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VOLUME - 9, September 2020

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Director's message

Dear Aspirants,

Three major issues confronting our country at the moment are the unabated spiking number of COVID-19 cases, sharp contracting of the economy and the military standoff on LAC with China in eastern Ladakh. The first two issues are equally challenging to most of the countries globally which were ravaged by the pandemic resulting in almost a million casualties with more than thirty million infections and sharp contraction of the economy being an interdependent world.

India with more than 54,18,681 infections is second only to USA and with 86,926 deaths, ranks third in the world after Brazil. Within the country, Maharashtra, Andhra Pradesh and Tamil Nadu States recorded highest number of infections and deaths.

It is almost ten months since the pandemic first emerged in Wuhan in December 2019 engulfing the entire world, the scientific community is yet to come out with a vaccine to counter it though the scientists and medical experts around the world have been working at breakneck speed thereby raising the question when and how will the pandemic end. There isn't an exact answer to the question, even when throughout the course of history, several pandemics and epidemics have plagued humanity. Experts has come out with two scenarios which may mark the beginning of the end of the pandemic. The first one being Vaccine and the second option is social ending. The medical ending of pandemic stems from the development of an effective and safe vaccine and following the social protocols strictly. As of now, more than 165 vaccine candidates are currently in different stages of preclinical and clinical trials and more than 33 of them have reached the critical last leg of human trials.

According to Dr Anthony Fauci, USA's top infectious disease expert, a vaccine which is safe and 50 to 60 percent effective will also be acceptable, even though the scientists are aiming to produce a vaccine which is 75 percent effective which, in all probability should be available by the first quarter of 2021. Similarly, as observed in the case of deadly Spanish Flu in 1918 which infected more than 500 million people across the world and wiped out 1 percent of the world's population at that time, ended after two long years when people gained immunity against the virus. However, herd immunity and the social ending may come at a price which will be beyond our comprehension. According to health experts, there is no one way of ending the pandemic in sight, instead, we need to bring the focus on controlling the spread of the disease. It can only be achieved through a degree of herd immunity, following social distancing norms and a safe and effective vaccine. The combination of all three measures will help in slowing down the spread of the disease.

Apart from casting a severe strain on the health system and numerous casualties, COVID-19 struck a severe blow to the global economy and more particularly Indian economy which was already showing a decline in the last quarter of FY 2019-2020. The first quarter has shown a negative growth of minus 23.9%. Clearly, the figure of decline of 23.9% represents only the organised sector and even this will be revised downwards. It also portends that the next quarter will also be dismal given the poor consumer sentiment, low business confidence and continued difficulties in the unorganised sector and the services sectors.

Economists and global institutions like the Asian Development Bank have recently cut India's growth projections from already historic lows as the virus continues to spread. Goldman Sachs Group Inc. now estimates a 14.8% contraction in gross domestic product for the year through March 2021, which the ADB is forecasting -9%. The Organisation for economic Co-operation and Development sees the economy shrinking by 10%. India has become the worst performing economy among the G20 nations in April to June quarter. Britain is the next worst at -20.4% and China is the best performing with a positive rate of growth of 3.2%. Within one quarter, China turned around from -6.8% decline to a positive rate of growth. Why is India impacted far more than other G20 countries?

First, the lockdown was not properly implemented, so the benefit of lockdown could not be obtained. The lockdown is being eased while the number of cases are rising rapidly. The first round of attack is proliferating and the number of infections are increasing creating huge uncertainty. Repeated local lockdowns have had to be ordered, which disrupts production. Second, as mentioned above, there is a very large unorganised sector unlike other big economies. People in this sector are poor and cannot cope with a crisis.

Third, a large number of people are alienated from the system and lack faith in the authorities. So, they flout official pronouncements. Some people believe that this is a manufactured crisis and the authorities are fooling them. Often, one sees people going around without masks and not maintaining physical distancing. This enables the virus to proliferate. This is also the lesson from countries that have been successful in controlling the spread of the disease – the moment there is laxity, the disease starts proliferating again.

On the issue of Indo-China Military standoff along the Line of Actual Control (LAC) in Eastern Ladakh, senior military commanders of India and China will meet again on 21st September 2020. Lt General-level officers of the two sides will meet which will be the sixth such meeting since June 6th. The meeting will take place at the Chinese garrison of Moldo, located opposite Chushul on the Indian side which will also be attended by a Diplomat from Ministry of External Affairs, Govt of India. Earlier this month, Raksha Mantri Sh Rajnath Singh and External Affairs Minister Sh S Jaishankar had met their respective Chinese counterparts in Moscow on September 4th and 10th respectively after which a five-point de-

escalation programme was also released. The previous efforts of five such meetings between June 6th and August 2nd failed to break the ice as the PLA failed to keep up the commitments of disengagement and de-escalation. Infact, for the first time after September 1962, bullets were fired in Ladakh on September 7th. With both the militaries amassing men and equipment in large numbers, a sense of mistrust and uncertainty prevails and the road to peace and tranquility seems to be a long drawn affair.

Ushering in major reform in the Agriculture sector, Parliament on 20th September 2020 passed two bills aimed at transforming agriculture in the country and raising farmers' incomes. The Farmers' Produce Trade and Commerce(Promotion and Facilitation) Bill, 2020 and The Farmers (Empowerment and Protection) Agreement of Price Assurance and Farm Services Bill, 2020, were passed by the Rajya Sabha. The Prime Minister has wished the farmers on the passage of farm bills in Parliament and called it a watershed moment in the history of Indian agriculture. Procurement at Minimum Support Price will continue and the farmers can sell their produce at MSP rates, the MSP for Rabi season will be announced in the last week of September. Mandis will continue to function and trading will continue as usual. Under the new system, farmers will have the option to sell their produce at other places in addition to the Mandis. The e-NAM trading system will also continue in the Mandis. Trading in farm produce will increase on electronic platforms which will result in greater transparency and time saving. The new legislation is expected to create an ecosystem where the farmers and traders will enjoy freedom of choice of sale and purchase of agri-produce. It will also promote barrier-free inter-state and intra-state trade and commerce outside the physical premises of markets notified under State Agricultural Produce Marketing legislations. The farmers will not be charged any cess or levy for sale of their produce and will not have to bear transport costs which will also eliminate the middlemen. However, some opposition Parties and farmers in some States have opposed the Bills apprehending stoppage of MSP, cessation of functioning of Mandis and future of Govt electronic trading portal like e-NAM and entry of corporates and private players in the farming sector which will adversely effect the interests of small and medium farmers.

With the CS Preliminary examination date fast approaching on October 4th, I am more than confident that you must have completed your preparation by now and in the process of last minute revision of your syllabus.

Best wishes.



K. Rajendra Kumar IPS (Retd.)
Director.

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1. NATIONAL

1.1 High Level Group on Agricultural Exports: Finance Commission

- Recently, the High Level Group (HLEG) on Agricultural Exports set up by the Fifteenth Finance Commission has submitted its report to the Commission.
- The HLEG was set up to recommend measurable performance incentives for states to encourage agricultural exports and to promote crops to enable high import substitution.

Key Points

Purpose to Constitute HLEG:

- To assess export & import substitution opportunities for Indian agricultural products (commodities, semi-processed, and processed) in the changing international trade scenario and suggest ways to step up exports sustainably and reduce import dependence.
- To recommend strategies and measures to increase farm productivity, enable higher value addition, ensure waste reduction, strengthen logistics infrastructure etc. related to Indian agriculture, to improve the sector's global competitiveness.
- To identify the impediments for private sector investments along the agricultural value chain and suggest policy measures and reforms that would help attract the required investments.
- To suggest appropriate performance-based incentives to the state governments for the period 2021-22 to 2025-26, to accelerate reforms in the agriculture sector as well as implement other policy measures in this regard.

Recommendations:

Crop Value Chains:

- It emphasises to focus on 22 crop value chains with a demand driven approach.
- The demand driven approach refers to a development strategy where the people themselves are expected to take the initiative and the responsibility for improving supply situation rather than being passive recipients of the Government services.
- It also suggests to solve Value Chain Clusters (VCC) holistically with focus on value addition.

State-led Export Plan:

- It is a business plan for a crop value chain cluster, that will lay out the opportunity, initiatives and investment required to meet the desired value chain export aspiration.
- These plans will be action-oriented, time-bound and outcome-focused.
- Such plans should be collaboratively prepared with private sector players and Commodity Boards presenting participation of all stakeholders.

Participation of Private Sector:

- The private sector players need to play a pivotal role in ensuring demand orientation and focus on value addition.
- It also needs to ensure project plans are feasible, robust, implementable and appropriately funded; providing funds for technology based on business cases and for creating urgency and discipline for project implementation.

Central Government's role:

- The Central government should act as an enabler.
- Thus, robust institutional mechanisms need to be enforced to fund and support implementation.

1.2 Initiative under Gramodyog Vikas Yojana

Recently, the Ministry of Micro, Small and Medium Enterprises has approved a programme for the benefit of artisans involved in manufacturing of Agarbatti under the Gramodyog Vikas Yojana.

Key Points**Description:**

- The programme will initially include four pilot projects, including one in the north eastern part of the country.
- Khadi and Village Industries Commission (KVIC) will provide training and assistance as well as work and raw material to artisans working in this area, in tie-up with Agarbatti manufacturing machines.
- KVIC is a statutory body established by Khadi And Village Industries Commission Act, 1956. It is an apex organisation under the Ministry of Micro, Small and Medium Enterprises charged with the planning, promotion, organisation and implementation of programs for the development of Khadi and other village industries in the rural areas

Benefits:

- Revival of Agarbatti manufacturing in the villages and small towns.
- Generation of sustainable employment and increase in wages for the traditional Artisans.
- Mitigation of the gap between the indigenous 'production and demand'.
- Reduction in import of 'Agarbatti' in the country.

Background:

- The Govt of India had earlier placed the 'Agarbatti' item from "Free" trade to "Restricted" trade in the import policy and enhanced the import duty from 10% to 25% on 'round bamboo sticks' used for manufacturing of Agarbatti.

Gramodyog Vikas Yojana

Gramodyog Vikas Yojana is one of the two components of Khadi Gramodyog Vikas Yojana which aims to promote and develop the village industries through common facilities, technological modernization,

training etc.

Components of Gramodyog Vikas Yojana:

- Research & Development and Product Innovation: R&D support would be given to the institutions that intend to carry product development, new innovations, design development, product diversification processes etc.
- Activities of existing dedicated verticals of Village Industries: This includes Agro Based & Food Processing Industry, Mineral Based Industry, Handmade Paper, Leather& Plastic Industry among others.
- Capacity Building: Under the Human Resource Development and Skill Training components, exclusive capacity building of staff as well as the artisans.
- Marketing & Publicity: The village institutions will be provided market support by way of preparation of product catalogue, Industry directory, market research, new marketing techniques, buyer seller meet, arranging exhibitions etc.

1.3 Muslim Women Rights Day

Recently, 1st August has been recorded as “Muslim Women Rights Day” in the country’s history to mark first anniversary of the passage of Muslim Women (Protection of Rights on Marriage) Act, 2019. The law made triple talaq a criminal offence.

Key Points

- Provisions of the Muslim Women (Protection of Rights on Marriage) Act, 2019
- The Act makes all declaration of talaq, including in written or electronic form, to be void (i.e. not enforceable in law) and illegal.
- It also makes a declaration of talaq a cognizable offence (only if information relating to the offence is given by a married woman against whom talaq has been declared), attracting up to three years imprisonment with a fine.
- A cognizable offence is one for which a police officer may arrest an accused person without warrant.
- The Magistrate may grant bail to the accused. The bail may be granted only after hearing the woman (against whom talaq has been pronounced), and if the Magistrate is satisfied that there are reasonable grounds for granting bail.
- The offence may be compounded (i.e. the parties may arrive at a compromise) by the Magistrate upon the request of the woman (against whom talaq has been declared).
- A Muslim woman against whom talaq has been declared, is entitled to seek subsistence allowance from her husband for herself and for her dependent children.

1.4 Scanner on institutions

The Ministry of Human Resource Development has decided to put higher education institutes that offer

Chinese language training courses under the scanner.

Background:

The draft of the National Education Policy, 2020 has dropped Mandarin (Chinese) from its list of foreign languages that can be taught in schools.

Details:

- The Ministry of Human Resource Development and the University Grants Commission (UGC) are in the process of reviewing the work being done by higher education institutions as part of agreements/educational arrangements with foreign institutions.
- It is looking closely at universities that have in the past held links with the official Chinese language training department -Hanban.
- Hanban runs hundreds of Confucius Institutes (CI) abroad.
- CIs have come under scrutiny recently in Europe, the U.S. and other countries with allegations of them being used as espionage hubs.

1.5 Draft Defence Production and Export Promotion Policy (2020)

- Recently, the Ministry of Defence has formulated a draft Defence Production and Export Promotion Policy 2020 (DPEPP 2020).
- The DPEPP 2020 is envisaged as an overarching guiding document to provide a focused, structured and significant thrust to defence production capabilities of the country for self-reliance and exports.

Key Points

Goals and Objectives:

- To achieve a turnover of Rs. 1,75,000 crore including export of Rs. 35,000 crore in Aerospace and Defence goods and services by 2025.
- To develop a dynamic, robust and competitive Defence industry, including Aerospace and Naval Shipbuilding industry to cater to the needs of Armed forces with quality products.
- To reduce dependence on imports and take forward "Make in India" initiatives through domestic design and development.
- To promote the export of defence products and become part of the global defence value chains.
- To create an environment that encourages research and development (R&D), rewards innovation, create Indian Intellectual Property (IP) ownership and promotes a robust and self-reliant defence industry.

Outlined Strategies:

Procurement Reforms:

- A Project Management Unit (PMU) will be set up for the development and production of technologies involved, life cycle costs and maintenance requirements of platforms, equipment and weapon systems.

- It also aims to move away from licensed production to design, develop and produce indigenously.
- It also aims to own the design rights and IP of the systems projected in the Long Term Integrated Perspective Plan (LTIPP) and a Technology Assessment Cell (TAC) would be created.
- The TAC would also assess the industrial capability for design, development and production, including re-engineering for production of major systems such as armoured vehicles, submarines, fighter aircraft, helicopters and radars with the major industries in the country.

Indigenisation and support to MSMEs/Startups:

- The indigenisation policy aims to create an industry ecosystem to indigenise the imported components (including alloys and special materials) and sub-assemblies for defence equipment and platforms manufactured in India. 5,000 such items are proposed to be indigenised by 2025.
- More than 50 startups are currently developing new 'fit-for-military-use' technologies/products.

Optimise resource allocation:

- The share of domestic procurement in overall Defence procurement is about 60%.
- To enhance procurement from domestic industry, the procurement needs to be doubled from the current Rs. 70,000 crore to Rs. 1,40,000 crore by 2025.

Investment Promotion and Ease of Doing Business:

- India is already a large aerospace market with rising passenger traffic and increasing military expenditure, as a result of which the demand for aircraft (fixed and rotary wings) is rising.
- The opportunities in the aerospace industry have been identified in the following segments - aircraft build work, aircraft Maintenance, Repair and Overhaul (MRO), helicopters, engine manufacturing and MRO work, line replaceable units, Unmanned Aerial Vehicles (UAVs) and upgrades and retrofits.
- The improvement in market size, demographic dividend and availability of diverse skill sets are evident from India's ranking in the World Bank's 'Ease of Doing Business' (EoDB) report.
- The investments in the defence sector need to regularly sustain the steady supply of orders.

Innovation and R&D:

- Innovations for Defence Excellence (iDEX) has been operationalised to provide necessary incubation and infrastructure support to the startups in the defence area.
- iDEX would be further scaled up to engage with 300 more startups and develop 60 new technologies/products during the next five years.
- Mission Raksha Gyan Shakti was launched to promote a greater culture of innovation and technology development and file a higher number of patents in Defence Public Sector Undertakings (DPSUs), Ordnance Factory Board (OFB). It would be scaled up for promoting the creation of Intellectual Property in the sector and its commercial utilisation.

1.6 AP Government Signs MoU with three International FMCG companies to Support Economic Empowerment of Women

- On 3rd August 2020, The state government of Andhra Pradesh(AP) signs a memorandum of Understanding(MoU) with three International FMCG (Fast-moving consumer goods) companies- Hindustan Unilever Ltd (HUL), ITC Ltd., and Procter and Gamble (P&G) to provide marketing and technological support for the economic empowerment of the women and to make them self-reliant.
- The MoU was signed in the presence of Y S Jaganmohan Reddy at his Camp office in Tadepalli.
- Raju Babu, CEO of Society for elimination of rural poverty(SERP) on behalf of the government signed the MoU while Joseph Verkey of P&G, Rajnikant Rai of ITC and Ramakrishna Reddy of HUL signed the MoU.
- The state government of Andhra Pradesh is set to launch two schemes YSR Cheyutha and YSR Asara to support the empowerment of women. Around Rs. 11,000 crores per year will be distributed under both the schemes which will be around Rs. 44,000 crores for 4 years which will benefit around 1 crore women.

YSR Cheyutha:

- The YSR Cheyutha scheme is set to launch on 12th August 2020, to support the women of the minority groups (SC, ST, BC) aged between 45 and 60.
- Financial assistance of Rs. 18,750 per annum that is Rs. 75,000 for four years will be provided to the women under the scheme to support them to become self-reliant and change their economic status.
- Under this scheme around Rs. 4,500 crores will be distributed.

YSR Asara:

- YSR Asara is set to be launched in September 2020, which will benefit around 90 lakh women of around 9lakh self-help groups.
- Under this scheme around Rs. 6,700 crores will be distributed.

Features of MoU:

- The Companies will support the women under the YSR Cheyutha and YSR Asara schemes.
- They will provide marketing opportunities and technology support for the women under the schemes which will benefit around 25 lakh women in AP.
- This MoU will provide more employment opportunities with constant income for the women.

1.7 E-Raksha Bandhan launched in Andhra Pradesh

Andhra Pradesh Chief Minister Y.S. Jagan Mohan Reddy on the eve of Raksha Bandhan launched 'E-Raksha Bandhan', an online training programme on cybersecurity. The programme is aimed at creating awareness among the public on cybercrimes across the State.

Objective

The programme has massive support of various dignitaries including, Crime Investigation Department (CID), FM Radio, The Andhra Pradesh Police, Cyber Peace Foundation, Cyber Crime Prevention Against Women and Children (CCPWC), and other organisations for organizing, advertising and creating mass awareness about the month-long online awareness programme.

Implementation

Through 'E-Raksha Bandhan' as many as 1 lakh women, girls and the general public would be trained. The participants will be trained through Essay writing, debates, quiz, webinars, workshops, and slogan writing competitions which will be held every day on different topics from 11 a.m. to 12 noon daily, until 31st August.

- The telecast of all these events will be done on AP CID's YouTube channel every-day starting at 11 in the morning.

Related highlights

- While gracing the occasion the CM of Andhra Pradesh listed out various other steps being taken by the state government to prevent crime against women.
- The CM praised Disha Police Stations and also mentioned the investigation of 167 cases relating to crime against women has been completed and charge sheets have been filed in the courts.
- The CM promoted the Disha APP and urged the victims to complain through the Disha App and in Disha Police Stations on harassment and cybercrimes.

1.8 Vitamin D deficiency in India

- Researchers have claimed that vitamin D deficiency can negatively affect Covid-19 high-risk patients, particularly those who are diabetic, have heart conditions, pneumonia, obesity and those who smoke.
- It is also associated with infections in the respiratory tract and lung injury.

Key Points

- India has a large population suffering from vitamin D deficiency among the public irrespective of their location (urban or rural), age or gender, or whether they are poor or even rich.
- This is despite India being a tropical nation getting abundant sunshine, which is a precursor to Vitamin D formation in the body.
- According to an analysis published in the Indian Journal of Endocrinology and Metabolism in 2017, the level of vitamin D in people from different states of India ranged between 3.15 nanogram/millilitre to 52.9 ng/ml, which was considerably lower than the needed level of 30-100 ng/ml.
- Vitamin D level among south Indians is 15.74–19.16 ng/ml.
- Females showed consistently lower levels than males.
- Vitamin D deficiency also occurs among people of the Indian sub-continental origin settled in Great Britain.

- This suggests a correlation between genetics of people of this region and Vitamin D metabolism.
- According to data by the National Nutrition Monitoring Bureau (NNMB) over the last 50 years, the calcium levels in average Indian populations has plummeted from 700 units per day to 300-400.
- The normal, needed level of Calcium is 800-1,000 units per day. Vitamin D helps in absorption of Calcium by the body.
- The body needs calcium to maintain strong bones. It is also needed for muscles to move and for nerves to carry messages between the brain and every body part.
- It also helps release hormones and enzymes that affect almost every function in the human body.
- This deficiency of Calcium stands in contrast to the fact that India produces the maximum amount of milk per day in the world which is a rich source of calcium.

Government Initiatives

- Mid-day meal scheme has helped in combating nutrition deficiencies in poor school-going children.
- The feeding programmes for preschool children and pregnant women under the Integrated Child Development Services through anganwadis have been vital.
- The government is trying to ensure the food requirement of the poor section of society through the National Food Security Act (NFSA) and the Public Distribution System (PDS).
- POSHAN Abhiyaan, launched in 2017-18, aims to reduce stunting, under-nutrition, anaemia and low birth weight babies through synergy and convergence among different programmes, better monitoring and improved community mobilisation.
- Biofortification i.e improvement of the nutritional quality of food crops through agronomic practices, conventional plant breeding, or modern biotechnology is being promoted by the government for various crops like carrots (MadhubanGajar), wheat (MACS 4028) etc. in order to ensure nutritional security.

Suggestions

- The Central and State governments need to consult nutrition experts and institutions to advise and suggest the type of nutritive items that can be added to the current 'ration' food given to the poor, and the meals given to school children.
- The meals given to the poor or children should include vegetables like spinach and other green leafy vegetables, beans, peas, carrots, tomato, potato, milk/curd and fruits like bananas, and omega 3 and 6 fatty acids (and an egg)
- Besides vitamin D and calcium, food rich in other micronutrients (such as B complex vitamins, plus Fe, Zn, I, Se, Zn) should be offered to the poor, so that immunity against any infection is ensured.
- Such an addition takes care of what is called 'hidden hunger' in poorly nourished people.

- The government can mass supply free-of-charge vitamin D, other vitamins and calcium, in consultation with medical and public health experts to the public.
- Many Indian pharmaceutical companies manufacture these. Procuring these supplements from Indian companies will fall in line with the 'Make in India' initiative of the government.
- The consumption of Seaweed can be very beneficial. Seaweeds are vegetarian, and rich in vitamins, minerals, iodine and omega 3 fatty acids. As India has a long coastline, these can be affordable nutritional supplements for Indians.
- Schools can have their students stand in sunlight for 20-30 minutes daily, and encourage physical exercise and games for an hour per day.
- Further, it is important to raise awareness about the importance of healthy eating and nutritional requirements of the human body.

1.9 24 States under One Nation-One Ration Card

- Recently, Manipur, Nagaland and Uttarakhand, along with the Union Territory (UT) of Jammu and Kashmir have been integrated with the One Nation-One Ration Card (ONORC) Scheme.
- Now a total of 24 States/UTs are connected under the ONORC scheme.
- The remaining states/UTs are targeted to be integrated into the scheme by March 2021.

Key Points

The ONORC Scheme:

- It was started as an inter-State portability of ration cards in 2019.
- It allows the migratory National Food Security Act (NFSA), 2013 beneficiaries to lift their entitled quota of food grains from any Fair Price Shop (FPS) of their choice anywhere in the country.
- This can be done by using their existing ration card with Aadhaar based authentication.
- With 24 States/UTs connected under the scheme, about 65 crore beneficiaries, comprising 80% of the total beneficiaries covered under the NFSA, can now get their subsidised ration from anywhere in these 24 states and union territories.

Benefit of ONORC Scheme:

- **Transparency:** It will bring more transparency and efficiency in the distribution of foodgrains.
- **Identification:** It will improve the mechanism to identify fake/duplicate ration cards and provide the option to Public distribution system (PDS) beneficiaries to lift their entitled foodgrains from the Fair Price Shops of their choice at the national level.
- **Food Security:** The scheme will ensure food security of migrant labourers who move to other states to seek better job opportunities.
- **SDG:** This will help achieve the target set under Sustainable Developmental Goals (SDG) 2 of ending hunger by 2030.

- Also, it will address the poor state of hunger in India, as highlighted by the Global Hunger Index, where India has been ranked 102 out of 117 countries in 2019.

Issues Involved:

- **Distribution of Ration:** The distribution of ration had become an issue during the lockdown when migrant workers didn't have ration cards in the states they were staying. This led the migrants to walk towards their villages amid lockdown.
- **Logistical Issues:** An FPS receives the monthly quota of products strictly in accordance with the number of people assigned to it.
- The ONORC, when fully operational, would disrupt this practice, as some FPSs may have to cater to more numbers of cards even as others cater to less, owing to migration of people.
- **Lack of Data:** There is no exact data on the mobility of poor households migrating to work, locating intra- and inter-state destinations and sectors employing the workers.

Suggestions

- The Unorganised Sector Social Security Act, 2008, had drawn up a system of documenting informal sector workers through a system of welfare boards.
- In order to get credible data regarding the migrant workers, this must be implemented in letter and spirit.
- A dedicated e-commerce platform ONORC may resolve the challenge of logistical issues.
- Social auditing must be made mandatory to measure the performance of ONORC.
- NFSA defines food security as nutritional security.
- Therefore, portability of Integrated Child Development Services, Mid-Day Meals, immunisation, health care and other facilities for poor migrant households can't be neglected and should be made portable.
- In the longer run, the PDS system may be replaced by a fool-proof food coupon system or direct benefit transfer, targeting the poor, wherein a Below Poverty Line family can buy rice, pulses, sugar and oil from any Kirana store at the market price, by either paying fully through the coupon or by cash.

1.10 Expansion of Emergency Credit Line Guarantee Scheme

- Recently, the government has expanded its Emergency Credit Line Guarantee Scheme (ECLGS) to cover loans given to larger firms as well as to self-employed people and professionals who have taken loans for business purposes.
- ECLGS was rolled out in May 2020 as part of the Centre's Aatmanirbhar package in response to the Covid-19 crisis. The objective was to support small businesses struggling to meet their operational

liabilities due to the imposition of a nationwide lockdown.

