrop, the parachutes are designed to slow down the air droppable container as much as possible before it hits the ground.

What is high-velocity air drop?

- This type is meant to stabilize the fall. The parachute will slow the air droppable container but not the extent of low-velocity airdrop. The method is used in delivering military ready to eat meals. LAPES is a high velocity airdrop system. LAPES is Low Altitude Parachute Extraction System. It is currently the most advanced air drop system. It uses touch and go type pattern where the load is ejected in extremely low altitude.

What is Free Fall Airdrop?

- The airdrop where no parachute is used and the load is allowed to fall under gravity is called free fall airdrop.

5.19 ANGIOGENESIS

- An Innovation in Science Pursuit for Inspired Research (INSPIRE) faculty from the Department of Science & Technology (DST) is working on an Alternative Anti-Cancer Therapy (Anti-Angiogenic) using transgenic zebrafish.

- INSPIRE is an innovative programme sponsored and managed by the DST for attraction of talent to Science and was launched in 2008.

- Objective of INSPIRE is to communicate to the youth of the country the excitements of creative pursuit of science, attract talent to the study of science at an early age and thus build the required critical human resource pool for strengthening and expanding the Science & Technology system and R&D base.
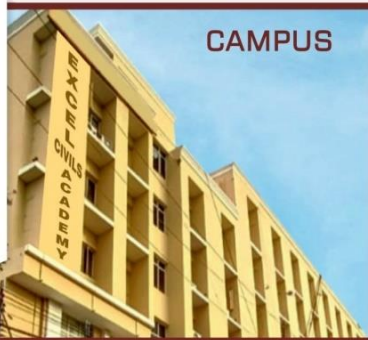
Angiogenesis:

- It is the physiological process through which new blood vessels form from pre-existing vessels.

- It is critical in the growth of cancer because tumors need blood supply to grow. Tumors trigger the growth of blood cells by giving off chemical signals that stimulate angiogenesis.

- Inhibition of tumor angiogenesis has become a popular anti-cancer strategy after Chemotherapy.

- Angiogenesis inhibitors are unique cancer-fighting agents because they block the growth of blood vessels that support tumor growth rather than blocking the growth of tumor cells themselves.

Limitation of Anti-Angiogenic Drugs:

- The clinically approved anti-angiogenic drugs are ineffective due to parallel activation of various compensatory mechanisms involving a cascade of molecules, which aids tumorangiogenesis and investigation of these mechanisms are essential for developing anti-angiogenic therapies.

Alternative Anti-Cancer Therapy:

- Scientists are exploring an alternative anti-cancer therapy that involves targeting tumor generated formation of new blood vessels which allows the delivery of oxygen and nutrients to the body's tissues.

- An INSPIRE faculty is exploring the role of compensatory mechanisms signaling cues as key targets for cancer therapy.

- He has also found that nitric oxide (NO) plays a key role in switching off angiogenesis under tumor micro environment and that the Melatonin hormone suppresses tumor angiogenesis.

- The research has shown that compensatory mechanisms could be a potential therapeutic target for developing effective anti-cancer treatment regimes.

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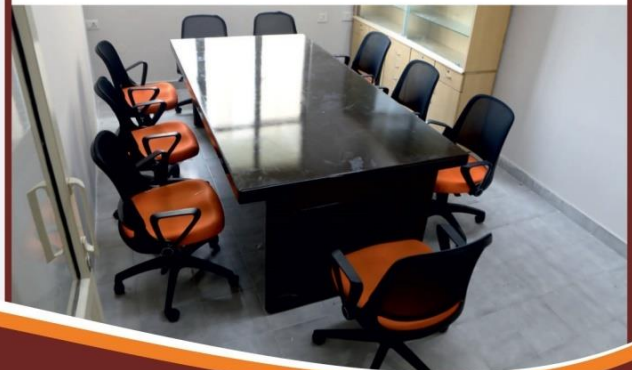LECTURE HALL - 1

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