Key Points

- The ECLGS provides for the Guaranteed Emergency Credit Line (GECL) facility. The GECL is a loan for which 100% guarantee is provided by the National Credit Guarantee Trustee Company (NCGTC) to Member Lending Institutions (MLIs) - banks, financial institutions and Non-Banking Financial Companies (NBFCs).
- The loans are extended in the form of additional working capital term loan facility in case of banks and additional term loan facility in case of NBFCs to eligible Micro, Small and Medium Enterprises (MSMEs)/business enterprises and interested Pradhan Mantri Mudra Yojana (PMMY) borrowers.
- First-time borrowers and Non-Performing Asset (NPA) accounts cannot raise funds under the scheme.
- The tenor of loans provided under the GECL facility is four years from the date of disbursement.
- A moratorium period of one year on the principal amount is provided.
- Interest rates of banks and financial institutions have been capped at 9.25% per annum, while NBFCs can lend at a maximum of 14% per annum.
- The Scheme is applicable to all loans sanctioned under the GECL facility during the period from, 23rd May 2020 to 31st October, 2020, or till an amount of Rs. 3 lakh crore is sanctioned under GECL, whichever is earlier.

The scheme has been expanded to cover:

- Enterprises with a turnover up to Rs. 250 crore with outstanding loans up to Rs. 50 crore (as on 29th February, 2020).
- The earlier limit was Rs. 100 crore and Rs 25 crore, respectively.
- Credit under GECL is provided up to 20% of the borrower's total outstanding credit up to Rs. 25 crore.
- The expansion of the limits has increased the maximum amount of loans that can be availed under the Scheme to Rs. 10 crore (20% of 50 crore) from Rs. 5 crore (20% of 25 crore).
- Individual beneficiaries including both professionals such as doctors, lawyers and chartered accountants, as well as self-employed people such as vendors or taxi drivers.
- The changes in the ECLGS scheme are likely to make an additional Rs 1 lakh crore eligible.
- Till now, a total of around Rs. 1.37 lakh crore has been sanctioned under the scheme by member lending institutions to around 40 lakh accounts, of which around Rs 87,000 crore has been disbursed.

1.11 Thenzawl Golf Resort in Mizoram

- Recently, the Thenzawl Golf Resort Project in Mizoram has been virtually inaugurated.
- The project was implemented under the Swadesh Darshan Scheme of the Ministry of Tourism, Government of India.

Key Points

The project was sanctioned under the Integrated Development of New Eco-Tourism under Swadesh Darshan-North East Circuit at Thenzawl and South Zote, District Serchhip and Reiek, Mizoram.

- Eco-Tourism has been broadly defined as tourism which is ecologically sustainable.
- A total amount of Rs. 92.25 crore was sanctioned for it, out of which Rs. 64.48 crore was sanctioned for various components at Thenzawl including the golf course which is designed to have facilities of international standards.
- The competitive advantage of Thenzawl Golf Course is that it will provide quality golfing experience at a fair price.

Golf Tourism in India:

- Currently, India has more than 230 golf courses in all out of which several are of international standards and golf events held there attract domestic and international tourists.
- Golf tourism has a strong potential in India because the climatic condition is more favourable here as compared to most countries.
- India's picturesque landscapes and exceptional hospitality services add to the enhanced experience.
- The Ministry of Tourism, Government of India endeavours to work as a catalyst and active supporter for the development of golf tourism in the country.
- For that, it is creating a comprehensive and coordinated framework for promoting golf tourism in India as a niche tourism product.

1.12 Constitution Bench for EWS Quota

- Recently, the Supreme Court of India referred the petitions challenging the 103rd Constitutional Amendment Act, 2019 to a five-judge constitution bench, saying it involves 'substantial questions of law'.
- According to Article 145 (3) of the Constitution, at least five judges need to hear cases that involve 'a substantial question of law as to the interpretation' of the Constitution, or any reference under Article 143, which deals with the power of the President of India to consult the Supreme Court.
- The Supreme Court bench consisting of at least five judges is called the Constitution bench.

Key Points**103rd Constitutional Amendment Act:**

- It introduced an economic reservation (10% quota) in jobs and admissions in education institutes for Economically Weaker Sections (EWS) by amending Articles 15 and 16.
- It inserted Article 15 (6) and Article 16 (6).
- It was enacted to promote the welfare of the poor not covered by the 50% reservation policy for SCs, STs and Socially and Educationally Backward Classes (SEBC).

- It enables both Centre and the states to provide reservation to the EWS of society.

Petitioners' Argument:

- The amendments run contrary to the constitutional scheme, where no segment of available seats/posts can be reserved, only on the basis of economic criterion.
- The amendments also run contrary to the judgment pronounced in the Indra Sawhney V. Union of India 1992 case, that a backward class cannot be determined only and exclusively with reference to economic criterion.
- The amendments alter the 50% quota limit set up in Indra Sawhney V. Union of India 1992 case, which according to the petitioner is a part Basic Structure of the Constitution.
- Reservation in unaided institutions violates the fundamental right under Article 19(1)(g) of the Constitution.
- Article 19 (1)(g) allows every citizen to practise any profession, or to carry on any occupation, trade or business.

Central Government's Stand:

- The amendment was necessitated to benefit EWS who are not covered under existing schemes of reservation, which as per statistics, constitute a considerably large segment of the country's population
- The 50% limit in the Indira Sawhney ruling cannot be applied in the present petitions as the Sawhney case dealt with memoranda issued by the government while what is under challenge now is a constitutional amendment.

Substantial Question of Law Involved:

- Whether the challenged 103rd Amendment Act violates Basic Structure of the Constitution, with reference to equality provisions of the Constitution.
- The case of the Union of India that though ordinarily 50% is the rule but same will not prevent the amendment of the Constitution itself in view of the existing special circumstances to uplift the members of the society belonging to economically weaker sections.

1.13 Sahakar Cooptube NCDC Channel

Recently, the Union Minister of Agriculture & Farmers' Welfare launched the two initiatives of the National Cooperative Development Corporation (NCDC) - SahakarCooptube NCDC Channel and Guidance Videos on 'Formation and Registration of a Cooperative'.

Key Points**SahakarCooptube NCDC Channel:**

- The Channel aims to facilitate involvement of the youth in the cooperative movement.
- Cooperatives lend strength to farmers to minimize risks in agriculture and allied sectors and act as a shield against exploitation.

- The channel will give a boost to Atmanirbhar Bharat Abhiyan under which the government has announced a series of transformative measures and sector specific financial packages to help agriculture.
- The initiatives are steps towards One Nation One Market with the objective for India to become a food factory of the world.

Guidance Videos:

These have been produced by the NCDC on ‘Formation and Registration of A Cooperative’ for eighteen different states in Hindi and regional languages.

- These would help strengthen and deepen the major initiatives of the government to promote and form 10,000 Farmer-Producer Organisations (FPOs).
- One such initiative is the formation of FPOs under the “One-Product One-District” approach.

1.14 Bru Resettlement Issue

- Recently, three organisations representing the Bru community have rejected the sites proposed for their resettlement by the Joint Movement Committee (JMC).
- Joint Movement Committee (JMC) is an umbrella group of non-Bru community in Tripura. The JMC comprises the Bengali, Mizo, Buddhist Barua and some other communities.
- The three organisations included Mizoram Bru Displaced Peoples’ Forum, Mizoram Bru Displaced Peoples’ Coordination Committee and Bru Displaced Welfare Committee

Key Points

- JMC’s Actions: On 21st July 2020, the JMC had submitted a memorandum to the Tripura government specifying six places in Kanchanpur and Panisagar subdivisions of North Tripura district for resettlement of Brus.
- Limiting the number of families: Proposal of limiting the number to 500 families at most be settled in these places.
- Limited Resources: They maintain that the State (Tripura) does not have enough space and resources to accommodate them (Bru).

Arguments by Bru Community Representatives:

- This action of site selection by the JMC is completely unjustified as they were not a part of the quadrilateral agreement. Also the sites proposed by the JMC are unconnected by road and electricity and too far from hospitals, schools and other facilities.
- The quadrilateral agreement was signed among the Central government, State governments of Mizoram and Tripura and the Bru groups in New Delhi in January 2020.
- They have insisted on resettling some 6,500 families in clusters of at least 500 families at each of the sites of their choice —seven in North Tripura district and five in the adjoining Dhalai district.

- They have also rejected the demand for inclusion of four JMC members in the monitoring team for the resettlement of the Bru, as they are having no connection or involvement in the issue of either repatriation to Mizoram or resettlement in Tripura during the last 23 years.

Background

- Bru or Reang is a community indigenous to Northeast India, living mostly in Tripura, Mizoram and Assam. In Tripura, they are recognised as a Particularly Vulnerable Tribal Group.
- In Mizoram, they have been targeted by groups that do not consider them indigenous to the state. In 1997, following ethnic clashes, nearly 37,000 Brus fled Mamit, Kolasib and Lunglei districts of Mizoram and were accommodated in relief camps in Tripura.
- Since then, 5,000 have returned to Mizoram in eight phases of repatriation, while 32,000 still live in six relief camps in North Tripura.
- In June 2018, community leaders from the Bru camps signed an agreement with the Centre and the two State governments, providing for repatriation in Mizoram. But most camp residents rejected the terms of the agreement.
- According to them, the agreement doesn't guarantee their safety in Mizoram.
- The Centre, the governments of Mizoram and Tripura and leaders of Bru organisations signed a quadripartite agreement in January (2020) to let the remaining 35,000 refugees who have stayed back to be resettled in Tripura.
- The rehabilitation package offered included financial assistance of ₹4 lakh and land for constructing a house for each family.

1.15 Issues with Home-based Learning Programme in MP

Only 30% students in government schools of Madhya Pradesh (MP) have been regularly reached through the HamaraGhar, Humara Vidyalaya programme.

Key Points

HamaraGhar, Hamara Vidyalaya Programme:

- It is a home-based learning programme launched by the Department of School Education, MP.
- It aimed to reach 22 lakh students after shutting down of schools due to Covid-19 pandemic.
- The idea behind the programme is to ensure that students study regularly at home and also learn life skills from their elders.
- Under it, the modular programme airs on Doordarshan Madhya Pradesh on fixed time slots. It has three parts to it which are recap, delivery of a new concept and practice of the concept.
- Various concepts in the form of videos, practise sheets and quizzes are delivered in sync with TV programmes through WhatsApp-led Digital Learning Enhancement Program (DigiLEP).

Issues Highlighted:

- The programme was able to reach only around 30% of the total students from 18th July to 25th July.
- 20% of students were reached through TV and 10% through WhatsApp.
- Families of 30% of the students do not have TVs or smartphones having an internet connection to avail of the study material.
- In families where smartphones with internet connections are available, parents often take them to work with them.
- The remaining students were not able to avail the study modules on a regular basis breaking the learning flow.
- Reaching to students in the 89 tribal dominated blocks in districts such as Alirajpur, Barwani and Jhabua is a task in itself.

Suggestions:

- Students need to be divided into various groups according to the availability of TVs and phones with the working connection, in sync with PRAGYATA guidelines.
- If a family has a phone, it should be used by all of its children for their studies.
- Those who have a TV, they must watch the telecast during fixed time slots on Doordarshan.

1.16 IMD Forecasts Surplus Rains

- According to the India Meteorological Department (IMD) rainfall in the “second half of the monsoon” is likely to be 104% of the Long Period Average (LPA).
- This fall within the “normal” range of rainfall.

Key Points

- Long Period Average (LPA): It is the average rainfall recorded during the months from June to September, calculated during the 50-year period, and is kept as a benchmark while forecasting the quantitative rainfall for the monsoon season every year.
- IMD maintains an independent LPA for every homogeneous region of the country, which ranges from 71.6 cm to 143.83 cm.
- IMD maintains five rainfall distribution categories on an all-India scale. These are:
 - Normal or Near Normal: When per cent departure of actual rainfall is +/-10% of LPA, that is, between 96-104% of LPA.
 - Below Normal: When departure of actual rainfall is less than 10% of LPA, that is 90-96% of LPA.
 - Above Normal: When actual rainfall is 104-110% of LPA.
 - Deficient: When departure of actual rainfall is less than 90% of LPA.
 - Excess: When departure of actual rainfall is more than 110% of LPA.

- This year increased rainfall is attributed to the commencement of La Nina like conditions by the second half of the monsoon season.
- La Nina is a climate pattern that describes periods of below-average sea surface temperatures across the east-central Equatorial Pacific.
- La Nina is considered to be the counterpart to El Nino, and its impacts tend to be opposite those of El Niño.
- Together, they form the "cold" (La Nina) and "warm" (El Nino) phases of the El Nino-Southern Oscillation (ENSO).

1.17 Abanindranath Tagore birth anniversary on August 7th

The National Gallery of Modern Art (NGMA), New Delhi has organised a virtual tour titled “The Great Maestro - Abanindranath Tagore” to commemorate the 150th birth anniversary of Abanindranath Tagore on 7th August 2020.

Key Points

- Birth: Abanindranath Tagore took birth in a family of Tagores of Jorasanko in Kolkata in 1871.
- He was a nephew of Rabindranath Tagore.

Abanindranath Ideology:

- In his youth, Abanindranath received training in European and Academic style from European artists.
- However, during the last decade of the 19th century, he developed distaste for the corporeality of European naturalism (which represented things closer to the way one sees them - inspired by the principles of natural science).
- Mughal miniatures influenced his visual ideas deeply.
- Another source of inspiration came from the visit of the Japanese philosopher and aesthetician Okakura Kakuzo to Kolkata in 1902.
- He leaned towards painting images with historic or literary allusions.

Prominent Figure of Modern Indian Art:

- Towards the end of the nineteenth century, a stronger connection was established between art and nationalism. Many painters tried to develop a style that could be considered both modern and Indian.
- Raja Ravi Varma was one of the first artists who tried to create a style that was both modern and national.
- He mastered the Western art of oil painting and realistic life study, but painted themes from Indian mythology.
- However, in Bengal, a new group of nationalist artists gathered around Abanindranath Tagore.
- They rejected the art of Ravi Varma as imitative and westernised, and declared that such a style was unsuitable for depicting the nation’s ancient myths and legends.

- They felt that a genuine Indian style of painting had to draw inspiration from non-Western art traditions, and try to capture the spiritual essence of the East

Bengal School of Painting:

- It is also called the Renaissance School or the Revivalist School, as it represented the first modern movement of Indian art.
- It rediscovered the glories of Indian art and consciously tried to produce what it considered a truly Indian art inspired by the creations of the past.
- Its leading artist was Abanindranath Tagore and its theoretician was E.B. Havell, the principal of the Calcutta School of Art.
- They broke away from the convention of oil painting and the realistic style, and turned for inspiration to medieval Indian traditions of miniature painting and the ancient art of mural painting in the Ajanta caves.
- They were also influenced by the art (wash technique) of Japanese artists who visited India at that time to develop an Asian Art movement.
- Associated Pupils: Nandalal Bose and Kshitindranath Majumdar
- Popular Paintings: Bharat Mata, My Mother, Journey's End, etc.
- Popular Books: Rajkahini, Nalak, etc.
- Death: He died on 5th December, 1951.

1.18 National Handloom Day

- On the occasion of the 6th National Handloom Day on 7th August 2020, the Ministry of Textiles is organizing a virtual function in the wake of the Covid-19 pandemic.
- The first National Handloom Day was celebrated in Chennai in 2015.

Key Points

- The date, 7th August, was chosen as the Swadeshi Movement was launched on the same date in the year 1905, which was based on the Gandhian ideology of Swadeshi.
- On this day, the handloom weaving community is honoured and the contribution of this sector is highlighted.

Objectives:

- To generate awareness about the handloom industry amongst the public at large and its contribution to socio-economic development.
- To protect India's handloom heritage and to enable the handloom weavers and workers with greater opportunities.
- To ensure sustainable development of the handloom sector thereby empowering handloom workers financially and instilling pride in their exquisite craftsmanship.

Significance:

- Handloom sector is a symbol of India's glorious cultural heritage.
- India's soft power has long been endorsed by the handloom and handicraft space. 'Saree diplomacy' and 'Khadi diplomacy' are some such examples.
- The textiles and handloom sector in India is the second-largest source of employment to people, after agriculture.
- According to the Fourth All India Handloom Census 2019-20, 31.45 lakh households are engaged in handloom, weaving and allied activities.
- It is an important source of livelihood in the country and a key to women empowerment as over 70% of handloom weavers and allied workers are women.

Steps Taken

- A social media campaign has been planned for the handloom weaving community.
- All the Secretaries of the States, Textile Bodies like the Central Silk Board, National Jute Board, e-commerce entities, retail companies and designer bodies have been requested to amplify the campaign.
- The Prime Minister has urged the people to use Indian handlooms and handicrafts and further spread awareness to others as well.
- The more the world knows about the richness and diversity of these products, the greater Indian artisans and weavers will benefit.
- Under Atmanirbhar Bharat Abhiyan, Handloom Export Promotion Council (HEPC) is organising a Virtual Fair, connecting more than 150 participants from different regions of the country showcasing their products with unique designs and skills.
- Various exquisite handloom products and numerous other Geographical Indication (GI) Tagged products will be displayed to attract the attention of international buyers.
- Other events include the launching of a mobile app and backend website for Handloom Mark Scheme (HLM), the launching of My Handloom Portal, etc.
- HLM was launched in 2006 with the basic objective to brand Indian handloom products and secure a premium position for them in domestic as well as international markets.

1.19 Anganwadi Services

Right to Food Campaign has given a memorandum to the Minister for Women and Child Development to resume provision of hot-cooked meals and ensure implementation of anganwadi services.

Key Points

Recommendations: The memorandum suggested that anganwadi services (like community-managed growth monitoring, supplementary nutrition, immunisation, etc.) should be delivered either within the day care centres or at the houses of the beneficiaries.

- It also recommended a comprehensive package of cooked food and dry rations.
- It also sought protective gear for frontline health workers such as Accredited Social Health Activist (ASHA) and anganwadi workers.
- Background: Following the nationwide lockdown on March 25, the Integrated Child Development Scheme (ICDS) implemented at anganwadis was discontinued.
- It impacted nearly 14 lakh anganwadis and over 8 crore beneficiaries (children under six years and pregnant women and lactating mothers)
- The Ministry of Women and Child Development asked State governments and Union Territories to extend food security allowance to each beneficiary.
- According to the POSHAN COVID-19 Monitoring report for India compiled in June 2020, by UNICEF, World Food Programme and the World Bank, 10 of the 14 most populous States did not conduct community management of acutely malnourished children and eight States were unable to measure growth parameters of children under six years.

1.20 Quit India Day is observed on 9 August

Quit India Day is observed on 9th August every year. The day commemorates the important movement in the freedom struggle. The day is celebrated to pay tribute to the freedom fighters.

Quit India Movement:

- The Quit India Movement is also known as India August Movement or Bharat ChodoAndolan. It was launched by Mahatma Gandhi at the Bombay session of the All-India Congress Committee (AICC) on 8 August 1942 during World War II.
- The movement demanded "An Orderly British Withdrawal" from India. As the movement was held in August, it is also known as August Kranti or August Movement.
- Under the movement, more than 1,00,000 people were arrested and the government resorted to violence in order to crush the agitation.
- The movement was crushed in 1944 as the British refused to grant immediate independence. But after the Quit India movement, the British cited that immediate independence could happen only after WWII had ended.

1.21 Report on Future of News in India: Vidhi

Recently, the Vidhi Centre for Legal Policy (Delhi based independent think-tank) released a report examining the future of news in India.

Key Points

Findings:

- The worsening economic health of print journalism threatens its ability to credibly inform the public and act as an institutional check upon power.

- The environment of digital news operates in a vacuum of regulation. The emergence of a post-truth paradigm in public communications and the widespread proliferation of misinformation are barriers to realising the benefits of digital news distribution.
- Post-truth includes circumstances in which objective facts are less influential in shaping public opinion than appeals to emotion and personal belief.
- Recommendations: The report has drawn a roadmap of legal reforms to facilitate the transition of high-quality print journalism into the era of digital communications in a manner that benefits the public good.
- Checking the Dominance of Online Advertising Platforms:
 - The advertisement-revenue model for digital news may be displaying indications of market failure.
 - In an advertising-revenue model, the online companies publish free content that drives hundreds, thousands or millions of visitors to the site on a monthly basis. Advertisers pay the online companies to get in front of these visitors, this helps Businesses generate their revenue from the fees advertisers pay for this access.
 - To orient the market for digital news towards the public good, the role and practices of online advertising platforms must be systematically studied by a specialised authority.
 - The report has recommended the Competition Commission of India to investigate the dominance of online advertising platforms.

1.22 Enacting Comprehensive Measures to Address Misinformation:

- It suggests a range of legislative, co-regulatory and voluntary measures which provide an integrated framework to prevent the spread of misinformation and enhance reader literacy. Example:
 - Development of industry standards to identify misinformation.
 - Use of analytics to identify patterns of misinformation, etc
- Appropriate Responsibilities on Digital News Entities:
 - The report calls to fill the legal vacuum for digital news in a manner which is sensitive to the nuances of online discourse.
 - It recommends granting limited powers to the Press Council of India, in conjunction with a voluntary registration procedure and the development of a brief, accessible code of conduct as a mechanism for the imposition of editorial responsibility.
 - The role of online platforms in the distribution of news should be addressed through targeted interventions based on the design aspects of such platforms.

1.23 **Food System Vision 2050 Prize: Rockefeller Foundation**

- The Rockefeller Foundation has selected Naandi Foundation (a Hyderabad based non-profit organisation), as one of the top 10 ‘Visionaries’ in the world for the Food System Vision 2050 Prize.
- Naandi was recognised for its Arakunomics model.

Key Points

The Food System Vision Prize:

It was launched by the USA-based ‘The Rockefeller Foundation’, in partnership with the other two organisations - SecondMuse and OpenIDEO- in 2019.

- It is an invitation for organizations across the globe to develop a Vision of the regenerative and nourishing food system that they aspire to create by the year 2050.
- Food System Vision is a story about the future that addresses the following six interconnected themes: Environment, Diets, Economics, Culture, Technology and Policy.
- The notion is that by transforming food systems, following challenges can be addressed:
 - A global population approaching 10 billion
 - Greenhouse gasses changing the climate
 - Pollution poisoning soil, air, and water
- USD 2 million will be distributed to the Top Visionaries, who will be eligible to receive a prize of USD 2,00,000 each.

Naandi Foundation (Arakunomics):

- The organisation was recognised for the application of Arakunomics model in regions of Araku (Andhra Pradesh), Wardha (Maharashtra) and New Delhi, leading to the Food Vision 2050 that follows an “ABCDEFGH” framework centring on: Agriculture, Biology, Compost, Decentralised decision-making, Entrepreneurs, Families, Global Markets, and ‘Headstands (implying innovation)’.
- Arakunomics is a new integrated economic model that ensures profits for farmers, quality for consumers through regenerative agriculture.
- It is based on work with tribal farmers in Araku for nearly 20 years.
- This economic model is a tribute to the tribal farmers of Araku region for the world class coffee produced and launched in Paris in 2017, as well as for the high carbon landscape transformation they did in over 955 villages, thereby planting 25 million trees.
- Arakunomics success in Araku led to Naandi replicating the model to support the livelihoods of farming communities in the villages of Wardha – infamous for agrarian distress, as well as later in New Delhi, as part of an Urban Farms Co programme.
- Naandi hopes to expand its “food-print” by creating thousands of farm livelihoods by transforming their agriculture over one million acres spread across India.

- Rockefeller Foundation will release USD 1,50,000 at present and the balance USD 50,000 after a three-month accelerator programme that is intended to help Naandi realise its vision.

1.24 TRIFED's Digitisation Drive

The Tribal Cooperative Marketing Development Federation of India (TRIFED) celebrated its 33rd Foundation Day on 6th August 2020 and launched its own virtual office on the same day.

Key Points

Virtual Office:

- It has 81 online workstations and 100 additional converging State and agency workstations that will help the team members of TRIFED in working with their partners across the country on mission-mode towards bringing the tribal people closer to mainstream development.
- To gauge the level of employee engagement and streamline their efforts, an Employee Engagement and Work Distribution Matrix with Dashboard Links has also been launched.

Reasons:

- After the Covid-19 pandemic, every aspect like shopping, banking, working, etc. has gone online and it has been observed that the trend has increased even after relaxations of lockdowns.
- All these organisational initiatives are a part of TRIFED's ambitious all-encompassing digitisation drive to promote tribal commerce and map and link its village-based tribal producers and artisans to national and international markets by setting up state of art e-platforms benchmarked to international standards.

1.25 Rashtriya Swachhata Kendra

The Prime Minister will inaugurate RashtriyaSwachhata Kendra (RSK) on 8th August, 2020.

Key Points

- RSK is an interactive experience centre on the Swachh Bharat Mission.
- It will introduce future generations to its successful journey as the world's largest behaviour change campaign.
- It will showcase the core elements of the mission and anecdotes on the journey of the country from Satyagraha to Swachhagrah.
- It will impart information, awareness and education on Swachhata (sanitation) and related aspects.
- The installations at RSK will include audio visual immersive shows, interactive LED panels, hologram boxes, interactive games etc.
- RashtriyaSwachhata Kendra (RSK) was first announced on the occasion of the centenary celebrations of Mahatma Gandhi's Champaran Satyagraha.

1.26 **First Kisan Rail**

- The Indian Railways has introduced the first “Kisan Rail” from Devlali (Maharashtra) to Danapur (Bihar).
- The Centre had announced plans of starting special parcel trains called ‘Kisan Rail’ in the Budget 2020-21.

Key Points

- Kisan Rails are the first ever multi commodity trains.
- Earlier, Indian Railways had run single commodity special trains like Banana Specials etc.
- These trains with refrigerated coaches will help in bringing perishable agricultural products like vegetables, fruits to the market in a short period of time.
- These will ensure that agro products reach from one corner to another corner of the country.
- These trains are a step towards realising the goal of doubling farmers’ incomes by 2022.
- These are expected to be a great help to the farmers, as freight of these trains will be charged as per parcel tariff of normal trains.
- The Devlali-Danapur train (a weekly service) is expected to reduce transportation costs by Rs. 1000 per tonne compared with roadways and reduce travel time by around 15 hours.
- Aggressive marketing is being done with local farmers, loaders, Agriculture Produce Market Committee (APMC) and individuals.
- Any farmer or any other interested party can directly book their consignments in trains, without any lower limit on the size of consignment.
- The consignment can be as small as 50-100 kgs, and can be booked from any stopping station to any other stopping station – giving full flexibility.
- Regarding loss/damage of products for any reason, Railways already have a well-established claim/compensation system – through which the party can get compensation for its losses.

1.27 **Andaman and Nicobar Islands to be Maritime and Startup Hub**

Recently, the Prime Minister has declared that the Andaman and Nicobar Islands will be developed as a "maritime and startup hub".

Key Points

- A transshipment hub has been proposed in the Andaman and Nicobar Islands.
- A transshipment is when cargo or a container is moved from one vessel to another while in transit to its final destination.
- It will be built in South Bay, Great Nicobar Island, to provide Indian shippers an alternative to the Colombo (Sri Lanka), Singapore and Port Klang (Malaysia) transshipment ports.

- 12 islands of the archipelago have been selected for high-impact projects with an emphasis on boosting trade of sea-based, organic and coconut-based products of the region.
- A submarine cable project has been launched in the islands to make it digitally independent.
- 2300 Km of submarine optical fibres cable (OFC) have been laid down
- The fibre will connect Chennai and Port Blair and seven other islands- Swaraj Deep (Havelock), Long Island etc.
- The connectivity project was funded by the Centre through the Universal Service Obligation Fund under the Ministry of Communications.
- It was executed by Bharat Sanchar Nigam Limited (BSNL) and Telecommunications Consultants India Limited (TCIL) was the technical consultant.
- In addition, Port Blair airport is to be expanded and some of the islands will be also connected with seaplanes.

Background:

- In 2015, the government had announced an ambitious, Rs 10,000 crore economic plan to transform the Andaman and Nicobar Islands into the country's first maritime hub.
- This included infrastructure construction, protection of the original Jarawa inhabitants and boosting the tourism potential.
- Earlier, India had also invited global investors to develop the Andaman & Nicobar and Lakshadweep islands.
- The Union Government constituted the Island Development Agency on 1st June, 2017 for the development of islands.

1.28 Negative Imports List for Defence

Recently, the Ministry of Defence (MoD) has announced a negative list of 101 defence items that the MoD will stop importing.

Key Points**Indigenisation of Defence Production:**

- This will boost indigenisation of defence production and is in line with the government's target to reach a turnover of USD 25 billion by 2025 through indigenously manufactured defence products.
- Government also targets to export these indigenously manufactured defence products worth USD 5 billion by 2025.
- The manufacturers could be private sector players or Defence Public Sector Undertakings (DPSUs).
- This will reduce the government's defence import bill.

List of Items:

- The list comprises simple parts to high technology weapon systems like artillery guns, assault rifles, sonar systems, transport aircrafts, radars, and many other items.

Implementation:

- The imports on these 101 defence items is planned to be progressively implemented between 2020 to 2024.
- MoD has also bifurcated the capital procurement budget for 2020-21 between domestic and foreign capital procurement routes.
- A separate budget head has been created with an outlay of nearly Rs. 52,000 crore for domestic capital procurement in the current financial year.
- In any government contract over Rs. 200 crore, no foreign company can participate in the tendering process.

Benefits:

- It will offer an opportunity to the Indian defence industry to manufacture the items in the negative list by using their own design and development capabilities or adopting the technologies designed and developed by the Defence Research and Development Organisation (DRDO) to meet the requirements of the Armed Forces.
- It is a big step towards self-reliance in defence under the Atmanirbhar Bharat initiative.

Issues Involved:

- At least a third of the 101 items are already being produced in India.
- Some items in the list are under development by domestic industry, and are not produced by any other country. E.g. the Light Combat Helicopter and the light transport aircraft.
- Items like the AK-203 rifle, to be produced by the Ordnance Factory Board in Amethi with Russian collaboration are stuck over pricing issues.
- The items in the list are of proven technologies, and do not involve any critical or cutting-edge technology for a next-generation weapon system or platform.
- Challenge for the government and the armed forces will be to keep this commitment to domestic producers in the event of an operational requirement.
- E.g. Make in India scheme announced in 2014 aimed to develop the indigenous defence industry, but has failed to achieve its targets.

1.29 Electric Vehicles Policy 2020: Delhi

- Recently, the Delhi government has notified the Electric Vehicles (EV) Policy 2020.
- It lays the maximum emphasis on replacement of two-wheelers, public transport and shared vehicles and goods-carriers instead of private four-wheelers, with Electric Vehicles (EVs)

Key Points**Features:**

- It envisions the replacement of the existing auto rickshaws and State-run buses with e-autos and e-buses respectively. It will also ensure that delivery-based services operating in the city are powered by e-mobility.
- It talks about increasing road tax for fuel-based vehicles, at least in the luxury segment and imposing in certain parts of the city a congestion fee that EVs will be exempt from.
- It has a 'scrapping incentive' for those people who want to make the switch, allowing them to exchange an old fuel-based vehicle while purchasing a new EV, further reducing its cost.
- The government will also offer low-interest rate loans to people interested in buying commercial EVs.
- The policy also offers subsidies and road tax and registration fee waivers, for EVs bought in the capital
- At present, road tax ranges from 4% to 10% of the cost of the vehicle, while the registration fee could cost up to Rs. 3,000.
- In addition, a subsidy of Rs. 5,000 per kWh of the battery capacity up to Rs. 30,000 will be given on the purchase of each EV.
- For the first 1,000 e-cars or electric four-wheelers, a subsidy of Rs. 10,000 per kWh will be given, capped at Rs. 1,50,000 per vehicle.
- These grants will be in addition to the subsidies offered by the Union government under its FAME India Phase 2 scheme, which offers similar incentives, especially on the purchase of electric two-wheelers and electric heavy passenger and goods vehicles.
- A State EV fund will be set up, encompassing all the expenditure of the EV Policy. A State Electric Vehicle Board will be constituted for effective implementation of the policy and managing the fund. Besides, a dedicated EV Cell will also be constituted.

Aims:

- To reduce air pollution and to kick-start the economy by spurring demand.
- Delhi experiences a public health emergency every winter due to the rise in air pollution, which has become a recurrent annual crisis.
- During the Covid-19 induced lockdowns, the capital witnessed a drastic reduction in the PM10 and PM2.5 levels.
- To address both problems of the high cost of purchase and the lack of sufficient charging infrastructure.
- To register at least 5,00,000 EVs in Delhi in the next five years.

Delivery-based and Ride-hailing Services:

- Ride-hailing service providers will be allowed to operate electric two-wheeler taxis subject to operating within the guidelines to be issued by the Transport Department.
- It is expected that the incentives provided by the policy would encourage delivery service providers related to food delivery, e-commerce logistics providers and couriers to switch to using electric two-wheelers.
- All delivery service providers shall be expected to convert 50% of their fleet operating in Delhi to electric by 31st March 2023 and 100% by 31st March 2025.
- Delivery service providers who commit to achieving these targets will be eligible for financing support from the Delhi Finance Corporation.

Autorickshaws:

- Incentives will be provided related to the purchase (Rs. 30,000 per vehicle) and use of new electric autos.
- An open permit system will be put in place to provide permits on a first-come, first-served basis to those with valid light motor vehicle driving licences and a Public Service Vehicle badge.
- The open permit system for e-autos shall be subject to the cap on the maximum number of autos if the Supreme Court will direct so in future.
- There will be no cap on permits issued to e-autos in Delhi since they are zero-emission vehicles and can be very effective in ensuring clean, last-mile connectivity.
- Currently, there is a cap on the number of CNG-run auto rickshaws, allowed to ply in the city.

Buses:

- The policy envisions that half of the State-run buses to be procured over the next three years will be pure electric buses.
- It will start doing so with the induction of 1,000 pure electric buses by 2020.

1.30 Telemedicine Service Platform: eSanjeevani

- The telemedicine service platforms of the Ministry of Health & Family Welfare i.e. 'eSanjeevani' and 'eSanjeevaniOPD' have completed 1.5 lakh tele-consultations.
- The top two States which have registered highest consultations through the platforms are Tamil Nadu (32,035 consultations) and Andhra Pradesh (28,960).
- Since November 2019, tele-consultation by eSanjeevani and eSanjeevaniOPD have been implemented by 23 States.
- Both the platforms have been developed by the Centre for Development of Advanced Computing (C-DAC) Mohali.

- C-DAC is the premier R&D organization of the Ministry of Electronics and Information Technology (MeitY) for carrying out R&D in IT, Electronics and associated areas.

Key Points

Telemedicine: As per the World Health Organisation (WHO), telemedicine is the delivery of health care services, where distance is a critical factor, by all health care professionals using Information Technology (IT) for diagnosis, treatment and prevention of disease and injuries, research and evaluation, etc, all in the interests of advancing the health of individuals and their communities.

Tele-consultation is one of the applications of telemedicine. It uses IT to facilitate communications between a patient and a doctor who are otherwise geographically separated.

eSanjeevani:

- It is a doctor to doctor telemedicine system, being implemented under the Ayushman Bharat Health and Wellness Centre (AB-HWCs) programme.
- AB-HWCs are envisaged to be the platform for delivery of an expanded range of primary health care services closer to the communities.
- It seeks to connect all 1,50,000 HWCs using the hub-and-spoke model by December 2022.
- Under the model, a network will be established comprising an anchor establishment, or hub, which offers a full array of services, and will be complemented by secondary establishments, or spokes, which offer limited services, routing patients needing more intensive services to the hub for treatment.
- Presently, telemedicine is being provided through more than 3,000 HWCs in 10 States.

eSanjeevaniOPD:

- It was launched amid the Covid-19 pandemic to enable patient-to-doctor tele-consultations.
- Offered at no cost, this e-health service has made it convenient for the people to avail of the health services without having to travel. It enables two-way interaction and even generates a prescription slip.
- It is hosting over 40 online Out Patient Department (OPD) services, more than half of these are speciality OPDs which include Gynaecology, Psychiatry, AntiRetroviral Therapy (ART) for the AIDS/HIV patients, Non-Communicable Disease (NCD) etc.

1.31 UGC on University Exams

The University Grants Commission (UGC) objected to Maharashtra and Delhi governments employing the Disaster Management Act, 2005 to cancel the examinations of students amid the Covid-19 pandemic.

Key Points**Background:**

- The UGC had directed that final year examinations of Universities must be conducted by September-end in online or offline mode.
- The UGC Guidelines on Examinations and Academic Calendar for Universities in view of Covid-19 Pandemic were recently revised.
- The new guidelines allow students to opt for offline or online or the “blended” manner in which students can alternate between online and physical modes of attending the exams.
- However, many States/UTs like Delhi, Maharashtra and Punjab announced cancellation of these examinations
- While Delhi has cited ‘the reality of digital divide as a reason for scrapping university final year examination’, states like Maharashtra have used Disaster Management Act for the same.
- The UGC is calling ‘cancellation of examination’ a populist move which may undermine the future of higher education in India.

Arguments for Conducting Examination:

- The UGC argued that the conduct of examinations was entirely within the domain of the UGC which is a statutory body, as per the UGC Act.
- The University Grants Commission Act, 1956 makes provision for the co-ordination and determination of standards in Universities and for that purpose, provides for establishment of UGC.
- Under this Act, the determination and maintenance of standards of teaching, examination and research in Universities fall under the ambit of power and functions of UGC.
- Higher education is on the concurrent list.
- The 42nd amendment Act, 1976 shifted Education from State list to Concurrent List, empowering both the central and state government to make rules on Education.
- Therefore, UGC and AICTE (All India Council for Technical Education) directives have to be implemented in this case.
- AICTE is the statutory body and the national-level council for technical education in the country.
- As the UGC said, the courts of law have a limited role in framing policy on academic issues.

Limitations of Conducting Examinations:

- As the teaching-learning process has been hampered by the Covid-19 pandemic, the basis of assessment of learning by the students has been negated in the first hand.
- Many universities are not technically prepared for taking examinations in the online mode.
- The reliance on written, subjective-type exams for the evaluation of students is an archaic model of education which has been done away by many prestigious colleges around the globe, like the Oxford, Indian Institute of Technology (IIT) or National Law Universities.

- At a time when the country is struggling with a global health and economic crisis, the pressure of exams may negatively impact the physical and mental well-being of the student.
- Inequality of internet access among the student fraternity, a lack of adequate online study material, and grievances of students with disabilities are also some of the shortcomings of taking examinations at this juncture.

1.32 **PMJAY Affected by Lockdowns**

- According to the “Pradhan Mantri Jan Arogya Yojana (PMJAY) Policy Brief (8): PMJAY Under Lockdown: Evidence on Utilization Trends”, the nationwide lockdown has had a significant negative impact on inpatient care utilization under the scheme
- The analysis covers 22 weeks of data, from 1st January to 2nd June 2020. The national lockdown started on 25th March and was significantly relaxed as of 1st June.
- The analysis is based on claims data drawn from the PMJAY Transaction Management System (TMS) and the main indicator of claim volumes (utilization) is non-rejected pre-authorization requests.

Key Points

- Demographic groups, women, younger and older populations (under 20 and over 60) reduced their utilisation by more than men, young adults or the middle-aged.
- Among procedures, planned surgeries such as cataract operations and joint replacements suffered a decline of over 90%, while hemodialysis (also known as dialysis which is a process of purifying the blood) declined by only 20%.
- Overall, average weekly claim volumes in 10 weeks of lockdown were 51% lower than the weekly average observed during the 12 weeks prior to the lockdown.
- The steepest decline (over 75%) was registered in Assam, followed by Maharashtra and Bihar, while much smaller declines (about 25% or less) were observed in Uttarakhand, Punjab and Kerala.
- There was a small but perceptible shift in PMJAY utilisation from the public to private hospitals.
- Significant declines were noticed in admissions for child delivery and oncology (study and treatment of tumours).
- The utilisation of neo-natal packages declined by 24%.
- There was a slight shift from public to private hospitals for neonatal care and the largest declines have been observed in the public sector in Tamil Nadu and Madhya Pradesh.
- The 64% decline in oncology volumes across India was concentrated in a few States.
- In the public sector, which plays a smaller role in oncology care under PMJAY, there was a 90% decline in claims in Maharashtra and a 65% decline in Tamil Nadu.

- While access to medical facilities was one of the few exceptions to stay-at-home orders during the lockdown, care-seeking behaviours and healthcare provision were nevertheless significantly affected, due to the following reasons:

On the Supply Side:

- Hospitals may be preoccupied with Covid-19 preparations or caseloads, resulting in fewer resources for non-Covid-19 cases.
- This may be particularly relevant in public hospitals, which have been the primary focus of the policy response and could extend to activities such as submitting pre-authorisation requests or claims documents as required under PMJAY.
- Private hospitals may reduce services out of fear among health workers that they will become infected.

On the Demand Side:

- PMJAY beneficiaries might delay or forego treatment due to fear of infection at a hospital.
- They may not be able to reach hospitals due to public transport shutdowns and mobility constraints.
- The economic crisis may affect financial considerations related to seeking care.
- Health experts have highlighted that ensuring the least possible impact on key health programmes will be an ongoing challenge which needs continued close monitoring.

1.33 Agriculture Minister Narendra Singh Tomar launched Krishi Megh

- Union Minister of Agriculture & Farmers' Welfare Narendra Singh Tomar virtually launched the Krishi Megh (National Agricultural Research & Education System -Cloud Infrastructure and Services).
- Krishi Megh is in line with the digital agriculture of New India. Also, he launched KVC ALUNET (Krishi Vishwavidyalaya Chhatr Alumni Network) and Online Accreditation System for Higher Agricultural Educational Institutions (HEI).

Krishi Megh:

- Krishi Megh is expected to meet the services and infrastructure needs of the Digital Agriculture of National Agricultural Research and Education System (NARES). The existing Data Centre (ICAR-DC), which was built during 2012, will be strengthened with cloud computing infrastructure.
- NARES-Cloud Infrastructure and Services along with ICAR-DC and ICAR-KrishMegh will provide a robust and dynamic platform to meet the growing IT needs of the NARES system with the deployment of mission-critical applications such as e-Office, ICAR-ERP, ICAR institute websites, KVK Portal, and Education Portal. It also provides Alumni Portal, mobile apps, Academic Management System, e-Courses of UG and PG level, etc.

- Under the National Agricultural Higher Education Project (NAHEP), the out-reach of existing ICAR Data Center is broadened to cover the Agriculture Universities enabling them to host their websites and IT solutions.
- ICAR-Krishi Megh at ICAR-National Academy of Agricultural Research Management Hyderabad is synchronized with ICAR-Data Center at ICAR-IASRI, New Delhi has been built to mitigate the risk, availability, and accessibility of e-governance, research, enhance the quality, extension and education in the field of agriculture in India.
- This new Centre has the latest Artificial Intelligence, Deep learning software, and tools kits for building and deploying deep learning-based applications such as disease and pest identification using image analysis, detection of maturity, and ripening of fruits through image analysis, disease identification in livestock, etc.
- It should be noted that amid the COVID-19 situation, 24x7 availability of IT applications has made it possible to work from home and to collaborate with fellow scientists through video conferencing.

1.34 Chhattisgarh CM launched Indira Van Mitan Yojana

Chhattisgarh Chief Minister Bhupesh Baghel launched Indira Van Mitan Yojana on the occasion of World Tribal Day. The scheme aims to make the forest dwellers in the state self-reliant.

Indira Van Mitan Yojana:

- Under the Indira Van Mitan Yojana, youth groups will be formed in 10,000 villages of tribal area of the state. All forest-based economic activities will be conducted through these groups. The groups will work to provide self-employment and prosperity of the forest dwellers through these groups.
- The groups will also ensure arrangements for procurement, processing and marketing of forest produce.
- The scheme aims to add 19 lakh families from scheduled areas.
- The groups will manage trees. They will collect the forest produce from the trees of the forest areas and get economic benefits.
- The estimated cost of a unit would be around Rs.10 lakh. An amount of Rs.8.50 crore will be made available for the establishment of forest produce processing units in 85 development blocks of scheduled areas.
- In order to increase the income of forest dwellers fruit and vegetation plants will be planted instead of timbers in the forests.

1.35 PM Modi launches Transparent Taxation-Honoring the Honest platform

- Prime Minister Narendra Modi launched 'Transparent Taxation-Honoring the Honest' platform on August 13, 2020. The platform includes three major reforms- faceless assessment, faceless appeal and

taxpayers' charter. While the faceless assessment and taxpayers' charter reforms have been brought into effect from today itself, faceless appeal service will be available from September 25.

- Union Finance Minister Nirmala Sitharaman stated that the system of “Transparent Taxation– Honoring the Honest” was put into place by CBT to realise PM Modi's vision is to empower the taxpayer, to provide a transparent system and honour honest taxpayers. The platform aims to be a transparent and accountable system using data analytics and artificial intelligence.

1.36 Govt allows sale, registration of electric vehicles without batteries

- The Government announced that it has allowed the sale and registration of electric vehicles without pre-fitted batteries. This will reduce the upfront cost of these vehicles.
- The pre-fitted batteries account for almost 30-40 percent of the total cost of the electric vehicles. They can be provided separately by the companies. The official statement by the Ministry of Road Transport and Highways (MoRTH) read that the Ministry has allowed registration of electric vehicles without pre-fitted batteries.
- The Ministry said that all the States and UTs that electric vehicles without batteries can be sold and registered based on the type approval certificate issued by the Test Agency specified under Rule 126 of the Central Motor Vehicles Rules, 1989.

1.37 Medha Servo Rail Coach Factory in Ranga Reddy District.

- Telangana Municipal Administration and Urban Development (MAUD) minister KT Rama Rao laid the foundation stone for Medha Servo Rail Coach Factory in Rangareddy District.
- Medha rail coach factory is being constructed in Kondakal village of Shankarpally Mandal in Rangareddy district. It is spread over 100 acres and is being constructed with a budget of Rs 800 crore.
- The minister said that Medha Servo Drives, a manufacturer of textile industry train coaches and diesel electric locomotives, will set up its unit in Kondakal village with an investment of Rs 800 crore. For this, Telangana State Industrial Infrastructure Corporation (TSIIC) has undertaken the acquisition of 100 acres of land in 2017 after signing an intellectual agreement with the government, said KTR.

1.38 SRIJAN: Online Portal for indigenization of Defence Production

- On the final day of Atmanirbhar Week celebration of the Ministry of Defence (MoD) Raksha Mantri Shri Rajnath Singh today launched Department of Defence Production, MoD's portal SRIJAN which is a 'one stop shop online portal that provides access to the vendors to take up items that can be taken up for indigenization.
- Four Contracts of Defence India Start-up Challenge under iDEX and four MoUs between industry partners and Defence PSUs were also signed in presence of Raksha Mantri. A number of Expressions of Interest/Requests for Proposal were also issued.

- Pursuant to Atmanirbhar Bharat announcement, Department of Defence Production, MoD has developed an indigenization portal, srijandefence.gov.in, as “opportunities for Make in India in Defence”, which will give information on items that can be taken up for indigenization by the private sector. On this portal, DPSUs/OFB/SHQs can display their items which they have been importing or are going to import which the Indian Industry can design, develop and manufacture as per their capability or through joint venture with OEMs.

1.39 National Digital Health Mission Launched

- Prime Minister Narendra Modi announced the launch of the National Digital Health Mission under which every Indian will get a health ID that will store the individual's medical records.
- In his Independence Day address, the prime minister said the Mission will help reduce problems in getting treatment in various health facilities in the country and herald a new revolution in the sector.
- Under this scheme, every Indian will be given a health ID. This health ID will work as each Indian's health account. Every test, disease and diagnosis, and medical reports along with medicines will be stored in every citizen's health ID. These health issues will be resolved through this National Digital Health Mission. The Mission allows patients to access health services remotely. It also features Tele-consultation and E-Pharmacies.

PM Narendra Modi launched National Digital Health Mission

- **Prime Minister Narendra Modi** launched the **National Digital Health Mission** on the **74th Independence Day**. It is expected that the mission would revolutionize India's health sector.

Highlights:

- Under the National Digital Health Mission, every Indian will receive a **unique health identity card**.
- The mission features **Tele-consultation and E-Pharmacies**.
- Every citizen who holds the cards shall allow one-time access to the doctors and health care providers during their visit to the hospitals.
- National Digital Health Mission allows patients to access health services remotely.
- The card will ensure permission to access confidential medical data which will be provided for every visit by the patient himself. It will assure the privacy and maintenance of the patient. Also, the control of access to the digital records will be completely in the hands of the patient and the doctors will be able to access the medical record every time only at the will of the patients.

1.40 Odisha topped in implementing AMRUT scheme

- **Odisha** has topped in the implementation of the **Atal Mission for Rejuvenation and Urban Transformation (AMRUT) scheme**. As per the data provided by the **Ministry of Housing and Urban Affairs**, **Odisha** has secured a score of **85.67%**.

- **Chandigarh and Telangana** have secured the second and third positions followed by **Gujarat and Karnataka**.

AMRUT scheme:

- AMRUT scheme was launched by **PM Narendra Modi in June 2015**.
- The scheme aims to establish an infrastructure that will ensure robust sewage networks and water supply for urban transformation.
- Under the mission, efforts have been made towards universal coverage of water supply, construction of sewage treatment plants, and improving green spaces in the 9 AMRUT cities of Odisha.
- The nine cities are **Balasore, Bhubaneswar, Baripada, Cuttack, Sambalpur, Rourkela, Bhadrak, Berhampur, and Puri**. These cities are covered under the AMRUT scheme in Odisha.
- A total of **191 projects** are grounded in the state. Out of the total **1919 projects, 148 projects** have been implemented and the rest are likely to be completed by **March 2021**.
- Under the scheme, the Universal coverage of piped water supply has been completed by laying or replacing **400 Km of pipeline to date**, and all the nine AMRUT cities will have **100 percent network coverage by December 2020**.
- Also, several parks with well-conceived landscaping and rejuvenation facilities, open gyms, and jogging trails have been developed.

1.41 Renewable Energy Ministry received proposals over 10 GW of fresh solar power Equipment

- **Ministry of New and Renewable Energy** has received proposals over **10 gigawatt (GW) of fresh solar power Equipment**. The move is in line with the **Government of India's AtmaNirbhar Bharat Abhiyaan**.
- The move is to set up **100 GW of solar energy** by the end of **2022**. By **October 2019**, India has already achieved **31 GW**. Currently, India is focusing on domestic manufacturing to reduce dependency on imports.
- Previously, a **750 megawatt (MW) solar project** was also inaugurated in **Rewa, Madhya Pradesh**.

GoI's measure:

- GoI is yet to approve a proposal to levy basic customs duty in the range of **20-40% on solar equipment**
- Departments and Institutions under GoI were brought under the ruling that they have to purchase only domestically manufactured solar cells.
- Also, a **5 percent** interest subvention scheme was proposed for wafers, ingots, and cells manufactured in the country
- GoI implemented several Safeguard Duties against solar equipment imported from **China and Malaysia**

Background:

- At the Paris summit, India has pledged that it would bring **40%** of its electricity generation from non-fossil fuels by **2030**.
- Non-fossil fuels include **nuclear power, solar power, hydropower, renewable energy, etc.**

1.42 Government may relook the age of marriage for women

- **Prime Minister** has stated in his **Independence Day speech** that the government may take a **relook at the age of marriage of women.**

Background:

- The Budget Speech of 2020 proposed the setting up of a task force to look into the issue of age of a girl entering motherhood to help lower maternal mortality rates and malnutrition levels. In **June 2020**, the government announced a 10-member panel for this purpose.
- The committee has missed its **July 31** deadline to finalise its report and give recommendations.

Arguments:

- The **National Coalition Advocating for Adolescent Concerns** has asserted that increasing the legal age of marriage for girls will only expand the number of married persons deemed underage and criminalise them and may render underage married girls without legal protection.
- There are also arguments that the **Prohibition of Child Marriage Act, 2006** instead of curbing child marriages, has only played as a weapon in the hands of parents to punish their daughters for elopement and is used in conjunction with other laws to punish boys in self-arranged marriages.
- The reasons for early marriage vary across the country. The issue of poor nutritional status in teenage mothers is also due to poverty and lack of safety driving early marriage in girls.
- Some have argued that lack of proper education, poor economic status among teenage mothers also contribute to poor nutritional outcomes for the mother and child and emphasize the need to act on these factors first before lowering the marriage age.

1.43 Enact law to bar criminals from polls: HC

- The **Madras High Court** has directed the **Central government** to explain in two weeks as to why the centre should not enact a law prohibiting people with criminal background from contesting in **parliamentary, Assembly and local body elections.**

Background:

- The analysis carried out by the **Association for Democratic Reforms** has revealed that **43%Members of Parliament** had declared criminal cases pending against them while **29%** of the legislators were facing serious criminal cases.

Details:

- Recognizing the increasing criminalization of politics and the threat posed by it, the Madras HC has stressed on the need to cleanse the system.
- Recognizing that measures against the criminalization of politics can succeed only when political parties do not admit criminals in their parties and given the reluctance of the parties to do so, the Madras HC has called on the Central government to come out with comprehensive legislation to prohibit persons with criminal background from contesting elections.

1.44 India celebrated its 74th Independence Day on 15 August

- **India** celebrated its **74th Independence Day on 15 August 2020**. **Indian Independence Day** is celebrated in India every year. On **15th August 1947**, India gained its power and became an independent nation.
- The Day is celebrated by colours and many events across the country. On this special day, President Ram Nath Kovind and the Prime Minister delivered the address to the nation on the Independence Day event. PM of India Narendra Modi hoisted the tricolour flag on the special occasion.

History:

- British rule began in **1757**. The **East India Company (EIC)** took control in India till **1857**. British crown, then, dethroned the EIC during the **Indian Mutiny in 1857-58**. The Indian Independence movement began in the mid-19th century.
- The movement was led by **Mahatma Gandhi**. He led through various movements like a method of nonviolent, non-cooperation movement, and the Civil Disobedience Movement.
- In the year **1946**, the British government underwent capital loss during the **Second World War (WWII)**. The **British Labour Government** planned to end its rule over India.
- The then **British PM Clement Atlee** announced that the British rule would end in India by **30 June 1948**. He also announced powers would be transferred to responsible Indian hands. On the other, the **Muslim League** demanded the partition of the country, which is Pakistan. But, on the midnight of **14-15 August in 1947**, the British rule came to an end, and power was transferred to the two new independent Dominions of India and Pakistan.

1.45 Defence Ministry to expand NCC in 173 borders, coastal districts

- **Defence Minister Rajnath Singh** approved a proposal of the **National Cadet Corps (NCC)** for a major expansion scheme in all the border and coastal districts.
- A total of **83 NCC units** will be upgraded. It includes **Army 53, Navy 20, Indian Air Force (IAF) 10**. The scheme aims to impart NCC training to the cadets in the border and coastal areas.

Highlights:

- Under the scheme, a total of one lakh cadets from **173 border and coastal districts** will be inducted in the NCC.

- As part of the expansion plan, One-third of the cadets will be girl cadets.
- Also, more than **1,000** schools and colleges have been identified in the border and coastal districts where NCC will be introduced.
- The proposal on the expansion of NCC expansion was announced by **Prime Minister Narendra Modi** on **15th August**, at the Independence Day address.
- Under this, the Indian Army will provide training and administrative support to the NCC units located in the border areas. Indian Navy will provide training and administrative support to the units in the coastal areas and IAF to the units close to Air Force stations.
- The NCC expansion plan has been planned to be implemented in partnership with the respective states

1.46 Navroz: Parsi New Year

- **Navroj** was celebrated in **India** on **16th August 2020**.
- Globally Navroz is celebrated on **21st March**, however, in India it is celebrated on **16th August** because of the **Shahenshahi calendar** that is followed by **Parsis in India**.
- The Shahenshahi calendar doesn't account for leap years.

Key Points

- Navroz is also known as Parsi New Year. In Persian, 'Nav' stands for new, and '**Roz**' stands for the day, which literally translates to '**new day**'.
- It is celebrated to mark the beginning of the **Iranian (Persian) calendar**.
- The tradition is observed by **Iranians** and the Parsi community around the world.
- In India Navroz is also known as **Jamshed-i-Navroz**, after the **Persian King, Jamshed**. The king Jamshed is credited with having created the Shahenshahi calendar.
- Navroj is inscribed in the list of **UNESCO Intangible Cultural Heritage of Humanity of India**.

1.47 RTI on PM-CARES Fund

- The **Prime Minister's Office (PMO)** has denied a Right to Information request related to the **Prime Minister's Citizen Assistance and Relief in Emergency Situations Fund (PM-CARES Fund)**.

Key Points

- The PMO denied information on the number of applications and appeals related to **PM-CARES and the Prime Minister's National Relief Fund**.
- The information was denied by the PMO on the grounds that providing it would "**disproportionately divert the resources of the office**" under **Section 7(9) of the Right to Information Act, 2005**.
- According to the Section 7 (9) of the RTI Act, "an information shall ordinarily be provided in the form in which it is sought unless it would disproportionately divert the resources of the public authority or would be detrimental to the safety or preservation of the record in question."

1.48 Cabinet approved setting up of National Recruitment Agency

- The **Union Cabinet** headed by **Prime Minister Narendra Modi** approved the setting up of the **National Recruitment Agency (NRA)**.
- The aim is to pave the way for a transformational reform in the recruitment process for central government jobs.

National Recruitment Agency (NRA):

- NRA will conduct a **Common Eligibility Test (CET)** to screen/shortlist candidates for Group B and C which is for non-technical posts.
- NRA will have representatives of **Ministry of Railways, Department of Financial Services of the Ministry of Finance, the Staff Selection Commission (SSC), the Railway Recruitment Boards (RRBs) and the Institute of Banking Service Personnel (IBPS)**.
- It is expected that the NRA would be a specialist body bringing state-of-the-art technology and best practices to the field of Central Government recruitment.

Background:

- The move comes as, currently, the candidates seeking government jobs have to appear for separate examinations conducted by multiple recruiting agencies for various posts, for which similar eligibility conditions have been prescribed.
- With the introduction of NRA, a common eligibility Test will enable the candidates to appear once and apply to any or all of these recruitment agencies for the higher level of examination. This will provide major relief to all the candidates.

1.49 No Audit of PM-CARES Funds by CAG: SC

- The **Supreme Court** has endorsed the PM CARES Fund as a “**public charitable trust**” to which donors contribute voluntarily.

KEYPOINTS:

- The petition had argued that the PM-CARES Fund was not subject to CAG audit.
- It was not under “**public scrutiny**”. Contributions to it were “**100% tax-free**”.
- It was accused that there was statutory fund already in existence under the **Disaster Management Act of 2005** to receive contributions to finance the fight against a calamity.

BACKGROUND:

- The **Prime Minister’s Citizen Assistance and Relief in Emergency Situations Fund (PM CARES Fund)** were created on **28 March 2020** following the COVID-19 pandemic in India.
- The fund will be used for combat, containment and relief efforts against the coronavirus outbreak and similar pandemic like situations in the future.
- The PM is the chairman of the trust. Members will include the defence, home and finance ministers.

- The fund will also enable micro-donations. The minimum donation accepted for the **PM CARES Fund is ₹10 (14¢ US)**.
- The donations will be tax-exempt and fall under corporate social responsibility.

1.50 National Cancer Registry Programme Report 2020

- According to the recently released **National Cancer Registry Programme Report 2020**, cancer cases in India are likely to increase to **15.6 lakhs by 2025**, a **12%** increase from the current estimated cases.
- The report has been released by the **Indian Council of Medical Research (ICMR) and the National Centre for Disease Informatics and Research (NCDIR), Bengaluru**.

Key Points

- The numbers of cases are likely to touch **15.6 lakhs by 2025** from the current **13.9 lakhs in 2020**.
- Tobacco-related cancers are estimated to contribute **27.1%** of the total cancer burden.
- Cancers related to use of any form of tobacco were highest in the northeastern region of the country and in higher proportions in men.
- Among women, breast cancers are estimated to contribute **14.8%** and cervical cancer (tumour of the cervix, the lowermost part of the uterus) are estimated to contribute **5.4%**.
- For both men and women, cancers of the gastrointestinal tract are estimated to contribute **19.7%** of the total cancer burden.
- Cancers of the lung, mouth, stomach and oesophagus (the muscular tube that runs from the throat to the stomach) are the most common cancers among men.

1.51 Parkash Purab Utsav

- The **Prime Minister of India** greeted the people on the occasion of the **Parkash Purab Utsav of the holy book Guru Granth Sahib (19th August 2020)**.

Key Points

- The first Prakash Purab Utsav marked the installation of **Guru Granth Sahib in Harmandir Sahib**, also known as the **Golden temple, in 1604**.
- Granth Sahib is the sacred scripture of Sikhism (religion). It is a collection of nearly **6,000 hymns of the Sikh Gurus (religious leaders)** and various early and medieval saints of different religions and castes.
- It is the central object of worship in all gurdwaras and is accorded the reverence paid to a living Guru.
- The first version of the book was compiled by the **5th Sikh Guru Arjan at Amritsar in 1604 CE**. He included his own hymns and those of his predecessors, the **Gurus Nanak, Angad, Amar Das, and Ram Das**, and a selection of devotional songs of both **Hindu and Islamic saints (notably the poet Kabir)**.

- In 1704 CE the 10th and last Guru, **Gobind Singh**, added the hymns of his predecessor, **Guru Tegh Bahadur (the 6th - Hargobind, 7th- Har Rai, and 8th - Hari Krishen- Gurus** did not write hymns), and enjoined that after his own death the Granth would take the place of the Guru.
- The language is mostly Punjabi or Hindi, interspersed with **Marathi, Persian, and Arabic words**.
- After the death of Guru Gobind Singh, his hymns and other writings were compiled into a book known as **the Dasam Granth**.

1.52 2020 Swachh Survekshan: Indore tops as the cleanest city 4th time in a row

- Indore topped the list of the cleanest city in India for the fourth consecutive time in the Swachh Survekshan, 2020, India's annual survey on cleanliness.
- The results were declared on 20th August by the Union Minister of State (independent charge) for Housing and Urban Affairs Hardeep Singh Puri.
- Surat in Gujarat and Navi Mumbai in Maharashtra ranked second and third among the cleanest cities with more than a million population.

The assessment was done on various parameters such as:

- Solid waste floating on the Ganga
- Open dumpsites sighted (or not) near ghats or on the riverbank
- Garbage vulnerable points near ghats or on the riverbank
- Availability of anti-littering messages around ghats and riverbanks accessible to citizens
- Availability of twin litter bins every 50m around ghats and riverbanks accessible to citizens
- Sweeping and cleaning arrangements at least once a day
- Sweeping and cleaning around all ghats and riverbanks
- Nullah discharge into the river
- Availability of solid waste plant and trash cleaners to trap solid waste floating on the river surface

Highlights:

- Swachh Survekshan 2020, the pan-India survey began in 2016.
- Under the mission, the Ministry ranks India's cities, towns and states based on sanitation, waste management and overall cleanliness.
- In the list, Karad in Maharashtra, Saswad and Lonavala bagged the first three positions for cities having a population less than one lakh.
- Among the cities with a population between 1-10 lakh, Ambikapur in Chhattisgarh were declared the cleanest. It was followed by Mysore in Karnataka.
- The 2020 survey focused on the collection of segregated waste and its maintenance till the processing site; treatment and re-use of wastewater. It also included the curtailment of solid waste-based air pollution and the improvement of social conditions of informal waste pickers, among others.

- As per the survey, over 2,606 Urban Local Bodies (ULBs) practice door-to-door garbage collection in more than 50% wards and 1,476 ULBs initiated source segregation of waste in at least 50% wards.
- The report also stated that 1,020 cities have at least 80% of all constructed toilets attached to sewerage.
- Around 1,000 ULBs were declared Open defecation (ODF+), 483 ULBs ODF++ and 966 ULBs banned open dumping of faecal sludge.

1.53 Former Finance Secretary Rajiv Kumar was appointed as the Election Commissioner

- Former Finance Secretary Rajiv Kumar has been appointed as the new Election Commissioner. Mr Kumar will replace Commissioner Ashok Lavasa.
- Rajiv Kumar will assume office when the Commissioner Ashok Lavasa leaves his office on 31st August 2020.
- The outgoing Election Commissioner Ashok Lavasa will join Asian Development Bank (ADB) as its vice president.

Rajiv Kumar:

- Rajiv Kumar is a retired Indian Administrative Service (IAS) officer of the 1984 batch from Jharkhand cadre. Kumar has over 30 years of experience in public policy and administration across various sectors. He holds B.Sc and LLB degrees, along with masters in public policy and sustainability.
- Kumar served as the secretary, Department of Financial Services in the month of September, when most of the public sector banks (PSBs) were in losses. In 2019, he was designated as finance secretary. He played a major role in the major merger of 10 PSBs into four.
- As financial services secretary, he took several policy decisions to promote responsive and responsible banking. Kumar also undertook a massive Rs.3 lakh crore recapitalisation of banks during his tenure. He also initiated and implemented the 59-minute loan scheme for the MSME sector.
- Prior to his experience in finance ministry, he served as the establishment officer (EO) in the personnel ministry. During his term in the personnel ministry, Kumar introduced a 360 degree appraisal system for promotion and empanelment of senior bureaucrats.
- He also worked to streamline the promotion and appointment process done by the Appointments Committee of the Cabinet (ACC). A compendium of guidelines pertaining to board-level appointments in the Central Public Sector Enterprises (CPSE) was issued by Kumar when he worked as the EO in 2017.

1.54 Harit Path, a mobile app to monitor plantation along national highways

The National Highways Authority of India (NHAI), a public sector undertaking under the Ministry of Road Transport and Highways, has launched a mobile App called Harit Path. The app was inaugurated

by the Union Minister for RTH ShriNitinGadkari.

Harit Path:

- Harit Path mobile application aims to monitor location, growth, species details, maintenance activities, targets and achievements of each of its field units for each and every plant under all plantation projects.
- Harit Path will track the growth and health of the plants, photographs along with data of the plants captured. The data will be uploaded every 3 months on NHAI's Artificial Intelligence (AI) powered Big Data Analytics platform 'Data Lake.'
- NHAI has created user IDs of over 150 ROs/ PDs/ Horticulture experts. Also, over 7800 plants have also been geo-tagged by NHAI.
- The launch of Harit Path mobile app is expected to further facilitate creation of Green Highways across the country.

1.55 Shri Arjun Munda e-inaugurated Tribes India Showroom in Mumbai

Shri Arjun Munda, Union Minister for Tribal Affairs e-inaugurated 'Tribes India Showroom' in Mumbai on 21 August 2020. The move comes to support 50 lakh tribal artisans and forest gatherers, to sustain their income, employment and livelihoods.

Highlights:

- The move is in line with the Prime Minister's message "Be Vocal for Local".
- The move aims to promote the livelihood of the tribal people marketing, TRIFED, Ministry of Tribal Affairs has initiated these path-breaking initiatives that have a wide-ranging impact.
- The move aims to boost sales and enhance tribal income in these challenging times, Tribes India on Wheels, mobile vans stacked fully with Van Dhan natural produce, immunity boosters and other tribal products. It will take these products directly to the customer's doorstep in 150 cities across the country.

1.56 Arunachal Pradesh to provide tap water to all rural homes by 2023 under JJM

- Arunachal Pradesh State Government has announced that it is to provide 100% tap water connections to all the households in the State by 2023 under the Jal Jeevan Mission.
- The move comes as Arunachal Pradesh is highly dependent on Assam State. Despite having available water resources in the State, it depended on other states due to difficulties faced while implementing the JJM in the state.

Highlights:

- The State Government aims to cover all villages/ habitations so as to potable water reaches every rural household.

- Under Jal Jeevan Mission, the State will provide clean, potable water to its citizens in their houses. It aims to reduce the burden of women and girls in the State.

Jal Jeevan Mission:

- JJM was announced by Prime Minister Narendra Modi on 15th August 2019. Jal Jeevan Mission is being implemented in partnership with States with the objective to provide functional household tap connections to every rural household of the country by 2024.
- The Mission aims to enable every rural household with the availability of potable water at a service level of 55 litres per capita per day (lpcd) on a regular and long-term basis. The mission aims to bring improvements in the lives of people living in rural areas.

1.57 National Council for Transgender Persons

- The Centre has constituted the national council for transgender persons, headed by the Union social justice minister and comprising representatives from 10 central departments, five states and members of the community.
- The council – India's first and formed under Transgender Persons (Protection of Rights) Act, 2019 – was announced in a gazette notification issued recently.

Key Highlights**According to the legislation, the council has five main functions —**

- i. Advising the central government on the formulation of policies, programmes, legislation and projects with respect to transgender persons;
 - ii. Monitoring and evaluating the impact of policies and programmes designed for achieving equality and full participation of transgender persons;
 - iii. Reviewing and coordinating the activities of all the departments;
 - iv. Redressing grievances of transgender persons;
 - v. Performing such other functions as prescribed by the Centre.
- The council will have joint secretary-level members from the ministries of health, home, minority affairs, education, rural development, labour and law. In addition, there will be a member from the department of pensions, Niti Aayog, National Human Rights Commission and National Commission for Women.
 - Representatives from five states or Union Territories, on a rotational basis, will be members of the commission. The first such clutch comprises Jammu and Kashmir, Andhra Pradesh, Odisha, Tripura and Gujarat.
 - Five members of the community and five experts, from non-governmental organisations, have also been named to the commission. The tenure of the community members and experts shall be three years.

1.58 Atal Bimit Vyakti Kalyan Yojana extended: ESIC

- The Employees' State Insurance Corporation (ESIC) has extended the Atal Bimit Vyakti Kalyan Yojana by one year, to 30th June 2021.
- Further, the ESIC has relaxed eligibility criteria and enhanced the payment of the unemployment benefit under the Yojana (applicable from 24th March-31st December 2020).

Key Points

- Atal Bimit Vyakti Kalyan Yojana was introduced w.e.f. 1st July 2018.
- Under it, unemployment benefit is paid to the workers covered under the Employees' State Insurance (ESI) scheme.
- Unemployment benefit is paid in the form of cash compensation upto 90 days, once in a lifetime, to be claimed after three months (90 days) in one or more spells for being rendered unemployed.
- The employee should have completed two years of insurable employment and has contributed not less than 78 days in each of the four consecutive contribution periods immediately preceding to the claim of the relief.
- The benefit does not exceed 25% of the average earning per day.

1.59 Inclusion of the Disabled in National Food Security Act 2013

The Ministry of Consumer Affairs, Food & Public Distribution had asked State Governments/UTs to include all eligible disabled persons under the National Food Security Act (NFSA), 2013.

Key Points

- The disabled persons should get their entitled quota of food grains under NFSA & Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY) as per provisions of the Act.
- Those not already covered should be issued fresh ration cards as per the eligibility criteria.
- The disable person should also be covered by States/UTs under the priority households as per the criteria of identification evolved by them.
- PMGKAY is a part of Pradhan Mantri Garib Kalyan Package (PMGKP) to help the poor fight the battle against Covid-19.
- The scheme is aimed at providing each person who is covered under the National Food Security Act with an additional 5 kg grains (wheat or rice) for free, in addition to the 5 kg of subsidised foodgrain already provided through the Public Distribution System (PDS).
- The beneficiaries are also entitled to 1 kg of pulse for free, according to regional preferences.
- The Section 10 of the NFSA provides for identification and coverage of persons under the Antyodaya Anna Yojana (AAY) and the remaining households as priority households by the State Government.
- Disability is one of the criteria for inclusion of beneficiaries under AAY households.

- The Section 38 of the NFSA mandates that the Central Government may from time to time give directions to the State Governments for effective implementation of the provisions of the Act.
- The Atmanirbhar Bharat Package of the Government of India provides free food, along with other benefits, to the migrant labourers, who are not covered either under NFSA or any States Scheme Targeted Public Distribution System (TPDS) Cards (Under Economic Stimulus-II).
- Hence, the disabled persons without ration cards are also eligible for getting benefits under Atmanirbhar Bharat package.

1.60 Agri Profits and Farmers' Income: Crisil Survey

- A detailed analysis of 25 key field and horticultural crops done by the rating agency Crisil has indicated that per hectare profitability will improve 3-5% year-on-year to Rs. 10,0000 in the Kharif (Summer Crop) Season 2020.
- However, economists say that individual farmers are unlikely to see any hike in their own income.

Key Points

- Profits are Expected in the Agriculture Sector: Agriculture is one of the few bright spots in an economy ravaged by Covid-19, with good rains expected to boost production and profits, especially in the paddy crop.
- To support farmers in effectively undertaking the post-harvest rabi produce and preparatory work for kharif crops, Rs. 30,000 crore additional emergency working capital fund through NABARD and Rs. 2 lakh crore of concessional credit have been provided by the government.
- The agriculture sector showed growth of 5.9% in the last quarter of 2019-2020.

1.61 India's Longest River ropeway in Assam

The Assam government has inaugurated a 1.8-km ropeway across the Brahmaputra river, and described it as India's longest river ropeway.

Key Points:

- The 1.82 km bi-cable jig-back ropeway connects the southern bank of the Brahmaputra and a hillock behind the DouL Govinda temple in North Guwahati on the other.
- It passes over the mid-river Peacock Island that houses Umananda, a medieval Shiva temple.
- It thus cuts travel time between the two banks to 8 minutes.
- The current travel options between the two banks are by ferry (30 minutes or more, depending on current and season) or by road through a bridge that usually takes over an hour in the traffic.

1.62 DRDO identifies 108 Systems and Subsystems for industry to design, develop, manufacture

Defence Research and Development Organisation (DRDO) has identified 108 systems and subsystems for designing and development by the Indian Industry only.

The move is in line with Prime Minister's Atmanirbhar Bharat. Apart from this, DRDO has taken

several initiatives to strengthen the indigenous defence ecosystem.

Highlights:

- This initiative is aimed to pave the way for Indian Defence industry to develop many technologies towards building an AtmaNirbhar Bharat.
- Under this move, the DRDO will support the Indian industries for design, development and testing of these systems on requirement basis.
- All the requirements of these systems by R&D establishments, Armed Forces, and other Security Agencies can be met through development contracts or production orders on suitable Indian industry.
- With this, DRDO will focus on designing and developing critical and advanced technologies and systems.
- Indian industry has progressed from a build to print partner to build to specification partner.

1.63 DNA Bill can be misused, Parliamentary Committee flags draft report

A draft report of the Parliamentary Standing Committee on Science and Technology on the DNA Bill has stated that some alarming provisions in the bill could be misused for caste or community-based profiling.

Background:

- The Bill seeks to control the use and application of the deoxyribonucleic acid (DNA) technology for establishing the identity of certain categories of persons, including offenders, victims, suspects and under-trials.
- The DNA Technology (Use and Application) Bill of 2019 was introduced in and passed by the Lok Sabha in January 2019, but lapsed before it could be taken up by the Rajya Sabha.
- It was later referred to a parliamentary standing committee for examination.

Concerns:

- The committee pointed out that DNA profiles can reveal extremely sensitive information of an individual such as pedigree, skin colour, behaviour, illness, health status and susceptibility to diseases.
- Access to such intrusive information can be misused to specifically target individuals and their families with their own genetic data.
- It is particularly worrying as it could even be used to incorrectly link a particular caste/community to criminal activities.
- The report also red-flagged disregard for an individual's privacy and other safeguards.
- The committee urged the government to amend the provisions to ensure that if the person has been found innocent his DNA profile must be removed immediately from the data bank.
- The report noted that there is no legal or moral justification for a database with DNA, given the high potential for misuse.

- In the Bill, if a person is arrested for an offence that carries a punishment of up to seven years, investigation authorities must take the person's written consent before taking the DNA sample. However, this consent is only "perfunctory".
- The Bill refers to consent in several provisions, but in each of those, a magistrate can easily override consent, thereby in effect, making consent perfunctory.
- There is also no guidance in the Bill on the grounds and reasons when the magistrate can override consent, which could become a fatal flaw.
- The Bill also provides that DNA profiles for civil matters will be stored in the data banks, but without a clear and separate index. The committee questioned the necessity for storage of such profiles, pointing out that this violates the fundamental right to privacy and does not serve any public purpose.
- Therefore, in the absence of a robust data protection legislation, the security of a huge number of DNA profiles that will be placed with the National DNA Data bank and its regional centres becomes questionable.

1.64 DGNCC Mobile Training App for NCC Training launched

Union Minister of Defence Rajnath Singh launched the Directorate General National Cadet Corps (DGNCC) Mobile Training App on 27 August.

The mobile Application will assist in conducting countrywide online training of National Cadet Corps (NCC) cadets.

DGNCC Mobile Training App:

- The DGNCC Mobile Training App will help the NCC cadets in digital learning and overcoming the difficulties posed by COVID-19 due to restrictions on direct physical interactions.
- The training app aims at providing NCC cadets entire training material including syllabus, training videos, précis, and frequently asked questions on one platform.
- The App has been designed in an interactive way by including a query option. With this option, a cadet can post his question related to the training syllabus and the same will be answered by a panel of qualified instructors.
- The app is expected to provide a positive step towards automation of NCC training.
- The move is in line with Digital India vision of Prime Minister Shri Narendra Modi.
- The mobile app will assist the NCC cadets by providing easier access to training material in these testing times of pandemic.

1.65 Ministry of Social Justice to launch Kiran, mental health rehabilitation helpline

Ministry of Social Justice and Empowerment is to launch Kiran, a mental health rehabilitation helpline. The toll-free helpline is aimed to enable access to mental health resources.

Highlights:

- The Kiran mental health rehabilitation helpline number is 1800-599-0019.
- It aims to provide callers support for early screening, first-aid, psychological support, distress management, mental well-being, preventing deviant behaviours, psychological crisis management etc.
- The helpline will offer services in 13 languages.
- It focuses to resolve issues of the people across the country experiencing stress, anxiety, depression, panic attack, adjustment disorder, post-traumatic stress disorder, substance abuse, suicidal thoughts, pandemic-induced psychological issues and mental health emergency.
- The move comes due to the emergency support and help sought by the people who are going through mental health issues, particularly amid the COVID-19 pandemic.
- The helpline has 660 volunteer clinical/rehabilitation psychologists and 668 volunteer psychiatrists.
- It will run from 25 centres by 75 experts who can handle 300 callers per hour.

The helpline consists of three-level mechanism of support namely:

- At first, the caller will be connected to the location-based helpline centre
- Secondly, the caller will be referred to rehabilitation/clinical psychologists/psychiatrists
- Finally, a follow-up and support will be extended at the third level

1.66 NITI Aayog launched NDC-TIA to transport, energy, and climate stakeholders

- NITI Aayog virtually launched the India Component of the Nationally Determined Contributions (NDC)–Transport Initiative for Asia (TIA) on 27 August 2020.
- It will focus on electric mobility, which would require coupling of transport and energy sectors. It will also receive cross-sectoral expertise from ministries, international development agencies, think tanks, public and private organizations.

Highlights:

- NDC-TIA will offer the opportunity to provide input about India’s transport challenges and how they relate to CO2 reduction ambitions.
- The discussion aims to focus the programme further on India’s specific needs and circumstances.
- The aim is to promote a new approach to decarbonize transport in India, Vietnam, and China.
- NDC–TIA is a joint programme which is supported by the International Climate Initiative (IKI) of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).

It is implemented by a consortium of seven organisations, namely:

1. International Council on Clean Transportation (ICCT)
2. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
3. World Resources Institute (WRI)
4. International Transport Forum (ITF)
5. Agora Verkehrswende (AGORA)

6. Partnership on SLoCaT (Sustainable, Low Carbon Transport) Foundation

7. Renewable Energy Policy Network for the 21st Century

The aim is to strengthen GHG and transport modelling capacities, providing technical support on GHG emission reduction measures, financing climate actions in transport, and offer policy recommendations on electric vehicle (EV) demand and supply policies etc.

1.67 Integration of e-PPO with Digi Locker

- The Ministry of Personnel, Public Grievances & Pensions has decided to integrate the electronic Pension Payment Order (e-PPO) with Digi Locker.
- The decision has been taken to enhance ease of living of central government civil pensioners. e-PPO is generated through the Public Finance Management System (PFMS).

Key Points

- This initiative will create a permanent record of pensioners' respective PPO in their Digi Locker and eliminate the necessity of handing over a physical copy.
- Further, it will eliminate delays in reaching the PPO to new Pensioners
- The integration facility has been created with 'Bhavishya' software. Bhavishya will provide an option to retiring employees, to link their Digi-locker account with their "Bhavishya" account and obtain their e-PPO in a seamless manner.
- Bhavishya is an online Pension Sanction and Payment Tracking System implemented by the Ministry of Personnel, Public Grievances & Pensions.
- Pension tracking can be done by the individual as well as the administrative authorities for all actions preparatory to grant of pension and other retirement benefits as well as monthly pension paid after retirement.

1.68 Draft Health Data Management Policy

- The National Health Authority (NHA) has released the Draft Health Data Management Policy of the National Digital Health Mission (NDHM) in the public domain for comments and feedback.
- NHA is the apex agency of the Government of India responsible for the design, roll- out, implementation and management of Ayushman Bharat and the National Digital Health Mission (NDHM) across the country.

Key Points

- The draft health data management policy acts as a guidance document to set out the minimum standard for health data privacy protection.
- Purpose: To create a National Digital Health Ecosystem that supports Universal Health Coverage in an efficient, accessible, inclusive, affordable, timely and safe manner, through provision of a wide-range

of data, information and infrastructure services ensuring the security, confidentiality and privacy of health-related personal information.

Objectives:

- Provide adequate guidance and to set out a framework for the secure processing of personal and sensitive personal data of individuals.
- digital personal health data like medical conditions, reproductive outcomes, prescriptions and diagnosis etc.
- Create a system of digital personal and medical health records which is easily accessible to individuals and health service providers and is purely voluntary in nature, based on the consent of individuals, and in compliance with international standards.
- Increase awareness of the importance of data privacy.
- Ensure national portability in the provision of health services.
- Establish appropriate institutional mechanisms for auditing of the National Digital Health Ecosystem.
- Leverage the information systems existing in the Indian health sector.

1.69 New Circles of Archaeological Survey of India

The Ministry of Culture has announced 7 new circles of the Archaeological Survey of India (ASI).

Key Points

- The step has been taken in accordance with the Prime Minister's call to facilitate and strengthen the process of preservation and registration of archaeological monuments.
- New circles in Jabalpur (Madhya Pradesh), Trichy (Tamil Nadu), Jhansi and Meerut (Uttar Pradesh), Hampi (Karnataka), Raiganj (West Bengal) and Rajkot (Gujarat) have been created.
- The Hampi circle has been upgraded from the previous Hampi mini circle, and the Delhi mini circle has been merged with the Delhi circle.

BACKGROUND:

- For the maintenance of ancient monuments and archaeological sites and remains of national importance the entire country is divided into 36 Circles.
- These carry out archaeological fieldwork, research activities and implement the various provisions of the Ancient Monuments and Archaeological Sites and Remains (AMASR) Act, 1958 and Antiquities and Art Treasures Act 1972.

1.70 States can sub-classify Reserved Classes: SC

A five-judge Bench of the Supreme Court held that States can sub-classify the list of Scheduled Castes (SCs), Scheduled Tribes (STs), and Socially and Educationally Backward Classes (SEBCs) to provide preferential treatment to the "weakest out of the weak".

Key Points

- The decision overruled a previous 2005 decision in *E V Chinnaiah v State of Andhra Pradesh and Others*, also by a five-judge Bench, that state governments had no power to create sub-categories of SCs for the purpose of reservation.
- Since a Bench of equal strength cannot overrule a previous decision, the court also referred it to a 7-judge Bench.
- The judgment was on the constitutional validity of Section 4(5) of the Punjab Scheduled Caste and Backward Classes (Reservation in Services) Act, 2006.
- The act allows 50% of the reserved Scheduled Castes seats in the State to be allotted to Balmikis and Mazhabi Sikhs.

1.71 World Urdu Conference

Union Education Minister addressed the inaugural session of the two days World Urdu Conference organised by National Council for Promotion of Urdu Language (NCPUL) in New Delhi.

BACKGROUND:

- The Education Minister also announced that Urdu writers and literators will be honoured with awards and honours in the name of important personalities of Urdu like Amir Khusrow, MirzaGhalib, Agha Hashar, Ram BabuSaxena and Daya Shankar Naseem to encourage Urdu writers for literary and creative services by the Urdu Council from next year.
- The National Council for Promotion of Urdu Language (NCPUL) is an autonomous body under the Ministry of Human Resource Development (HRD), Department of Secondary and Higher Education, Government of India.
- It was setup in 1996 as the National Nodal Agency for the promotion of the Urdu language.

1.72 Regional Connectivity Scheme UDAN

The Civil Aviation Ministry has approved 78 new routes under the 4th round of Regional Connectivity Scheme UDAN. So far, 766 routes have been sanctioned under the UDAN scheme.

Background

- UDAN, which stands for 'Ude Desh Ka Aam Nagrik', aims to make air travel affordable and widespread.
- The Ministry of Civil Aviation had launched Regional Connectivity Scheme (RCS) in October 10 2016 to stimulate regional air connectivity and making air travel affordable to the masses.
- The scheme will be jointly funded by the central government and state governments.
- The scheme will run for 10 years and can be extended thereafter.

Viability Gap Funding (VGF):

- The scheme entails making the routes financially viable, without insisting on the financial viability of the regional airports, by lowering the cost of flight operations and through financial support in the form of Viability Gap Funding (VGF).
- VGF will be available to flight operators on specific routes for the first 3 years of operation.

1.73 Covid-19: Great Andamanese tribe under threat

The report of Covid-19 cases among the members of the Great Andamanese tribe is a matter of concern as the total population of the tribe is already low.

Key Points

- Particularly Vulnerable Tribal Group (PVTG): Great Andamanese are one of five PVTGs that reside in Andamans archipelago. The other four are: Jarwas, Onges, Shompens and North Sentinelese.
- Shompen is the only PVTG in the region with Mongoloid features. The other PVTGs have negroid features. Some of them interact with 'Great Nicobarese' - a Scheduled Tribe.
- The population of Andaman and Nicobar Islands' primitive tribes has rapidly declined over the years. The epidemics and crippling health crises of the past have been seen to disproportionately impact these indigenous tribal groups.
- 75 tribal groups have been categorised by the Ministry of Home Affairs as PVTGs. The Ministry of Tribal Affairs implements the Scheme of 'Development of PVTGs' exclusively for them.
- Article 366 (25) of the Constitution provides a process to define Scheduled Tribes.

1.74 PMJDY completes six years of successful implementation

- PradhanMantri Jan-Dhan Yojana (PMJDY) successfully completed 6 years on 28th August 2020.
- Under the scheme, 63.6% Rural PMJDY accounts and 55.2% Women PMJDY accounts have been created.
- The PMJDY scheme has been the foundation stone for the Modi government's people-centric economic initiatives.

Highlights:

- The PMJDY scheme was launched on 28th August 2014 by the Prime Minister Narendra Modi. The main aim of the scheme is to provide poor people access to financial services, namely, Banking/ Savings & Deposit Accounts, Remittance, Credit, Insurance, Pension in an affordable manner.
- The scheme ensures access of financial products and services at an affordable cost and the use of technology to lower cost and widen reach.
- So far, about 8 crore PMJDY accountholders receive Direct Benefit Transfer (DBT) from the Government under various schemes.

- The scheme was extended with new features and the focus was shifted from Every Household to Every Unbanked Adult.
- Under this initiative, Jan DhanDarshak App, a mobile application, was launched with an aim to provide a citizen centric platform for locating banking touch points such as bank branches, ATMs, Bank Mitras, Post Offices, etc. in the country.
- Over 8 lakh banking touchpoints have been mapped on the Geographic Information System (GIS) App. The facilities under Jan DhanDarshak App could be availed as per the need and convenience of common people. The web version of this application could be accessed at the link <http://findmybank.gov.in>.

1.75 Dr. Harsh Vardhan chaired 20th meeting of GoM on COVID-19 pandemic

Officials including Sh. Hardeep S. Puri, Minister of Civil Aviation, Dr. S. Jaishankar, Minister of External Affairs (MEA), Sh. MansukhLalMandaviya, Minister of State, Shipping (Independent Charge), Chemicals and Fertilizers, Sh. Ashwini Kumar Choubey, Minister of State, Health & Family Welfare, and Sh. NityanandRai, Minister of State, Home Affairs. Dr. Vinod Paul, Member (Health) NitiAayog, participated in the virtual meeting.

Highlights:

- The Health Ministry was instructed to develop SOPs for the Members of Parliament and the Legislative Assembly sessions comprising COVID protocols and preventive measures.
- A detailed report on surveillance efforts undertaken in India during the pandemic through the Integrated Disease Surveillance Programme (IDSP) network.
- The group was tasked with facilitation of vaccine development including issues of trial and stockpiling, sorting out issues of financing, risk management, selection of potential beneficiaries and their order of reference, envisioning logistics, scale-up, digital system, defining principles for selecting beneficiary categories, and defining the scientific basis for selecting vaccine.
- So far, three meetings of the Expert Group have been held. The last GoM was held on 31st July 2020.

1.76 GoI launched Chunauti, the Next Generation Start-up challenge contest in Bihar

- Government of India has launched "Chunauti", the Next Generation Start-up challenge contest in Bihar. The aim is to further boost software products and startups with a special focus on Tier-II towns of the country.
- The contest was launched by the Union Minister for Electronics and Information Technology Ravi Shankar Prasad on 28 August. For this programme, the cost of Rs.95.03 crore has been earmarked over a period of three years.

Highlights:

- In the Chunauti contest, over 300 startups will be selected and provided various support from the Government through the Software Technology Parks of India centers across India.
- Centre will provide a seed fund of up to Rs. 25 Lakh and also be provided with cloud credits from leading cloud service providers.
- The Ministry invites startups in areas namely:
 1. Medical Healthcare, Diagnostic, Preventive & Psychological Care
 2. Edu-Tech, Agri-Tech & Fin-Tech Solutions for masses
 3. Supply Chain, Logistics and Transportation Management
 4. Infrastructure and Remote monitoring
 5. Jobs & Skilling, Linguistic tools & technologies

1.77 Punjab passed a resolution against Farm Ordinances

Punjab State Government passed a resolution against the Centre's farm ordinances. The resolution was tabled by Chief Minister Amarinder Singh. The resolution termed these ordinances as anti-farmer and against the Minimum Support Price (MSP) regime.

Highlights:

- The ordinances were against the federal structure and the rights of the farmers.
- The resolution is against:
 1. Farmers' Produce Ordinance, 2020
 2. Farmers Agreement on Price Assurance and Farm Services Ordinance, 2020
 3. Essential Commodities Ordinance, 2020
 4. Electricity Amendment Bill 2020
- It is because, as per the Punjab State Government, Agriculture falls under List II of Constitution and hence falls under the State List.
- The ordinance promulgated by the Punjab state government is a direct encroachment on the functions of these states.

1.78 Foundation Day of AREAS

On the 6th Foundation Day (27th August 2020) of the Association of Renewable Energy Agencies of States (AREAS), the government has launched a website and telephone directory for AREAS.

Key Points

- Agenda Behind AREAS: State Nodal Agencies (SNAs) for Renewable Energy (RE) interact and learn from each other's experiences and also share their best practices and knowledge regarding technologies and schemes/programmes.

- The Union Minister for New & Renewable Energy (NRE) is the Patron of the Association and Secretary, MNRE is the ex-officio President of the Association. All SNAs are members of the Association.
- It got registered under Society Registration Act, 1860 on 27th August 2014.

1.79 Renewable Energy Initiatives in India

- The Ministry of New and Renewable Energy (MNRE) is the nodal Ministry of the Government of India for all matters relating to new and renewable energy.
- New and Renewable Energy sources include solar energy, geothermal energy, wind power, hydropower, biomass, etc.
- In September 2019, at the United Nations Climate Action Summit, India announced increasing the renewable energy target to 450 GW by 2030 from 175 GW by 2022.
- In its Intended Nationally Determined Contribution (INDC), India has pledged to increase the share of non-fossil fuels-based electricity to 40% by 2030.
- The Green Energy Corridor Project aims at synchronizing electricity produced from renewable sources, such as solar and wind, with conventional power stations in the grid.
- Indian Railways has contacted solar power developers to meet the net zero carbon emission target by 2030.

2. INTERNATIONAL RELATIONS

2.1 Loya Jirga: Grand Assembly of Afghanistan



- Recently, a three-day Loya Jirga-grand assembly has been called in Afghanistan to decide on freeing about 400 Taliban fighters convicted for serious crimes including murder and abductions.

Key Points

Need for Convening Loya Jirga:

- The Loya Jirga has been convened after the Afghanistan President refused to release the Taliban prisoners. This threatened the derailment of intra-Afghan talks, tentatively scheduled for 10th August 2020 in Doha.
- The Taliban has also threatened of more bloodshed if the prisoners are not released.
- The USA believes that the talks between the Afghanistan government and Taliban will lead to
- reduction of violence and direct talks, resulting in a peace agreement and an end to the war in Afghanistan.

Background:

- The prisoner exchanges are part of the agreements signed by the USA and Taliban and the USA and Afghanistan government in February 2020.
- However, these were delayed for several months, and the intra-Afghan talks that were scheduled on 10th March had to be put off. Few argue that the current Afghanistan President Ashraf Ghani is deliberately delaying peace talks with the Taliban to retain power because it is speculated that negotiations could seek a neutral interim government that may cost Mr.Ghani his post.
- The USA announced to withdraw its forces and reduced its strength to about 8000, after pushing for the Afghanistan government to release the Taliban prisoners, and for the Taliban to release Afghan soldiers and civilians in its custody.
- Over the past few weeks, the USA government has been keen to speed up the Taliban-Afghan reconciliation process, with an eye on the November 2020 Presidential elections.

India's Interests in Afghanistan:

- India has a major stake in the stability of Afghanistan. India has invested considerable resources in Afghanistan's development. E.g. the Afghan Parliament, the Zaranj-Delaram Highway, Afghanistan-India Friendship Dam (Salma Dam) among others.
- India favours the continuation of the current Afghanistan government in power, which it considers a strategic asset vis-à-vis Pakistan.
- An increased political and military role for the Taliban and the expansion of its territorial control should be of great concern to India since the Taliban is widely believed to be a protégé of Pakistan.
- Afghanistan is the gateway to Central Asia.
- Withdrawal of US troops could result in the breeding of the fertile ground for various anti-India terrorist outfits like Lashkar-e-Taiba or Jaish-e-Mohammed.

2.2 International Day of the World's Indigenous Peoples is observed on 9 August

- International Day of the World's Indigenous Peoples is observed on 9 August 2020. The day is observed by the United Nations (UN) and its member states.
- The day marks the first meeting of the UN Working Group on Indigenous Populations of the Sub-Commission on the Promotion and Protection of Human Rights in 1982.

Theme:

- The theme of 2020 International Day of the World's Indigenous Peoples "COVID-19 and indigenous peoples' resilience".
- The day is virtually commemorated. It featured a panel discussion on the innovative ways indigenous peoples demonstrate resilience and strength in the face of the covid-19 pandemic while confronting grave threats to their survival.
- The theme highlights how the promotion and preservation of indigenous peoples' traditional knowledge and practices can be leveraged during this pandemic. The interactive virtual event was focused on building back the good practices stronger.

2.3 GCC Backs UN Arms Embargo on Iran

- Recently, the Gulf Cooperation Council (GCC) has sent a letter to the United Nations Security Council (UNSC) backing an extension of its arms embargo on Iran, just two months before it is set to expire.

Key Points

- The GCC has alleged that Iran had not ceased or desisted from armed interventions in neighbouring countries, directly and through organisations and movements armed and trained by Iran.

Allegation on Iran:

- The UN, the USA and other armament experts have accused Iran of providing arms to Yemen's Houthi rebels.
- Iran allegedly arms Hezbollah fighters in Lebanon and Syria and also provides weapons to Shiite militias in Iraq and terrorist groups in Bahrain, Kuwait and Saudi Arabia.
- The letter also mentioned Iran's shootdown of a Ukrainian passenger plane and its navy accidentally killing 19 sailors in a missile strike during an exercise.
- Iran also is suspected of launching an attack on Saudi Arabia's oil industry in September 2019.

Arms Embargo:

- In 2010, the UN banned Iran from purchasing foreign-made weapons like fighter jets, tanks and warships amid tensions over Iran's nuclear program.
- The embargo blocked Iran from replacing its ageing equipment, much of which had been purchased before the 1979 Islamic Revolution.
- An earlier embargo had targeted Iranian arms exports.
- In 2015, under Iran's nuclear deal (Joint Comprehensive Plan of Action), the UN agreed to end the arms embargo in October 2020.
- In 2018, the USA unilaterally withdrew from the deal as a part of the maximum pressure campaign to hurt Iran's already ailing economy.
- Internal Conflict in GCC: Even though the GCC has offered a unified statement, it remains affected by internal conflict among the member nations. For example:
 - Qatar crisis, which saw Bahrain, Egypt, Saudi Arabia and the Emirates cut diplomatic ties with Qatar and launch a boycott of the nation beginning in 2017.
 - Qatar has had good relations with Iran and has used its airspace while sharing a vast offshore oil and gas field with Tehran (Iran's capital).
 - Qatar is home to the massive Al-Udeid Air Base and the forward headquarters of the USA military's Central Command.
 - Oman also has had close ties to Iran and has served as an interlocutor between Tehran and the West.
 - On the other hand, Bahrain, Saudi Arabia and the UAE are suspicious of Iran and accuse it of stirring up dissent among Shiite populations in the region.

Iran's Stand:

- Iran has denied the various accusations of its involvement in arms supply.
- Iran has condemned the GCC letter and called it an irresponsible statement that serves the USA's interests.

- It has also criticized the GCC countries for being “among the largest arms buyers in the region and the world,” even amidst the economic downturn caused by the Covid-19 pandemic.

2.4 World Biofuel day is observed on 10 August

- World Biofuel day is observed on 10 August. The day aims to highlight the importance of non-fossil fuels as an alternative to conventional fossil fuels. It is observed by the Ministry of Petroleum & Natural Gas since 2015.
- The day also highlights the various efforts made by the Government in the Biofuel sector. The day also aims to honour the research experiments by Sir Rudolf Diesel. He ran an engine with peanut oil in 1893.
- His experiment predicted that vegetable oil will replace fossil fuels in the next century to fuel different mechanical engines.

Theme:

- The 2020 theme of World Biofuel day is “Biofuels towards Atmanirbhar Bharat”. Biofuels programme was hosted in synergy with the Government of India’s initiative of Atmanirbhar Bharat.

Biofuels:

- Biofuels are derived from renewable biomass resources. It is expected that the utilization of biofuels will address global concerns about the suppression of carbon emissions.
- Biofuels are eco-friendly and it provides a strategic advantage to promote sustainable development. These fuels supplement conventional energy sources in meeting the rapidly increasing demand for transportation fuels.
- Biofuels will reduce the import dependence, ensure a cleaner environment, generate additional income for farmers and employment generation.
- Government of India (GoI) has taken a number of initiatives to increase the blending of biofuels from 2014.
- The initiatives taken by GoI include simplifying the procurement procedures by OMCs, administrative price mechanism for ethanol, enabling lignocellulosic route to procure ethanol introducing a long term ethanol procurement policy, ethanol distillation capacity addition, and amending many provision in Industries (Development & Regulation) Act, 1951.

2.5 Student Entrepreneurship Programme 2.0: AIM

- Atal Innovation Mission (AIM - an initiative by the NITI Aayog) in collaboration with Dell Technologies has launched the second edition of its Student Entrepreneurship Programme (SEP 2.0) for student innovators of Atal Tinkering Labs (ATLs).
- SEP 1.0 was launched in January 2019.

Key Points**SEP 2.0:**

- Objective: It will allow student innovators to work closely with Dell volunteers. They will receive mentor support; prototyping and testing support; end-user feedback; intellectual property registration and patenting of ideas, processes, and products; manufacturing support; as well as the launch support of the product in the market.

Background

- As many as 1500 innovations were submitted in the last season of ATL Marathon (2019). ATL Marathon is a nationwide contest where students identify community challenges and create grassroots innovations and solutions within their ATLS.
- 50 teams were selected and mentored by Atal Incubation Centres via the Student Innovator Programme 2.0.
- Student Innovator Programme provides training on business and entrepreneurship skills to students.
- The top 8 will take their prototypes to product through SEP 2.0.

SEP 1.0:

- SEP 1.0 was a 10-month-long programme through which the top 6 teams of ATL Marathon 2017 got a chance to transform their innovative prototypes into fully functioning products, which are now available in the market.

ATLs:**Vision:**

- AIM is establishing ATLS in schools across India with a vision to cultivate one million children in India as neoteric (modern) innovators.
- It is aimed at disrupting the Indian education system, creating a paradigm shift where children as young as 12 years of age are being introduced to the world of technology innovation.
- Objectives: To foster curiosity, creativity and imagination in young minds; and inculcate skills such as design mindset, computational thinking, adaptive learning, physical computing etc.
- Eligibility: Schools (minimum Grade VI - X) managed by Government, local body or private trusts/society.
- Financial Support: AIM provides grant-in-aid of Rs. 20 Lakh to each school that includes a one-time establishment cost of Rs. 10 lakh and operational expenses of Rs. 10 lakh for a maximum period of 5 years to each ATL.

Features:

- ATL is a work space where young minds can give shape to their ideas through hands on do-it-yourself mode; and learn innovation skills.

- Young children get a chance to work with tools and equipment to understand the concepts of STEM (Science, Technology, Engineering and Math).
- CollabCAD was launched in ATL schools to provide students experience in creating and modifying 3D designs.
- In order to foster inventiveness among students, ATL conducts different activities ranging from regional and national level competitions, exhibitions, workshops on problem solving, designing and fabrication of products, lecture series etc. at periodic intervals.

2.6 International Youth Day is observed on 12th August

- International Youth Day (IYD) is observed on 12th August. The day aims to raise awareness about the problems and challenges faced by the youth. The day celebrates the role of young women and men as essential partners in change across the world.

Theme:

- The 2020 Theme for IYD is "Youth Engagement for Global Action." The theme aims to highlight the several ways through which the young people at the local, national and global levels enrich the national and multilateral institutions and processes, draw lessons on the representation and engagement of the youth in formal institutional politics can be significantly enhanced.

History:

- IYD was initiated by the youngsters from Vienna and Austria in 1991. In the year 1999, the United Nations General Assembly (UNGA) first designated 12th August as the observation of International Youth Day as per this decision by the World Conference of Ministers Responsible for Youth, Lisbon in August 1998.
- IDY was observed for the first time in 2000. The day aims to create awareness about the confrontation and problems that they usually face around the globe.

2.7 Indonesia's Mt. Sinabung Erupted

- Recently, Mt. Sinabung, an active volcano on Indonesia's Sumatra island has erupted.
- Mount Sinabung is located in Karo regency, North Sumatra.

Key Points

Mt. Sinabung:

- It is among more than 130 active volcanoes in Indonesia, which is prone to seismic upheaval due to its location on the Pacific's Ring of Fire.
- The volcano was dormant for 400 years before exploding in 2010. It exploded again in 2014 and 2016.

Ring of Fire:

- The Ring of Fire, also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes.

- It traces boundaries between several tectonic plates—including the Pacific, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.
- 75% of Earth’s volcanoes i.e. more than 450 volcanoes are located along the Ring of Fire. 90% of Earth’s earthquakes occur along its path.
- The abundance of volcanoes and earthquakes along the Ring of Fire is caused by the amount of movement of tectonic plates in the area.
- Along much of the Ring of Fire, plates overlap at convergent boundaries called subduction zones. That is, the plate that is underneath is pushed down, or subducted, by the plate above. As rock is subducted, it melts and becomes magma. The abundance of magma so near to Earth’s surface gives rise to conditions ripe for volcanic activity.
- A significant exception is the border between the Pacific and North American Plates. This stretch of the Ring of Fire is a transform boundary, where plates move sideways past one another. This type of boundary generates a large number of earthquakes as tension in Earth’s crust builds up and is released.

2.8 Russian Covid Vaccine: Sputnik V

Russia became the first country to officially register a Covid-19 vaccine and declared it ready for use.

Key Points

- The vaccine has been called Sputnik V, named after the first artificial Earth satellite, Sputnik-I launched by the Soviet Union.
- It is the first Covid-19 vaccine to be approved.
- However, a Chinese vaccine had been cleared for ‘limited use’ before this. It is an adenovirus vector vaccine approved to be administered only on soldiers of the People’s Liberation Army.
- The Russian vaccine has outrun other Covid-19 vaccines like Oxford-AstraZeneca, Moderna and Pfizer which are still in trials.
- India’s Covaxin has been approved for human clinical trials. Another Indian vaccine ZyCoV-D has entered phase I/II of clinical trials.
- This vaccine has been developed by Moscow’s Gamaleya Institute in collaboration with the Russia’s defence ministry.
- The vaccine is based on the DNA of a SARS-CoV-2 type adenovirus, a common cold virus.
- The vaccine uses the weakened virus to deliver small parts of a pathogen and stimulate an immune response.
- The vaccine is administered in two doses and consists of two types of a human adenovirus, each carrying an S-antigen of the new coronavirus, which enter human cells and produce an immune response.

- Russian officials have said that large-scale production of the vaccine will start in September, and mass vaccination may begin as early as October.

Adenovirus Vector Vaccine:

- In this vaccine, adenovirus is used as a tool to deliver genes or vaccine antigens to the target host tissue.
- Adenovirus: Adenoviruses (ADVs) are DNA viruses ranging from 70-90 nanometre in size, which induces many illnesses in humans like cold, respiratory infection etc.
- Adenoviruses are preferred for vaccines because their DNA is double stranded which makes them genetically more stable and the chances of them changing after injection are lower.
- Rabies vaccine is an adenovirus vaccine.
- However, there are drawbacks of adenovirus vector vaccines like pre-existing immunity in humans, inflammatory responses etc.
- Just as human bodies develop immune responses to most real viral infections, they also develop immunity to adenoviral vectors. Since adenoviral vectors are based on natural viruses that some humans might already have been exposed to, these vaccines might not work for everyone.

Concerns Regarding the Vaccine:

- Experts expressed concerns over the safety and efficacy of the vaccine due to its extremely fast production and lack of published data on the vaccine.
- Russia has only made public the results of phase-I of the clinical trials, which it claimed were successful and produced the desired immune response.
- The human trials, which take several years in normal circumstances, have been completed in less than two months for Sputnik V. The late-phase human trials are important because the vaccine's efficacy can differ on different population groups.
- Russia, however, has claimed that this was made possible due to the fact that its Covid-19 vaccine candidate closely resembled a vaccine for Middle East Respiratory Syndrome (MERS) disease, caused by another coronavirus, that had already been tested extensively.

Use in India:

- Russia has claimed that around 20 countries have shown interest in the Sputnik V vaccine, including India.
- India has also partnered with the USA for development of Covid-19 vaccine.
- The approval for a vaccine is given by the Central Drugs Standard Control Organisation (CDSCO).
- The Central Drugs Standard Control Organisation (CDSCO), under Directorate General of Health Services, Ministry of Health & Family Welfare, is the National Regulatory Authority (NRA) of India.

- Under the Drugs and Cosmetics Act, 1940, CDSCO is responsible for approval of Drugs, Conduct of Clinical Trials, laying down the standards for Drugs, control over the quality of imported Drugs in the country and coordination of the activities of State Drug Control Organizations by providing expert advice.
- CDSCO can ask Russia to conduct late-phase human trials, usually both phase-2 and phase-3, on an Indian population.
- This is the usual requirement for all vaccines developed outside of India.
- CDSCO can also give emergency authorisation without late-phase trials, considering the extraordinary situation.
- The drug remdesivir was recently granted similar emergency approval to be used as a therapeutic on novel coronavirus patients.
- However, this is unlikely as vaccines are given to a large number of people, and the risks involved are much higher.
- There are also issues in manufacturing the vaccine as there is no agreement for its production in India right now.
- Pune-based Serum Institute of India, the world's largest manufacturer of vaccines by volume, has already entered into tie-ups with developers to mass-produce their vaccines. Other Indian companies have also done similar agreements but there is none with Russia.

2.9 US allows H-1B visa holders to return to same jobs

- US President Donald Trump's administration has relaxed the ban on H-1B visa, allowing H-1B visas holders to enter the United States to return to the same jobs they had prior to the proclamation of the visa ban.
- The US Department of State advisory announced that the dependents of the H-1B visas holders including spouses and children will also be allowed to travel along with primary visa holders.
- The Trump administration has also allowed travel by technical specialists, senior-level managers, and other workers holding H-1B visas, as their travel is necessary to facilitate the immediate and continued economic recovery of the United States.
- The administration has also permitted travel of visa holders who are working as public health or healthcare professional, or as researchers to alleviate the effects of the COVID-19 pandemic or conduct medical research in an area that would have substantial public health benefits.

2.10 Israel and UAE historic peace deal

- Israel and the United Arab Emirates have reached a deal to normalise relations, with Israel agreeing to suspend its controversial plans to annex parts of the occupied West Bank.
- Until now Israel has had no diplomatic relations with Gulf Arab countries.

- President Trump called the deal between Prime Minister Netanyahu and Abu Dhabi Crown Prince Mohammed bin Zayed Al Nahyan "a truly historic moment". It marks only the third Israel-Arab peace deal since Israel's declaration of independence in 1948, after Egypt and Jordan.
- In a TV address Mr Netanyahu said he had "delayed" West Bank annexation plans, but those plans remain "on the table". Annexation would make some West Bank areas officially part of Israel.
- "There is no change in my plan to apply our sovereignty to Judea and Samaria [West Bank] in full coordination with the US. I'm committed to it. That hasn't changed. I remind you that I was the one who put the issue of sovereignty over Judea and Samaria on the table. This issue remains on the table," he said.
- Mr Netanyahu said Israel would co-operate with the UAE in developing a coronavirus vaccine, in energy, water, environmental protection and many other fields.

2.11 UN defeats US demand to extend arms embargo on Iran

- The U.N. Security Council on Friday resoundingly defeated a U.S. resolution to indefinitely extend the U.N. arms embargo on Iran, with the Trump administration getting support from only the Dominican Republic but vowing further action to prevent Tehran's sale and export of conventional weapons.
- The vote in the 15-member council was two in favor, two against and 11 abstentions, leaving it far short of the minimum nine "yes" votes required for adoption. Russia and China strongly opposed the resolution.
- The Trump administration has said repeatedly it will not allow the arms embargo provision in the Security Council resolution endorsing the 2015 nuclear agreement between Iran and six major powers to expire as scheduled Oct. 18.
- U.S. Secretary of State Mike Pompeo announced the defeat of the resolution ahead of a very brief virtual council meeting to reveal the vote.

2.12 1947 Tripartite Agreement on Gurkha soldiers



- Recently, the Nepal's Foreign Minister has said that the 1947 Tripartite Agreement between India, Nepal and the United Kingdom (that deals with the military service of Gurkha soldiers from Nepal) has become redundant.
- He also said that Nepal would prefer to handle the matter bilaterally with India and the United Kingdom.

Key Points

The Tripartite Agreement:

- In 1947, when India became independent, it was decided to split Gurkha regiments between the British and Indian armies.
- From the first quarter of the 19th century, Gurkhas had served under the British, first in the armies of the East India Company, and then the British Indian Army.
- East India Company first recruited Gurkhas after suffering heavy casualties during the Anglo-Nepalese War also known as the Gurkha War. The war ended with the signing of the Treaty of Sugauli in 1816.
- It ensured that Gurkhas in British and Indian service would enjoy broadly the same conditions of service as that of British and Indian citizens.
- The services include all perks, remuneration, facilities and pension schemes etc.
- Gorkha recruitment was the first window that was opened to Nepali youth to go abroad.

Issues Involved:

- The objection from Nepal regarding the Gurkhas serving in the Indian military has become prominent in the backdrop of Nepal-India territorial dispute over the Kalapani region of Pithoragarh District that Nepal claims as its own.
- Nepal has responded by publishing a new map that included the disputed territories of Kalapani region.
- The issue became a talking point after Indian Army Chief remarked that Nepal's strong protest against Indian road construction in the Limpiadora-Kalapani-Lipulekh area was at the behest of a third party (China).
- The Nepalese people believe that Indian Army Chief, who is granted the honorary post of a General in the Nepal Army has hurt the sentiments of the Nepali Gurkha Army personnel who lay down their lives to protect India.
- Also the Gurkha veterans have been alleging that the United Kingdom has been discriminating against them in terms of pay, pension and other facilities.
- The British government started providing equal pay and pension to Gurkhas in 2007.

2.13 China's Presence Near Ecuador Waters

- Recently, Ecuador has expressed an official discomfort over the sighting of a flotilla of 260 mostly Chinese fishing vessels near the Galapagos archipelago (a part of Ecuador).
- The flotilla also consisted of some Liberia and Panama-flagged vessels which was detected in an international water corridor situated between two areas of Ecuadorian jurisdiction– 200 miles away from both the Galapagos Islands and mainland Ecuador.

Key Points

Past Occurrences:

- Ecuador has stated that the situation is repeated every year and such vessels reach the outer limit of the archipelago, outside the country's exclusive zone.
- In 2019, 245 Chinese fishing vessels were sighted in the area where Ecuador's writ does not extend.
- In 2017, a Chinese ship had entered Ecuador's waters and its authorities seized the ship.
- That time Ecuador had discovered 300 tonnes of wildlife on board, mostly the critically endangered scalloped hammerhead sharks.
- It has been observed that the two-thirds of hammerhead shark fins found in Hong Kong markets come from the Galapagos area.

Reasons:

- Chinese ships are frequent in Ecuador's waters during august month of the year as the cold Humboldt Current brings in nutrients that lead to a high congregation of marine species.
- The Humboldt Current, also called the Peru Current, is a cold, low-salinity ocean current that flows north along the western coast of South America.
- The Humboldt Current is a highly productive ecosystem. It is the most productive eastern boundary current system. It accounts for roughly 18-20% of the total worldwide marine fish catch.

Conflicts with Other Countries

- Chinese vessels have also run into trouble with other countries in the region.
- In 2016, Argentina's coast guard chased and sank a vessel that it claimed had been illegally fishing in the South Atlantic Ocean.

Diplomatic consequences:

- The matter has been escalated to a diplomatic level and Ecuador has officially expressed its "discomfort" to China.
- Ecuador has also stated that it will discuss the threat with Peru, Chile, Colombia, and Panama – coastal countries of the region that have also been affected in the past.

- The USA, which is already opposing China on multiple fronts, expressed its support for Ecuador. The USA has also expressed that it is against any aggression directed towards economic and environmental sovereignty.

China's Stand:

- China maintains that it is a “responsible fishing nation” with a “zero tolerance” policy toward illegal fishing.
- It also stated that China respects Ecuador's measures to protect the environment and preserve marine resources.

2.14 Quadrilateral Dialogue: China, Nepal, Pakistan and Afghanistan

- Recently, China convened a quadrilateral dialogue with the Foreign Ministers of Afghanistan, Nepal and Pakistan.

Key Points**Four-point Plan:**

- China proposed a four-point plan to contain the Covid-19 pandemic, boost economic recovery and resumption of the Belt and Road Initiative (BRI) infrastructure projects.

The four-point plan included:

- To share consensus in fighting the pandemic as good neighbours.
- To learn from China and Pakistan's joint prevention and control model of the pandemic.
- To look at opening up green channels as soon as possible by the four countries.
- Green channel is the route followed in passing through customs in an airport, etc by passengers claiming to have no dutiable goods to declare.
- China's expertise to the three countries in fighting Covid-19. It also included the vaccines that are being developed, to be shared with the three countries.
- Pakistan, Nepal and Afghanistan actively supported the four-point cooperation initiative proposed by China.

Other Discussed Issues:

- China also 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.
- All the four countries supported the maintenance of multilateralism, strengthened the role of the World Health Organisation (WHO), backed the realisation of a ceasefire in Afghanistan during the epidemic, and the peace and reconciliation process in Afghanistan.

Concerns for India:

- China asked the three countries at the quadrilateral meet to take advantage of their geography, strengthen exchanges and connectivity between the four countries and central Asian countries, and safeguard regional peace and stability.
- The remarks assume significance as it came amid the border tensions between India and China.
- The quadrilateral meeting also came at a time of deepening concerns over the India-Nepal relationship due to border disputes at Kalapani region.
- Nepal's Prime Minister K.P. Oli also accused India of trying to destabilize his government.

2.15 UK to Issue Coin in Honour of Mahatma Gandhi

- Britain is considering minting a coin to commemorate Mahatma Gandhi.

Key Points

- The consideration is seen as part of efforts to celebrate achievements of people from the Black, Asian and other Minority Ethnic (BAME) communities.
- The British Finance Minister has written a letter to the Royal Mint Advisory Committee (RMAC), to consider recognising the contribution of BAME communities on Britain's coinage.
- The RMAC is an independent committee made up of experts who recommend themes and designs for coins.
- The RMAC supports a campaign called 'We Too Built Britain', which seeks representation of non-white icons on British currency.
- Recently, the murder of a Black man, George Floyd, in the United States due to police brutality has led to Black Lives Matter protests against racism, colonialism and police brutality across the globe.
- Triggered by the death of George Floyd, some British institutions began re-examining their past, which includes their history, colonialism and racism.

2.16 UN Report on the Impact of Covid-19 on Children

According to the recently released UN Report on the Impact of Covid-19 on Children, almost 24 million children could drop out or not have access to school next year due to the economic impact of Covid-19.

Key Points

- Impact: The Covid-19 pandemic will impact the children all over the world in multiple ways:
- Economic: An estimated 42-66 million children could fall into extreme poverty as a result of pandemic
- The economic loss might reach 16,000 USD of lost earnings over a student's lifetime, translating over time into 10 trillion USD of lost earnings globally.
- Learning: 188 countries have imposed countrywide school closures, affecting more than 1.5 billion children and youth.

- More than two-thirds of countries have introduced a national distance learning platform, but among low-income countries the share of distance learning is only 30%.
- Online learning is not accessible for poor children, children from remote and conflict areas and children with disabilities.
- A loss of learning by one-third (equivalent to a three-month school closure) during Grade 3 might result in 72% of students falling so far behind that by Grade 10 they will have dropped out or will not be able to learn anything in school.
- Survival: Economic hardship experienced by families as a result of the global economic downturn could result in hundreds of thousands of additional child deaths in 2020,
- This will reverse the last 2 to 3 years of progress in reducing infant mortality within a single year.
- Health: Rising malnutrition is expected as 368.5 million children across 143 countries rely on school meals for a reliable source of daily nutrition.
- There is a reduced access to essential reproductive, maternal, newborn and child health interventions.
- Suspension of all polio vaccination campaigns worldwide and measles immunization campaigns in at least 23 countries will set back the decades-long effort to eliminate these diseases.
- The effects of physical distancing measures and movement restrictions on children's mental health represent another cause for concern.
- Safety: Lockdowns and shelter in place measures come with heightened risk of children witnessing or suffering violence and abuse.
- Children's reliance on online platforms for distance learning has also increased their risk of exposure to inappropriate content and online predators.
- Susceptibility to child marriage, early pregnancy and gender-based violence will also increase.
- Uneven Distribution of Impact: The Covid-19 Pandemic has increased the existing socioeconomic disparities.
- During the second quarter of 2020, 86% of children at the primary level have been effectively out of school in poor countries, compared to just 20% in highly developed countries.
- The Covid-19 crisis is likely to increase the financing gap between education budgets and the money available to reach the Sustainable Development Goal of quality education by up to one-third.
- The low and middle incomes already faced a USD 148-billion of the said financial gap.
- Apart from the poor children, other vulnerable groups of children like migrants, the displaced, refugees, minorities, slum-dwellers, children living with disabilities, children living in refugee settlements, and children in institutions are likely to face a more severe impact.
- The impact of Covid-19 is going to be more damaging for girls than boys, widening gender inequality.

- Earlier this year, the Global Education Monitoring Report, 2020 was released by UNESCO which highlighted that the Covid-19 had worsened the inequalities in education systems worldwide.

Suggestions

- Immediate rollout or expansion of social assistance to families, preferably through the use of universal child grants to prevent extreme poverty.
- Securing food supply chains and local food markets, to protect children from a food security crisis.
- Urgent adaptation of standard physical distancing and lockdown strategies in low-income and high population density settings.
- Prioritizing the continuity of child-centred services, schooling, nutrition programmes, immunization and other maternal and newborn care, and community-based child protection programmes with a particular focus on equity of access.
- Putting in place specific protections for vulnerable children.
- Providing practical support to parents and caregivers to support the mental health and learning of the children.
- Ensuring that children, adolescents and young people have access to Covid- 19 testing, treatment and vaccines as and when they become available.

2.17 Pakistan's New Map

Recently, Pakistan has released a new political map that includes all of Jammu & Kashmir, Ladakh, Sir Creek and Junagadh.

The map has been released on the eve of the first anniversary of the abrogation of special status to Jammu and Kashmir under Article 370.

Key Points

The Map:

- The map depicts entire Jammu & Kashmir as a disputed territory and does not show any borders in the east of Kashmir.
- It has also renamed Kashmir Highway in Islamabad as Srinagar Highway.
- It claims the Siachen, regions of Sir Creek and the erstwhile state of Junagadh in Gujarat as part of Pakistan's territory.
- This is not the first time Pakistan has tried to portray Junagadh as part of its territory. The 2012 Atlas of Pakistan also portrayed Junagadh as a Pakistan's territory.
- The map also shows the Federally Administered Tribal Areas (FATA) as being part of Khyber Pakhtunkhwa province.

India's Response:

- India has called Pakistan's move as an exercise in political absurdity, which lays untenable claims to the Indian territories.
- These assertions have neither legal validity nor international credibility and it only confirms the reality of Pakistan's obsession with territorial aggrandisement supported by cross-border terrorism.

Concerns for India:

- This is the second time in the recent past where India's neighbouring country has published a new map claiming India's territories. Nepal was the first country to do so.
- Nepal published its news map claiming the territories of the Kalapani region.
- Closeness of Nepal, Pakistan towards China.
- Recently, China also changed the status quo along the Line of Actual Control (LAC) in the western sector in its favour.

2.18 Beirut Explosion

Recently, a massive explosion took place in Beirut, capital of Lebanon, which left more than hundred people dead and more than 4,000 injured, according to the reports until now.

Key Points

- There were two explosions in the central port area of Beirut which occurred barely within minutes of each other within nearby buildings.
- The blast affected residents living as far as 10 kilometres away from the site and was felt upto 250 Km.
- The blast created seismic waves equivalent to a magnitude 3.3 earthquake.
- The blasts were likely triggered by over 2,700 tonnes of ammonium nitrate that had been confiscated and stored by authorities near the port for over six years.
- A two-week state emergency has been imposed in Beirut following the blast.

Impact of the Blast

- Economic: Lebanon is an import-dependent country. The badly damaged port facility is Lebanon's largest maritime gateway and it will make essential items expensive and threaten food security in the country.
- Lebanon has already been struggling with a huge economic meltdown, with the rapid devaluation of the local currency and a volatile exchange rate on the black market fueling inflation, shuttering businesses, unemployment and poverty.
- It had also defaulted on a Eurobond repayment in March 2020.
- It is in talks with the International Monetary Fund for a \$10 billion loan program.
- The blast will pose an additional financial burden of rebuilding the city.

- Political: Lebanon faced nationwide protests against corruption, economic mismanagement and sectarian politics in October 2019, which forced the resignation of then-Prime Minister Saad Hariri.
- This blast along with the growing economic crisis can again cause social unrest.
- Health: The country's health system is already burdened with the patients of Covid-19 pandemic and the victims of blast will add to this.

2.19 J&K Issue Raised at UNSC

- Recently, China has called India's move in Jammu and Kashmir (J&K) "illegal and invalid" and raised the issue at the United Nations Security Council (UNSC) in New York (USA).
- On 5th August 2019, the President of India promulgated the Constitution (Application to Jammu and Kashmir) Order, 2019 effectively abrogating the special status accorded to J&K under the provision of Article 370.
- 5th August 2020 marks the first anniversary of that move. On its eve, Pakistan released a new political map that includes all of J&K, Ladakh, Sir Creek and Junagadh.

Key Point

China's Stand on Kashmir:

- The Kashmir issue is a dispute left over from history between Pakistan and India, which is an objective fact established by the UN Charter, relevant Security Council resolutions and bilateral agreements between Pakistan and India.
- Any unilateral change to the status quo in the Kashmir region is illegal and invalid.
- Kashmir region issue should be properly and peacefully resolved through dialogue and consultation between the parties concerned.

India's reaction:

- India has noted the Chinese comments and held that Beijing has "no locus standi" on the matter and is advised not to comment on the internal affairs of other nations.
- India and China are holding talks over the disengagement along the Line of Actual Control (LAC).

UN's Response:

- The J&K issue has been raised at the UNSC three times in the last one year but there has been no concrete solution to it yet.
- UN human rights experts have called on India to take urgent action to address the alarming human rights situation in the region.
- If India fails to take any genuine and immediate steps to resolve the situation, meet the obligations to investigate historic and recent cases of human rights violations and prevent future violations, then the international community should step up.

Amnesty International India Report:

- Amnesty International in its report has urged the National Human Rights Commission (NHRC) and the National Commission for Women (NCW) to set up offices in J&K to facilitate easy access to the complaint filing process for the local people.
- NHRC has been asked to appoint a special monitor for the region and to take up cases pending with the erstwhile State Commission.
- NCW has been recommended to set up a J&K cell for addressing problems faced by women.
- The report held that people in J&K do not have any way of redressal of the violations of their rights after the closure of the State Commission in 2019.
- It also called on the government to release all political leaders, journalists and activists from detention; restore 4G mobile Internet; decongest prisons and start an independent investigation into attacks on journalists.
- The report acknowledged that there may be security concerns that merit restrictions on the right to freedom of expression.
- It suggested that curbs should be for a limited timeframe and as per the International Covenant on Civil and Political Rights (ICCPR), to which India is a state party.

2.20 USA Bars Federal Agencies from Hiring H-1B Visa Holders

- Recently, the President of the USA has signed an executive order barring federal agencies from hiring H-1B visa holders and other foreign workers in place of USA citizens or green card holders.

Key Point

H-1B Visas:

- The H-1B visa is a non-immigrant visa that allows USA companies to employ foreign workers in speciality occupations that require theoretical or technical expertise.
- The technology companies depend on it to hire tens of thousands of employees each year from countries like India and China to keep costs in check.
- Such jobs in developed countries pay minimum wages, which are not lucrative enough for employable individuals of these countries.

Executive Order:

- The executive order has asked the federal agencies to stop replacing USA workers and green card holders with H-1B visa holders or other foreign workers.
- A green card holder (permanent resident) is someone who has been granted authorization to live and work in the USA on a permanent basis.
- The order has also directed all agencies under the federal government to review the contracts they gave out in the two previous financial years and the performance of such contracts or subcontracts.

- The heads of departments will undertake an audit and check whether the jobs could have been performed by the USA workers and whether opportunities for domestic workers were impacted by such hiring.
- The Department of Labour will also finalise guidelines to prevent H-1B employers from moving H-1B workers to other employers' job sites to displace American workers.
- The order seems to be an extension of an earlier order in which the entry of non-immigrant visa workers had been banned until the end of 2020.

Background:

- The USA government under Trump leadership is moving towards a more conservative work visa regime under the America First policy.
- It has alleged Indian and Chinese IT companies of sending workers at very low cost, which hurt the prospects of skilled workers in the USA.
- The immediate trigger was an announcement by the federally-owned Tennessee Valley Authority (TVA) that it would outsource 20% of its technology jobs to foreign countries.
- This action could result in loss of jobs for up to 200 highly-skilled American tech workers in Tennessee and could also lead to possible leaking of sensitive user data and theft of intellectual property, detrimental to national security.
- The USA government has held that outsourcing of jobs should be avoided as far as possible because it is especially detrimental in the middle of a pandemic, which has already cost millions of Americans their jobs.

Impact on Indian Workers in the USA:

- The H-1B visa is the most sought-after among Indian IT professionals.
- Apart from workers hired by federal agencies, the order will also impact workers of Indian companies that are on contract with federal agencies.
- Bigger federal agencies such as state-run banks give the contract for supply and maintenance of their databases and other services to bigger Indian companies such as Infosys, TCS or Wipro.

Impact on the USA:

- The order comes at a time when there is a huge shortage of STEM (Science, Technology, Engineering and Mathematics) skills in the USA that workers on short-term non-immigrant visas like H-1B and L-1 help bridge.
- Such a measure could slow down the recovery phase of the USA as countries start unlocking.

2.21 USA Opposes Cuba in UNHRC

- The United States of America has urged United Nations members not to support Cuba's bid to join the United Nations Human Rights Council (UNHRC).

Key Points

- The USA has accused Cuba of “trafficking” its doctors under the guise of humanitarian missions.
- Cuba's sale of medical services is its main source of foreign exchange.
- Cuba has a generally respected healthcare system with 90,000 medical workers for a population of 1.1 crore.
- It has a high life expectancy (79.74 years in 2016) and a low infant mortality rate (around 4.76 deaths per 1,000 live births in 2013).
- It also sends its doctors abroad to tackle outbreaks, as it did during the Ebola epidemic of 2014-16 and Covid-19 pandemic.
- Cuba has applied to fill one of the regional vacancies for 2021-2023.
- It was a member of the UNHRC in 2014-2016 and 2017-2019.
- The USA and Cuba have had a strained relationship since the Cuban Revolution in 1959.
- The USA severed diplomatic ties with Cuba after the revolution.
- It had also placed a trade embargo on Cuba which was eased in 2000 and again in 2014. Travel restrictions, trade sanctions, restrictions on remittances to Cuba were partially lifted during these times.
- The sanctions were reinstated in 2017.
- The Cuba-US relationship also suffered during the Cuban Missile crisis in 1962.
- The USA accuses Cuba of human rights violations and dictatorship as it has a leftist authoritarian regime.
- A large number of Cubans have migrated to the USA after the Cuban revolution. This includes supporters of the overthrown regime, those whose property had been confiscated by the present Cuban socialist government and those in search of better employment and living conditions.
- Earlier, the USA had also criticized Qatar and South Africa for accepting doctors from Cuba to battle Covid-19.
- It had also blacklisted Cuba's defense minister, accusing him of human rights violations and supporting socialist Venezuelan President.

India and Cuba

- India shares close, warm and historical relations with Cuba and both countries are founding members of the Non-Aligned Movement.
- In 1959, the Cuban-Argentinean guerrilla commander Ernesto Che Guevara paid a diplomatic visit to India and was welcomed by the then Prime Minister Pt. Jawaharlal Nehru.
- In 2019, India supported the resolutions in the UN General Assembly calling for lifting of US sanctions against Cuba..

- India and Cuba agreed to collaborate in the areas of Biotechnology, Homeopathy and the traditional system of medicine during the visit of the President of India to Cuba in 2019.

2.2275th Anniversary of Hiroshima Bombing

- Japan marked 75 years of the atomic bombing on Hiroshima on 6th August, 2020.
- Survivors, relatives and foreign dignitaries attend the anniversary of Hiroshima every year to honour victims of the bombings and call for world peace.

Key Points

About:

- On 6th August 1945, a US bomber dropped the uranium fission bomb, codenamed Little Boy, on Hiroshima, a city in Japan.
- Three days later it dropped another bomb codenamed Fat Man, on Nagasaki.
- The explosion and resultant firestorms are believed to have killed around 80,000 people in Hiroshima and around 40,000 people in Nagasaki.
- Thousands more died in the following years due to the exposure to radiation from the blast and also from the black rain that fell in the aftermath of the explosions.
- Long-term effects of the attack included birth defects, malnutrition, Cancer and other illnesses
- The Allies were one of the two major alliances during World War-II, led by Great Britain, the United States, and the Soviet Union.
- The other alliance, Axis was led by Germany, Italy, and Japan.

Aftermath

- The attacks were widely criticized around the world for being crimes against humanity.
- Some historians argue the bombings ultimately saved lives by avoiding a land invasion that might have been significantly more deadly.
- The United States has never apologised for the bombings.
- However, in Japan, the attacks are widely regarded as war crimes because they targeted civilians indiscriminately and caused unprecedented destruction.
- After the war, Hiroshima tried to reinvent itself as a City of Peace and continues to promote nuclear disarmament around the world.
- The survivors of this attack are known as "Hibakusha", many of whom suffered physically and psychologically after the attack.
- Japan's wartime experience has led to a strong pacifist movement in the country. At the annual Hiroshima anniversary, the government usually reconfirms its commitment to a nuclear-free world.
- Japan signed the Treaty on the Non-Proliferation of Nuclear Weapons in February 1970.

3. INDIAN ECONOMY

3.1 Niti Aayog's Export Preparedness Index 2020



Gujarat has topped the **Niti Aayog's Export Preparedness Index 2020** followed by Maharashtra in second place and Tamil Nadu in the third place, as per a report released by NITI Aayog on August 26, 2020.

Speaking during the release of the report, NITI Aayog Vice Chairman Rajiv Kumar said that exports are an integral part of Aatmanirbhar Bharat and India will have to continue to strive to increase the share of exports in GDP and world trade. He said that we will try to double India's share in world trade in the coming years.

The report- **Export Preparedness Index (EPI) 2020** was released by Niti Aayog in partnership with the Institute of Competitiveness.

The index ranked states on four key parameters:

1. Policy
2. Business Ecosystem
3. Export Ecosystem
4. Export Performance.

The index also took into consideration 11 sub-pillars including export promotion policy, infrastructure, transport connectivity, export infrastructure, export diversification, institutional framework, business environment, access to finance, trade support, growth orientation and R&D infrastructure.

NITI Aayog Report: Key Highlights

- While Gujarat topped the index, Maharashtra and Tamil Nadu came second and third respectively.

- Overall, six of the eight coastal states featured among the top ten states, performing the best across India.
- This indicates the presence of strong enabling and facilitating factors to promote exports in the coastal areas of the country.
- Uttarakhand performed the best among the Himalayan states, followed by Tripura and Himachal Pradesh.
- Delhi performed the best across the Union Territories, followed by Goa and Chandigarh.
- Among the landlocked states, Rajasthan performed the best followed by Telangana and Haryana.
- Two other landlocked states- Chhattisgarh and Jharkhand were also mentioned in the report for initiating several measures to promote exports. By stating their example, the report highlighted that export orientation and preparedness is not restricted to only prosperous states.
- The report stated that other states facing similar socio-economic challenges can look at the measures taken up by Chhattisgarh and Jharkhand and try to implement them to grow their exports.

Why is there a distinction between coastal states and landlocked states?

According to NITI Aayog Vice-Chairman, there is a need to distinguish between coastal states and landlocked states because conditions for exports in coastal states and landlocked states are very different. Niti Aayog CEO Amitabh Kant said that the rapid growth of exports is a crucial component for long-term economic growth. He further added saying that a favourable ecosystem enables a country to contribute significantly to global value chains and reap the benefits of integrated production networks, globally.

Key Challenges

- The report revealed that export promotion in India faces three key challenges:
 1. Intra- and inter-regional disparities in export infrastructure
 2. Poor trade support and growth orientation among states
 3. Poor R&D infrastructure to promote complex and unique exports.
- The report highlighted that there is a need to focus on key strategies to address these challenges such as strengthening industry-academia linkages, creating state-level engagements for economic diplomacy and joint development of export infrastructure.
- The report stated that these strategies can be supported by revamped designs and standards for local products with adequate support from the central government. It further noted that to make India a developed economy and an '**Atmanirbhar Bharat**', it is important to increase exports from all the states and union territories.

Background

- India's per capita exports currently stand at USD 241, in comparison to China's USD 18,000 and South Korea's USD 11,900. The Indian government has made it clear that production linked incentive (PLI) schemes are critical to promoting exports.
- India's merchandise exports have witnessed an increasing rise from USD 275.9 billion in 2016-17 to USD 303.5 billion in 2017-18, to USD 331.0 billion in 2018-19.
- The COVID-19 pandemic has, however, dealt a severe blow to the current fiscal and this led India's exports to shrink by almost 60 percent in April 2020.

3.2 Average income of MGNREGA workers doubled amid COVID-19 lockdown in April-July: CRISIL report



- As per the CRISIL (Credit Rating Information Services of India Limited) report, the average income of MGNREGA workers has doubled during the government-imposed Coronavirus lockdown.
- The report mentioned that the average income per month for the unskilled workers under the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has nearly doubled to around Rs. 1000 per month in the first four months of the fiscal year 2020-2021.
- Under the government implemented the MGNREGA scheme, the April-July period of the current fiscal period has witnessed 46% growth in the work execution (in terms of person-days).

CRISIL report on MGNREGA: Key Highlights

- As per the report, the average payday wage has been increased by 12% during the period under review.
- The primary reason for the government's thrust on MGNREGA was the ongoing COVID-19 pandemic, which had pushed migrant workers back into their villages.
- The push to the scheme has been higher in Uttar Pradesh, Haryana, West Bengal, Bihar, Gujarat, and Odisha, where the work allocation has increased more than 50% in the first four months.

- The Central government had allocated Rs. 61,500 crores for this scheme under union budget 2020-21. The allocation was later increased by Rs. 40,000 crores amid the COVID-19 pandemic to support the rural economy.
- According to the report, even after considering the revised allocation, more than 50% of the funds have been spent in the first four months of the current fiscal.

About MGNREGA:

The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) scheme has the mandate of providing at least 100 days of the wage employment in a financial year to every rural household whose adult members opt for unskilled manual work. The scheme has been a key mechanism of providing employment to the rural workforce.

3.3 Strong Balance of Payments



- According to the Ministry of Commerce and Industry, India's Balance of Payments (BoP) in 2020-21 is going to be very strong.

Key Points

- **Strong BoP:** The BoP is going to be strong on the back of significant improvement in exports and a fall in imports.
- The exports in July 2020 is at about 91% export level of July 2019 figures.
- Imports are still at about 70-71% level as of July 2019.
- Trade Surplus in June 2020: India's trade has turned surplus for the first time in 18 years as imports dropped by 47.59% in June 2020 as compared to June 2019.
- The country posted a trade surplus of USD 0.79 billion in June 2020.
- Domestic Manufacturing Being Boosted: The government is taking steps to support and promote domestic manufacturing and industry.
- It has increased curbs on imports of products and parts, especially from China, as part of its 'Atmanirbhar' Initiative.

- The government also reviewed all Free-Trade Agreements (FTA) done between 2009 and 2011 and found most of them to be asymmetrical.
- FTAs done earlier have permitted foreign goods to come easily into the country. But Indian goods have not been allowed reciprocal entry.
- E.g. European countries have opposed technical standards imposed by India on import of tyres, even as they have restricted export of tyres from India.
- Change in Mode of Manufacturing: The government has also asked firms investing in the country to stop having an “assembly workshop” approach that has typically characterised Indian manufacturing.

Balance of Payment

Definition:

- Balance of Payment (BoP) of a country can be defined as a systematic statement of all economic transactions of a country with the rest of the world during a specific period usually one year.
- It indicates whether the country has a surplus or a deficit on trade.
- When exports exceed imports, there is a trade surplus and when imports exceed exports there is a trade deficit.

Purposes of calculation of BoP:

- Reveals the financial and economic status of a Country.
- Can be used as an indicator to determine whether the country’s currency value is appreciating or depreciating.
- Helps the Government to decide on fiscal and trade policies.
- Provides important information to analyze and understand the economic dealings of a country with other countries.

Components of BoP

- For preparing BoP accounts, economic transactions between a country and rest of the world are grouped under - Current account, Capital account and Errors and Omissions. It also shows changes in Foreign Exchange Reserves.
- Current Account: It shows export and import of visibles (also called merchandise or goods - represent trade balance) and invisibles (also called non-merchandise).
- Invisibles include services, transfers and income.

Capital Account: It shows a capital expenditure and income for a country.

- It gives a summary of the net flow of both private and public investment into an economy.
- External Commercial Borrowing (ECB), Foreign Direct Investment, Foreign Portfolio Investment, etc form a part of capital account.

- Errors and Omissions: Sometimes the balance of payment does not balance. This imbalance is shown in the BoP as errors and omissions. It reflects the country's inability to record all international transactions accurately.
- Changes in Foreign Exchange Reserves: Movements in the reserves comprises changes in the foreign currency assets held by the Reserve Bank of India (RBI) and also in Special Drawing Rights (SDR) balances.
- Overall, the BoP account can be a surplus or a deficit. If there is a deficit then it can be bridged by taking money from the Foreign Exchange (Forex) Account.
- If the reserves in the forex account are falling short then this scenario is referred to as BoP crisis.

3.4 Rising Imports from China

- According to the latest figures from China's General Administration of Customs (GAC), Indian imports from China, its largest trading partner in goods, are on a rise after the months of June and July.

Key Point

- India's imports from China had fallen to a record low of USD 3.2 billion both in the months of April and May, coinciding with the pandemic induced lockdowns.
- Imports subsequently rose to USD 4.8 billion in June and further to USD 5.6 billion in July, almost back to the pre-lockdown level of USD 5.8 billion reported in March.
- It was mainly due to increased import of Chinese medical supplies.
- Online shoppers in India seem to prefer Chinese mobile phones and electronic gadgets despite the environment of anti-China sentiments in the nation.
- As per the Prime Day 2020 sale data of Amazon, an e-commerce giant, OnePlus, Oppo, Huawei's Honor and Xiaomi were among the top-selling smartphone brands in India.
- For the seven months of 2020, India's imports from China have reached USD 32.2 billion. However, It is still down by 24.7% year-on-year, mainly because of the record slump in April and May.
- Two-way trade between both countries is USD 43.37 billion and it continues to be heavily tilted in China's favour. Indian exports account for USD 11 billion and are up 6.7% year-on-year.
- China's exports overall rose 7.2% in July, beating most estimates, while imports fell 1.4% year-on-year.
- China noticed a trade surplus of USD 62.33 billion, surpassing the estimated USD 42 billion.
- The major reason behind this was the increased export of medical supplies and work-from-home equipment.

3.5 Initiatives to Support Local Entrepreneurs

Amazon Karigar Store

- In 2019, on the eve of the National Handloom Day (7th August), Amazon announced the launch of the Karigar store which showcases over 55,000 products, including more than 270 arts and crafts from 20 states.
- It will give prominence to India's handicrafts heritage by enabling weavers and artisans to showcase 'Made in India' products to customers.

Saheli Programme:

- In November 2017, Amazon launched this programme with the aim to empower and enable Indian women entrepreneurs to sell their products across the country.
- Promotion of entrepreneurship amongst women has become the key motive of the programme.
- It was rolled out in partnership with non-government social service entities like Self-Employed Women Enterprise (SEWA) and Impulse Social Enterprise.

Amazon Launchpad

- It is a marketplace within a marketplace as it works on two levels to create value for both Amazon shoppers and up-and-coming brands.
- New companies get the time and guidance they need to fine-tune their business and generate greater visibility for their products while shoppers enjoy early access to innovative products from the latest startups.
- Since startups tend to have limited time and resources, they often need additional support to drive traffic to their products and get their business off the ground.

Significance

- In the wake of the Covid-19 pandemic and the growing tensions between India and China, it is important to boost the local market and make the economy less dependent on imports.
- By boosting up the local entrepreneurs and talent, their professions will become more profitable enabling them to have a better life.
- The country will also profit from it by the reduced imports and a strong sustainable domestic market, strengthening the economy.

3.6 K.V. Kamath Committee on Restructuring of Loans

- The Reserve Bank of India (RBI) has set up a committee headed by K.V. Kamath on restructuring of loans impacted by the Covid-19 pandemic.

Key Points

- Objective: The Committee is tasked to recommend parameters for one-time restructuring of corporate loans.

- The Committee will formulate sector-specific resolution plans for all accounts with total loan exposure of Rs.1,500 crore and above.

Deadline: It will submit its recommendations to RBI in 30 days.

- **Background:** In the recent Monetary Policy report, RBI has allowed banks to restructure loans to reduce the rising stress on incomes and balance sheets of large corporates, Micro, Small and Medium Enterprises (MSMEs) as well as individuals.
- **Reasons:** A large number of firms that otherwise maintain a good track record are facing the challenge as their debt burden is becoming disproportionate, relative to their cash flow generation abilities.
- This can potentially impact their long-term viability and pose significant financial stability risks if it becomes widespread. It may also lead to an increase in Non-Performing Assets.
- **Eligibility:** Only those borrowers will be eligible for restructuring whose accounts were classified as standard and not in default for more than 30 days with any lending institution as on 1st March, 2020.
- All other accounts will be considered for restructuring under the Prudential Framework issued by the RBI in 2019, or the relevant instructions as applicable to specific categories of lending institutions where the prudential framework is not applicable.
- The restructuring efforts may or may not include a moratorium on instalment repayments. RBI has left the decision of moratorium on banks, with an eye on averting such loans from slipping into non-performing assets.

3.7 Increased Fiscal Deficit



- As per the official data, the Centre's fiscal deficit for the first three months of fiscal 2020-21 (April-June) was Rs. 6.62 lakh crore, which is 83% of the budgeted target for the year (Rs. 7.96 lakh crore).
- As per the economists, the fiscal deficit may end up as high as 8% of the Gross Domestic Product (GDP), far exceeding the budget's goal of 3.5%.

Key Points

Fall in Income Component:

- The Union government has received Rs. 1.53 lakh crore (in terms of tax, non-tax revenue and loan recoveries) from April to June 2020.
- This is less than 7% of budget estimates for the full year.
- When economic activity has been stopped because of the pandemic and lockdown, government revenues are also going to come down.
- The Centre has also transferred Rs. 1.34 lakh crore to States as their share of taxes, which is Rs. 14,588 crore lower than the previous year.

Increase in Expenditure

- The Centre's total expenditure for April-June was Rs. 8.15 crore, almost 27% of budget estimates for the year.
- Due to spending on free food grains and rural job programmes for millions of migrant workers.
- There has been a 40% growth in the first quarter capital expenditure to Rs. 88,273 crore.
- This is historically high (in comparison to data from the last 20 years), in terms of year-on-year percentage growth for the first quarter.
- Increased capital expenditure implies increased spending on creation of assets such as infrastructure.
- Borrowings: The reduced collections have forced the government to raise the amount it's borrowing this fiscal to a record Rs. 12 lakh crore from earlier estimates of Rs. 7.8 lakh crore to meet spending needs.

3.8 Contraction in Core Sector Industries

- The output of eight core industries contracted for the fourth consecutive month - shrinking by 15% in June 2020.
- The eight core sector industries are coal, crude oil, natural gas, refinery products, fertilisers, steel, cement and electricity.
- These eight industries account for 40.27% in the Index of Industrial Production (IIP).

Key Points

Contraction in Total Output:

- During April-June 2020, the sector's output dipped by 24.6% as compared to a positive growth of 3.4% in the same period previous year.
- However, 15% contraction in June 2020 implies some economic recovery as in May 2020, the industries' output contracted by 22%.
- Economists expect the negative trend to continue for at least two more months.

Industry-wise Performance:

- The fertiliser industry is the only one which saw actual growth in June, with output rising 4.2% in comparison to June 2019.

- This, however, is lower than the May 2020 growth of 7.5%, but reflects the positive outlook in the agriculture sector where a normal monsoon is leading to expectations of a good kharif crop.
- Rest seven sectors – coal (-15.5%), crude oil (-6.0), natural gas (-12%), refinery products (-9%), steel (-33.8%), cement (-6.9%), and electricity (-11%) – recorded negative growth in June.
- The steel sector continues to remain the worst performer, with a 33% drop in production in comparison to the previous year.

3.9 Contraction of Eurozone Economy

- The Gross Domestic Product (GDP) of the Eurozone reduced by 12.1% in the April-June 2020 quarter, compared to the previous quarter.
- The Eurozone consists of 19 members of European Union (EU), which uses the Euro as their official currency. 8 EU members (Bulgaria, Croatia, Czech Republic, Denmark, Hungary, Poland, Romania, and Sweden) do not use the euro.
- The 27-country European Union saw a decline of 11.9% in its economy for the same period.

Key Point

- This is the largest drop on record in the eurozone's economy, as Covid-19 lockdowns shut businesses and hampered consumer spending.
- No country escaped the impact of the pandemic. Spain suffered the region's heaviest drop at 18.5%.
- European governments are countering the recession with massive stimulus measures. They have stepped in with loans to keep businesses continuing and wage support programmes that pay workers' salaries.
- The European Union leaders have agreed on a 750 billion euro recovery fund backed by common borrowing to support their economy from 2021.
- The European Central Bank is pumping 1.35 trillion euro in newly printed money into the economy, a step which helps keep borrowing costs low.
- The European Central Bank is an official EU institution and the central bank of the Eurozone countries.

3.10 Contraction in Manufacturing: PMI

- According to the recent IHS Markit India Manufacturing Purchasing Managers' Index (PMI), India's manufacturing sector activity contracted at a faster pace in July 2020 than in June 2020.

Key Points

Manufacturing PMI:

- It stood at 46 in July 2020, down from 47.2 in June 2020.
- In PMI parlance, a score above 50 means growth, while a score below that denotes contraction.

- This is the fourth straight month of contraction for the Indian manufacturing sector. In April, the PMI had slipped into contraction mode, after remaining in growth territory for 32 consecutive months.
- The manufacturing PMI showed some recovery in May, and further in June 2020, but it once again slipped in July 2020.

Reason for Contraction:

- The demand conditions remained subdued with some businesses still closed amid lockdown extensions due to emergence of new epicentres of Covid-19 pandemic.
- Export orders have also witnessed a decline.

Effect:

- The re-acceleration of declines in the manufacturing sector is undermining the trend towards economic stabilisation seen over the past two months. The firms have reduced both staff numbers as well as purchasing activity.

3.11 'M.P. should not get GI tag for basmati rice'

- Madhya Pradesh has sought inclusion of its 13 districts for GI tagging for basmati.
- In response, the Punjab Chief Minister has written to the Prime Minister seeking his personal intervention against allowing this, quoting the larger interest of Punjab and other states which are already basmati GI tagged.

Which states have GI Tag for Basmati Rice?

- Punjab, Haryana, Himachal Pradesh, Uttarakhand, Delhi, Western Uttar Pradesh and select districts of Jammu and Kashmir have GI tagging for basmati rice.

What are Punjab's concerns?

- According to Punjab CM, India exports basmati to the tune of ₹33,000 crore every year and any dilution in registration could give advantage to Pakistan in the international market in terms of basmati characteristics, quality parameters.
- Pakistan also produces basmati as per GI tagging.
- The CM has pointed out that GI tag for basmati has been given on the basis of the traditionally grown areas of basmati due to special aroma, quality and taste of the grain, which is indigenous to the region below the foothills of the Himalayas in the Indo-Gangetic Plains and the basmati of this area has distinct recognition across the world.
- It has been asserted that Madhya Pradesh does not fall under the specialised zone for basmati cultivation.

Geographical Indication:

- As per the Geographical Indications of Goods (Registration and Protection) Act, 1999, a geographical indication tag can be issued for agricultural goods that are originating in the territory of a country, or a region or locality in that territory, where a given quality, reputation or other characteristics of such goods is essentially attributable to its geographical origin.

3.12 Monetary Policy Report: RBI

- The Reserve Bank of India (RBI) has released the Monetary Policy Report for the month of August 2020.
- The Monetary Policy Report is published by the Monetary Policy Committee (MPC) of RBI.
- The MPC is a statutory and institutionalized framework under the RBI Act, 1934, for maintaining price stability, while keeping in mind the objective of growth.
- The MPC determines the policy interest rate (repo rate) required to achieve the inflation target (4%).
- The Governor of RBI is ex-officio Chairman of the MPC.

Key Points

Policy Rates Unchanged:

- Repo rate remains at 4% and the reverse repo rate at 3.35%.
- Repo rate is the rate at which RBI lends money to commercial banks.
- Reverse repo rate is the rate at which the RBI borrows money from commercial banks within the Country.
- RBI has kept the policy rates unchanged because of rising retail inflation levels.
- Retail inflation (measured by the Consumer Price Index - CPI) rose to 6.09% in June 2020 from 5.84% in March, breaching the central bank's medium-term target of $4 \pm 2\%$.
- This inflation range (4% within a band of $\pm 2\%$) was recommended by the committee headed by Urjit Patel in 2014.

Loan Restructuring:

- RBI has allowed banks to restructure loans to reduce the rising stress on incomes and balance sheets of large corporates, Micro, Small and Medium Enterprises (MSMEs) as well as individuals.
- A large number of firms that otherwise maintain a good track record are facing the challenge as their debt burden is becoming disproportionate, relative to their cash flow generation abilities.
- This can potentially impact their long-term viability and pose significant financial stability risks if it becomes widespread. It may also lead to an increase in Non-Performing Assets.
- However, only those borrowers will be eligible for restructuring whose accounts were classified as standard and not in default for more than 30 days with any lending institution as on 1st March, 2020.

- All other accounts will be considered for restructuring under the Prudential Framework issued by the RBI in 2019, or the relevant instructions as applicable to specific categories of lending institutions where the prudential framework is not applicable.
- The restructuring efforts may or may not include a moratorium on instalment repayments. RBI has left the decision of moratorium on banks, with an eye on averting such loans from slipping into non-performing assets.
- The loan restructuring scheme will be worked out by a committee headed by KV Kamath (former ICICI Bank Chairman).

Liquidity Support:

- An additional special liquidity facility of Rs.10,000 crore, equally to be split between National Bank for Agriculture and Rural Development (NABARD) and the National Housing Bank (NHB) to help small financiers and home loan companies amid Covid-19 difficulties.
- It can be noted that higher share of moratoriums are being availed by the retail borrowers which has created the need for such liquidity support to lenders.
- The liquidity facility to both NABARD and NHB will be offered at the policy repo rate.

Growth Projection:

- Economic activity had started to recover from the lows of April-May 2020 following the uneven reopening of some parts of the country in June 2020.
- However, fresh Covid-19 infections have forced renewed lockdowns in several cities and states, and economic indicators have levelled off.
- The recovery in the rural economy is expected to be robust, buoyed by the progress in kharif sowing.
- Manufacturing firms responding to the RBI's industrial outlook survey expect domestic demand to recover gradually from the second quarter of 2020-21 and sustain through the first quarter of 2021-22.
- For 2020-21 as a whole, real Gross Domestic Product (GDP) growth is expected to be negative. Early containment of the pandemic may improve the outlook.

3.13 Economic measures taken by RBI

- Recently, the Reserve Bank of India (RBI) has taken various economic measures, which include revising Priority Sector Lending (PSL) norms, increasing Loan to Value ratio (LTV) on gold loans and introducing online dispute resolution mechanism for digital payments.
- The PSL guidelines were last reviewed by the RBI in April 2015.

Key Points**Revised PSL Norms:**

- Provides PSL status to start-ups.

- Increases the borrowing limits for the renewable energy sectors- solar power and compressed biogas plants.
- Increased the targets for lending to 'Small and Marginal Farmers' and 'Weaker Sections'.
- Put in place the incentive framework for banks in order to address the regional disparities in the flow of priority sector credit.

Reasons for New PSL Norms:

- With a view to aligning the guidelines with emerging national priorities and bring sharper focus on inclusive development.
- It has been done with the aim to encourage and support environment-friendly lending policies to achieve Sustainable Development Goals (SDGs).

Loan to Value Ratio Increased:

- Currently, loans sanctioned by banks against pledge of gold ornaments and jewellery for non-agricultural purposes should not exceed 75% of the value of gold ornaments and jewellery.
- However, with a view to mitigating the impact of Covid-19 on households, RBI has decided to increase the permissible LTV for such loans to 90%.
- This relaxation will be available until 31st March 2021.
- Increase in LTV ratio will make banks and Non-Banking Financial Companies (NBFCs) more competitive as compared to money lenders.
- However it also increases the risk of gold financing players as the gold is floating at record high level. Any fall in gold prices will increase defaults.

Offline Retail Payments Scheme:

- RBI has unveiled a scheme of offline retail payments using cards and mobile devices to foster financial inclusion.
- There has been a considerable growth in digital payments using mobile phones, cards and wallets. However lack of Internet connectivity or slow Internet, especially in remote areas, is a major impediment in the adoption of digital payments.

Online Dispute Resolution:

- RBI has also Introduced an Online Dispute Resolution (ODR) mechanism for digital payments as the number of digital transactions are rising significantly giving rise to more disputes.

3.14 BRICS Industry ministers attend video meeting to discuss cooperation boost in 5G, AI



- The Industry ministers of BRICS countries attended the video meeting on August 24, 2020, to discuss ways to boost cooperation in areas including Artificial Intelligence and 5G.
- The meeting of the five members bloc which includes Brazil, Russia, India, China, and South Africa adopted a joint statement on cooperation in the new industries such as Artificial Intelligence, 5G, and the industrial internet.
- The Chinese Minister of Industry and Information Technology, Xiao Yaqing mentioned that Beijing has been actively considering the establishment of a BRICS Innovation base in China for strengthening the practical cooperation with BRICS.

Key Highlights:

- BRICS Industry ministers video meeting comes ahead of the proposed meeting of BRICS foreign ministers in early September 2020, arranged by current BRICS chair Russia.
- During the meeting, China urged BRICS countries to strengthen their cooperation on the digital transformation, especially in AI, digital economy, and 5G.
- The cooperation was also encouraged, to promote the digital transformation of enterprises and their innovation capabilities, and to promote sustainable social and economic development.
- Xiao Yaqing highlighted that the BRICS countries must cooperate to strengthen communication, promote economic recovery, and share their experiences in pandemic control and prevention, resume work and production, guarantee medical supplies and promote economic development.
- The need for enhancing development resilience, strengthening the industrial and supply chain, and the countries' abilities to respond to risks and create a good development environment was also discussed.

Economic ties impacted between India and China:

- India and China have currently have been seeing their bilateral relations going through a rough phase after the Galwan Valley clash on June 15, 2020. It also impacted the economic ties between the two countries as India took the path of self-reliance and depending on imports only for the necessary items, under PM Modi's vision of 'Atma Nirbhar Bharat'.

- Recently, India had also banned some Chinese apps and had also put tighter scrutiny for foreign investments from its neighbouring countries including China. India has also been working effortlessly on making its supply chain more diversified and resilient rather than heavily dependent on one country.
- Due to the COVID-19 situation, Russia had postponed SCO and BRICS summit scheduled in July 2020. The summit could have been a meeting point between India and China after the June border standoff.

4. ENVIRONMENT

4.1 Investment to Reduce Plastic Waste in India

- A Singapore-based-NGO namely 'Alliance to End Plastic Waste' plans to invest between USD 70 million to 100 million in India over the next five years to reduce plastic waste.
- Overall, the Alliance has a USD 500 million budget for environmental projects including the USD 100 million for India. The rest is for South East Asia and China.

Key Points

World Nature Conservation Day:

- The investment to end plastic waste in India was announced on the World Nature Conservation Day (28th July).
- It is celebrated every year to create and increase awareness about the importance of natural resources.
- The day also encourages people to save and protect Earth's natural resources that are fast-depleting owing to over-exploitation and even misuse.

Ongoing initiatives in India:

- Currently, 'Alliance to End Plastic Waste' is working on the Project Aviral which aims to reduce plastic waste in the Ganga river.
- Aviral seeks to pilot an approach to address waste management challenges. In particular, it will focus on strengthening an integrated plastic waste management system.

Worldwide Initiatives:

UN-Habitat Waste Wise Cities (WWC):

- Alliance to End Plastic Waste is also collaborating with the UN-Habitat to implement solutions toward a circular economy, creating business and livelihood opportunities while enhancing resource recovery.
- It intends to use the UN-Habitat Waste Wise Cities (WWC) Tool to map waste flows and assess potential plastic leakage from waste management systems.
- The collaboration supports the WWC Challenge to clean up and establish sustainable waste management in 20 cities around the world by 2022.
- It is also expected to identify short- and long-term pathways to increase the amount of plastic waste collected, recycled and recovered.

Zero Plastic Waste Cities Initiative:

- It is also implementing the Zero Plastic Waste Cities initiative in India and Vietnam which aims to tackle the plastic issue by improving and supplementing municipal waste management, repurposing collected waste and preventing it from flowing into the ocean.
- It will also develop sustainable social businesses that improve the livelihoods of many while preventing plastic waste from escaping into the environment.

- The two initial cities involved in this project are Puducherry in India and Tan An in the Mekong Delta region of Vietnam.

4.2 Three States rank high in dhole conservation

A study has pointed out that Karnataka, Maharashtra and Madhya Pradesh rank high in the conservation of the endangered dhole, in India.

BACKGROUND:

- Arunachal Pradesh, Chhattisgarh, Odisha, Telangana and Goa will need to increase financial investments in the forest and wildlife sectors, and reduce the ease of granting forest clearances for infrastructure projects.
- It is important to improve habitat conditions and prey densities in the Eastern Ghats of Andhra Pradesh, Telangana and Odisha.
- Doing so would strengthen the link between dhole populations in the Western Ghats and central India.
- It highlights the need for a targeted management plan for scientific monitoring of the species.
- The Western Ghats perhaps supports the largest dhole population in the world and is, therefore, a critical conservation landscape for the species.

Dhole:

- Also known as Asiatic wild dog, Dhole (*Cuon alpinus*) is native to Central, South, East Asia, and Southeast Asia.
- Dholes play an important role as apex predators in forest ecosystems.
- Dholes hunt in packs and tend to venture into forested landscapes adjoining protected areas.
- Besides the tiger, the dhole is the only large carnivore in India to be classified in the 'endangered' category by the IUCN.
- It is protected under Schedule II of the Wildlife Protection Act, 1972.

4.3 Large Population and Assets to be Affected by Sea Level Rise

Recently, a study in journal Scientific reports made predictions that a large population and assets will be globally affected as a consequence of Sea Level Rise (SLR).

Key Findings

- SLR is a consequence of climate change, which is predicted to increase coastal flooding by 2100.
- The global population potentially exposed to episodic coastal flooding will increase from 128-171 million to 176-287 million by 2100.
- 0.5-0.7% of the world's land area is at a risk of episodic coastal flooding by 2100, impacting 2.5-4.1% of the population.
- The value of global assets exposed to coastal flooding is projected to be between 6,000-\$9,000 billion USD, or 12-20% of the global GDP.

- Globally, of the 68% area that is prone to coastal flooding, over 32% can be attributed to regional SLR.
- For most of the world, flooding incidents that are typically associated with a 1 in a 100-year event could occur as frequently as 1 in 10 years, primarily as a result of SLR.

Sea Level Rise

- SLR is an increase in the level of the world's oceans due to the effects of climate change, especially global warming, induced by three primary factors:
 - Thermal Expansion: When water heats up, it expands. About half of the sea-level rise over the past 25 years is attributable to warmer oceans simply occupying more space.
 - Melting Glaciers: Higher temperatures caused by global warming have led to greater-than-average summer melting of large ice formations like mountain glaciers as well as diminished snowfall due to later winters and earlier springs. That creates an imbalance between runoff and ocean evaporation, causing sea levels to rise.
 - Loss of Greenland and Antarctica's ice sheets: As with mountain glaciers, increased heat is causing the massive ice sheets that cover Greenland and Antarctica to melt more quickly, and also move more quickly into the sea.
 - Global sea level has been rising over the past century, and the rate has accelerated in recent decades. The average global sea level has risen 8.9 inches between 1880 and 2015. That's much faster than in the previous 2,700 years.
 - Regional SLR: SLR is not uniform across the world. Regional SLR may be higher or lower than Global SLR due to subsidence, upstream flood control, erosion, regional ocean currents, variations in land height, and compressive weight of Ice Age glaciers.
 - Sea level is primarily measured using tide stations and satellite laser altimeters.
 - Earlier, IPCC released 'The Special Report on the Ocean and Cryosphere in a Changing Climate' which underlined the dire changes taking place in oceans, glaciers, and ice-deposits on land and sea.
 - The report expects oceans to rise between 10 and 30 inches by 2100 with temperatures warming 1.5 °C.

4.4 Agatti Island of Lakshadweep

Recently, the southern bench of the National Green Tribunal (NGT) has granted an interim stay on felling of coconut trees on Agatti Island in Lakshadweep.

Key Points

Background:

- Recently, a petition was moved in the NGT over indiscriminate cutting of coconut trees for a beach road.

- The tree-felling was violating the Union Territory's (UT) Integrated Island Management Plan (IIMP).
- IIMP was formulated on the basis of a report submitted by the Supreme Court-appointed Expert Committee, headed by Justice R.V. Raveendran, a former judge of the SC.
- IIMP includes holistic island development plans prepared by the National Centre for Sustainable Coastal Management (NCSCM) for implementation by coastal States/ UTs.
- The IIMP undertakes scientific approaches, coupled with indigenous knowledge for the better management of the islands and its resources.

Concerns:

- Due to the large scale cutting of the coconut trees, local residents are affected by losing income from the tree produces.
- It also poses an environmental challenge because the trees on the coastline act as a green belt to protect the rest of the island during cyclones and other natural calamities.

4.5 Dhole Conservation

- Karnataka, Maharashtra and Madhya Pradesh rank high in the conservation of the endangered Dhole in India, according to a new study.
- This study was conducted by scientists from the Wildlife Conservation Society-India, the University of Florida, the Wildlife Conservation Trust, and the National Centre for Biological Sciences.

Key Points

- In this study, the scientists explored the conservation tenets of retention, recovery and restoration of dholes in India.
- Karnataka, Maharashtra and Madhya Pradesh were found to be adequately equipped for consolidating forest habitats and recovering populations of Dhole by increasing prey density and reducing the pressure on forests.
- Arunachal Pradesh, Chhattisgarh, Odisha, Telangana and Goa are suggested to increase financial investments in the forest and wildlife sectors, and reduce the ease of granting forest clearances for infrastructure projects.
- Improving habitat conditions and prey densities in the Eastern Ghats of Andhra Pradesh, Telangana and Odisha would strengthen the link between dhole populations in the Western Ghats and central India.

Dhole

- About: Dhole (*Cuon alpinus*) is a wild carnivorous animal belonging to the canine family, found in Central, South, East Asia, and Southeast Asia.
- They are also known as Asian wild dogs.
- Ecological role: Dholes play an important role as apex predators in forest ecosystems.

- Conservation Status: It is under the International Union for Conservation of Nature's 'endangered' category.
- The species is protected under Schedule 2 of the Wildlife Protection Act 1972 and under Appendix 2 of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).
- In India, the first conservation breeding centre for dhole was built at the Indira Gandhi Zoological Park (IGZP) in 2014.

Threats:

- Ongoing habitat loss: Due to deforestation and fragmentation of forest corridors.
- Depletion of prey base: Ungulates are main prey of dholes whose population is rapidly decreasing due to excessive hunting and habitat loss.
- Persecution due to livestock predation and disease transfer from domestic and feral dogs.

4.6 Pokkali Rice: Kerala

Farmers in West Bengal are experimenting with the pokkali variety of rice to tide over a crisis-like situation created by severe seawater incursion into paddy fields in the Sundarbans (owing to Cyclone Amphan).

Vyttila-11 varieties of pokkali seedlings were brought from Kerala.**Key Points**

- The Pokkali variety of rice is known for its saltwater resistance and flourishes in the rice paddies of coastal Alappuzha, Ernakulam and Thrissur districts of Kerala.
- The single-season paddy is raised in saltwater fields between June and November followed by a season of fish-farming.
- The uniqueness of the rice has brought it the Geographical Indication (GI) tag and is the subject of continuing research.
- Several foreign research institutes, including the International Rice Research Institute in the Philippines, have been studying pokkali's gene pools and have identified a portion of DNA on one of its chromosomes that is crucial for salt tolerance.
- Given its ability to thrive under harsh climatic conditions and produce high yield, it can help in promoting climate-resilient agriculture.
- Pokkali has medicinal properties and its higher value of antioxidants and low carbohydrate content makes it preferable to those on a low sugar diet.
- Vyttila-11 is the latest variety of pokkali developed by the Kerala Agricultural University.
- It yields about 5 tonnes per hectare.
- The crop duration is about 110 days.

- Other GI Tag Registered Varieties from Kerala: Kaipad, Wayanad Jeerakasala, Wayanad Gandhakasala, Palakkadan Matta and Navara.
- Further, the Kuttanad below-sea level farming system has been recognised by the Food and Agriculture Organisation of the United Nations (FAO) as a Globally Important Agricultural Heritage System (GIAHS).
- It is unique as it practices rice cultivation below sea level.

4.7 Environment Ministry dithered on decision to close LG plant

The Union Ministry of Environment, Forests and Climate Change (MoEFCC) decided against closing down operations of the LG Polymers plant in Visakhapatnam, Andhra Pradesh.

Background:

- A gas leak in Visakhapatnam in Andhra Pradesh had claimed at least 11 lives and affected thousands of residents in five villages. The source of the leak was a styrene plant owned by South Korean electronics giant LG.
- The high-power committee (HPC) formed by the government to investigate the styrene vapour leak at LG Polymers in Visakhapatnam had submitted its 4000-page report to the Chief Minister.

Oil Spill in Mauritius

- A Japanese vessel struck a coral reef resulting in an oil spill of over **1,000 tonnes** into the Indian Ocean.
- The ship was carrying an estimated **4,000 tonnes of oil**.
- The accident had taken place near two environmentally protected marine ecosystems and the **Blue Bay Marine Park Reserve**, which is a wetland of international importance.

BACKGROUND:

- The vessel has broken near Pointe d'esny in Mauritius and the area has many environmentally sensitive zones.
- The oil spill threatens the ecology of the coastline of Mauritius and the marine life in the Indian Ocean.
- It endangers the already endangered coral reefs, seagrasses in the shallow waters, mangroves, the fishes and other aquatic fauna.

4.8 Well 'killing' work suspended at Baghjan

- The operation to 'kill' the blowout gas well at **Baghjan in eastern Assam's Tinsukia district** was suspended, after a valve in the well casing pipe gave way.

Background:

- In **May 2020**, there was a continuous flow out of gas in **Baghjan gas well**, following a blowout.

- Experts engaged by exploration major **Oil India Limited (OIL)** had begun killing Well No. 5 after capping it by placing a blowout preventer.
- Two earlier attempts to place the preventer, vital for stopping the outflow of gas, had failed.

Details:

- Killing is a technical term for injecting a viscous mud-cement mixture through an inlet in the blowout preventer at very high pressure to stop the pores at a depth of 3.5 km underground from where the natural gas and associated condensates have been spewing since the blowout.
- Injecting the killing fluid can be done at a stretch for up to **10 hours**.
- Killing the well will help stop the uncontrolled outflow of gas as well as the fire.

4.9 East Kolkata Wetlands

- **East Kolkata wetlands** is the biggest **ecological asset of the city and a Ramsar Site**.
- The east Kolkata wetlands are a fascinating natural resource to which tremendous value has been added by traditional knowledge.
- The wetlands have been historically created by a natural shift of the **Bidyadhari**, a tributary of the Ganga.
- The land on which Kolkata is built slopes to the east.
- So the British created canals to take out the city's waste water into in the wetlands.
- The traditional knowledge is used to treat this waste water.
- For the past century, the waste water has been first fed into settling ponds.
- There the biodegradation of organic components takes place.
- Then the nutrient-rich sewage is transferred into a fish pond to improve the organic quality of the water.
- Fish is grown in this pond and the used water is transferred to fields to irrigate crop.
- The government has assured to maintain the balance between ecology and development.
- But the reality is that the wetlands are slowly and steadily disappearing.
- Recently Kolkata **Urban local bodies (ULB)** were warned of punishment by the **National Green Tribunal (NGT)** for failing to comply with its order over waste disposal at East Kolkata Wetlands.
- They were accused of illegally dumping waste and contaminating water bodies in the area.

4.10 Micro-plastic Pollution in Atlantic Ocean

- The **Atlantic Ocean** contains **12-21 million tonnes of microplastics** — about 10 times higher than previously determined — according to new research published in Nature Communications.

Highlights of the report

- In the study, scientists studied pollution of the Atlantic Ocean caused by three types of plastics: **polyethylene, polypropylene, and polystyrene**, which were suspended in the top **200 metres of the ocean**.
- These three types of plastic are most commonly used for packaging.
- Scientists say that pollution caused by microplastics has been “severely” underestimated in previous assessments.
- They also estimate that based on plastic waste generation trends from **1950-2015** and considering that the Atlantic Ocean has received **0.3-0.8 per cent** of the global plastic waste for **65 years**.
- To date, a key uncertainty has been the magnitude of contamination of the ocean and our findings demonstrate that this is much higher in terms of mass than has been estimated previously.

4.11 BIS’ draft standard for drinking water supply

- The Bureau of Indian Standards (BIS) has prepared a draft standard for the supply system of piped drinking water and has invited comments from water utilities on it.

Key highlights:

- Labelled ‘Drinking water supply quality management system — requirements for piped drinking water supply service’, the draft has been prepared by the BIS’ Public Drinking Water Supply Services Sectional Committee.
- It outlines the process of water supply, from raw water sources to household taps, and has been developed keeping in view the Centre’s Jal Jeevan Mission for providing safe and adequate drinking water to all rural households by 2024.
- It states that after treatment the drinking water should conform to the Indian Standard (IS) 10500 developed by the BIS.
- The concept of district metering area (DMA) should be adopted where possible. DMA is a concept for controlling leakages in the water network, which is essentially divided into a number of sectors, called the DMAs, and where flow meters are installed to detect leaks.
- Water should be sampled at the treatment plant every four hours against quality parameters. In the distribution system, the sampling should be done every eight hours at the water reservoirs. Random sampling should also be done at household levels.
- A Water Audit should be conducted on a quarterly basis. Water audit is a calculation of the amount of water put into distribution against the amount that is consumed.
- The IS 10500 outlines the acceptable limit of various substances in drinking water, including heavy metals such as arsenic, and other parameters like the pH value of water, its turbidity, the total dissolved solids in it, and the colour and odour.

4.12 NGT asks to modify National Clean Air Programme

The National Green Tribunal (NGT) has directed the Ministry of Environment, Forest and Climate Change (MoEFCC) to modify the National Clean Air Programme (NCAP) which proposes 20-30% reduction of air pollution by 2024.

National Clean Air Programme (NCAP)

- It was launched by the MoEFCC in January 2019.
- It is the first-ever effort in the country to frame a national framework for air quality management with a time-bound reduction target.
- It seeks to cut the concentration of coarse (particulate matter of diameter 10 micrometer or less, or PM10) and fine particles (particulate matter of diameter 2.5 micrometer or less, or PM2.5) by at least 20% in the next five years, with 2017 as the base year for comparison.
- The plan includes 102 non-attainment cities, across 23 states and Union territories, which were identified by the Central Pollution Control Board (CPCB) on the basis of their ambient air quality data between 2011 and 2015.
- Non-attainment cities: These are those that have fallen short of the National Ambient Air Quality Standards (NAAQS) for over five years.

NGT's Directions:

- The timeline to reduce air pollution by 20-30% by 2024 needs to be reduced.
- The target of reduction needs to be increased.
- It suggested the Ministry to review and action in terms of shift to e-vehicles and CNG vehicles, intensifying public transport system, mechanical cleaning of roads, enhancement of public parking facilities, improvement in fuel quality, and traffic management.
- It directed the state pollution control boards to ensure the assessment and installation of the requisite number of real-time online continuous Ambient Air Quality Monitoring Systems within six months.
- It also directed an expert team of the Central Pollution Control Board to design a model for source apportionment and carrying capacity assessment within two months which may be replicated for all the non-attainment cities.

4.13 Nationally Determined Contributions (NDC) – Transport Initiative for Asia (TIA)

NITI Aayog has launched the India Component of the Nationally Determined Contributions (NDC)–Transport Initiative for Asia (TIA).

About NDC- TIA:

- It is a joint programme, supported by the International Climate Initiative (IKI) of the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU).
- It aims to promote a comprehensive approach to decarbonize transport in India, Vietnam, and China.

- It is implemented by a consortium of seven other organisations.
- On behalf of the Government of India, NITI Aayog will be the implementing partner.

Implementation:

- The NDC-TIA programme has a duration of 4 years.
- It will allow India and other partner countries to achieve accountable long-term targets by making a sectoral contribution through various interventions, coordinated with a large number of stakeholders in the domain.
- This will contribute towards achieving their NDCs and increasing their ambition in the transport sector of 2025 NDCs.

5. SCIENCE & TECHNOLOGY

5.1 China Launches BeiDou Navigation Satellite System

China has formally launched full global services of its BeiDou-3 Navigation Satellite System (BDS).

Key Points

Background:

- The name BeiDou comes from Chinese word for the Big Dipper or Plough constellation.
- China's BeiDou navigation project was launched in the early 1990s. The system then became operational within China in 2000 and in the Asia-Pacific region in 2012.
- The navigation satellite system was completed in three steps: BDS-1 which provided services to China, BDS- 2 to provide services to the Asia-Pacific region and BDS-3 which provides services worldwide.

Features:

- A hybrid constellation consisting of around 30 satellites in three kinds of orbits: Geostationary Earth Orbit (GEO), Inclined Geo-Synchronous Orbit (IGSO) and Medium Earth Orbit (MEO).
- Provides navigation signals of multiple frequencies, and is able to improve service accuracy by using combined multi-frequency signals.
- Offers accurate positioning, navigation and timing, as well as short messaging communication, international search and rescue, satellite-based augmentation, ground augmentation and precise point positioning, etc.
- The services are used in various fields by China including defence, transportation, agriculture, fishing, and disaster relief.
- It will be the fourth global satellite navigation system after the USA GPS, Russia's GLONASS and European Union's Galileo.
- It is said to be much more accurate than the USA's GPS.
- Global Navigation Satellite System (GNSS) is a general term describing any satellite constellation that provides Positioning, Navigation, and Timing (PNT) services on a global basis.

Implications

- **Challenge to the Centrality of the USA:** While China says it seeks cooperation with other satellite navigation systems, Beidou is being seen as a rival to America's GPS, Russia's GLONASS and the European Union's Galileo networks.
- **Military Implications:** The development of its own secure and independent navigation system will boost China's military strength, especially amidst rising US-China tensions.

- **Economic Implications:** The better accuracy and experience of BDS, as claimed by China will lure companies to sign-up for it. As the global market is being increasingly dominated by an information-based economy, China is expected to reap huge economic benefit from BDS.
- **China's Hold on Other Nations:** China is promoting its use in the countries signed-up for its Belt and Road Initiative (BRI). Pakistan has already started using BDS. This will certainly give China economic and political leverage over nations adopting this system.
- **Edge over India:** This has also given China a competitive edge over India, whose IRNSS-NavIC is still a regional navigation system.
- **Importance in Covid Times:** The world is becoming heavily dependent on space infrastructure due to the impact of COVID-19 limitations on in-person physical meetings and travel restrictions. Thus, information and space-based services will gain importance in present times.
- **China's Authority in Space:** The space program of China has seen rapid advancements in past few years with the launch of Tianwen-1 rover mission to Mars. China has also constructed an experimental space station and sent a pair of rovers to the surface of the moon (Chang'e-4). BDS is another step in marking China's presence in Space.

5.2 Bharat Air Fibre: Wireless Internet

Recently, Bharat Air Fibre Services have been inaugurated at Akola in Maharashtra providing the residents wireless internet connections on demand.

Key Points

- The Bharat Air Fibre services are being introduced by Bharat Sanchar Nigam Limited (BSNL) as a part of the Digital India initiative by the Government of India. It is being scaled pan-India.
- **Aim:** To provide BSNL fibre-to-the-home (FTTH) wireless connectivity up to a range of 20 km from the BSNL points of presence.

Features:

- The connectivity speed is 100 Mbps and BSNL is offering various broadband plans in wireline and wireless segments.
- There is a huge demand for high-speed broadband service in the present situation as there is the migration of people from metro cities to rural areas due to the Covid-19 pandemic.
- The service is becoming popular due to Work from Home (WFH), e-learning, online shopping, gaming and entertainment, etc. amidst lockdowns.
- BSNL is also providing unlimited free voice calling.
- **Mechanism:** It provides high-speed broadband to subscribers of remote areas by bridging the gap of last-mile connectivity through radio waves.

- A vast network of Optical Fibre has been laid by BSNL up to nearest Telephone Exchange or Mobile Tower and from there the connectivity is provided to subscribers over wireless.

Benefits:

- Customers at remote locations will be benefitted as BSNL comes with the cheapest services with the support of Telecom Infrastructure Partners (TIPs).
- These services are wireless and there are very low chances of interruption in services locally.
- BSNL is tying up with local entrepreneurs/unemployed youth on revenue sharing basis thereby generating employment in rural areas.
- They will earn a regular monthly income of about one lakh per month thereby becoming self-reliant under the Aatmanirbhar Bharat initiative.
- This service could be a game-changer for rural areas as with a little integration of Internet of Things (IoT) and sensors, the moisture content of soil can be known on a real-time basis, so that irrigation can be planned, resulting in saving of water and thereby increasing productivity.
- Sensors can be tied to the neck of dairy cattle, enabling continuous recording of body temperature so as to know the exact time when milk output is best.

5.3 Aspirin to Prevent Cataract

- Recently, scientists from the Institute of Nano Science & Technology (INST) have developed nanorods from the Non-Steroidal Anti-Inflammatory Drug (NSAID) Aspirin to prevent cataracts in an economical and less complicated way.
- Aspirin is a popular medication used to reduce pain, fever, or inflammation and now it has been found to be an effective non-invasive small molecule-based nanotherapeutics against cataract.
- INST is an autonomous institute under the Department of Science & Technology, Government of India.

Key Points**Cataract:**

- It is a major form of blindness that occurs when the structure of crystallin proteins that make up the lens in human eyes deteriorates.
- Such deterioration causes damaged or disorganised proteins to aggregate and form a milky blue or brown layer, which ultimately affects lens transparency.
- As with aging and under various conditions, the lens protein crystallin aggregates to form opaque structures in the eye lens, which impairs vision and causes cataract.
- Thus, prevention of the formation of these aggregates as well as their destruction in the early stage of disease progression is a major treatment strategy for cataracts.

Usage of Aspirin:

- The scientists have used the anti-aggregation ability of self-build aspirin nanorods as an effective non-invasive small molecule-based nanotherapeutics against cataract.
- It prevents the protein aggregation through biomolecular interactions, which convert it into coils and helices and consequently fail to aggregate.

Significance:

- Aspirin nanorods due to their nano-size are expected to enhance bioavailability, improve drug loading, lower toxicity, etc.
- Hence, the delivery of the aspirin nanorods as eye drops is going to serve as an effective and viable option to treat cataract non-invasively.
- It is easy to use and a low-cost alternative nonsurgical treatment method and will benefit patients in developing countries who cannot access expensive cataract treatments and surgeries.

5.4 Electronic Vaccine Intelligence Network

- The Electronic Vaccine Intelligence Network (eVIN) is being used by the State/UT governments in India to monitor the supply chain of Covid response material.
- This has been used with the requisite customization during the Covid pandemic for ensuring continuation of the essential immunization services.

Key Points

- About: It is an indigenously developed technology system that digitizes vaccine stocks and monitors the temperature of the cold chain through a smartphone application.
- Objective: It is aimed at strengthening immunization supply chain systems across the country.
- eVIN aims to support the Government of India's Universal Immunization Programme by providing real-time information on vaccine stocks and flows, and storage temperatures across all cold chain points in these states.
- Implemented by: It is being implemented under the National Health Mission (NHM) by the Ministry of Health and Family Welfare in partnership with the United Nations Development Programme (UNDP).

The integrated solution combines:

- Technology: Online real-time information on vaccine stocks and storage temperature to facilitate evidence-based decision-making.
- Governance: Systemizing record keeping, upgrading logistics and encouraging good practices to ensure efficient vaccine logistics management.
- Human Resources: To empower the state cold chain network by building the capacities of handlers and managers at each stage of vaccine supply.

5.5 Space X Capsule Returns Safely

- Recently, two National Aeronautics and Space Administration (NASA) astronauts Doug Hurley and Bob Behnken have returned to earth in their SpaceX Dragon capsule named Endeavour, in less than a day after departing the International Space Station (ISS).
- Their capsule parachuted into the Gulf of Mexico about 40 miles off the coast of Pensacola, Florida Panhandle (USA), which was one of the approximate locations.

Key Points

- It was the first splashdown by the USA astronauts in 45 years, with the first commercially built and operated spacecraft to carry people to and from orbit.
- The last time NASA astronauts returned from space to water was on 24th July 1975, in the Pacific to end a joint USA-Soviet mission known as the Apollo-Soyuz.
- The Apollo-Soyuz Test Project was the first spaceflight to include two participating nations working together with their own national spacecraft.
- The Americans sent up an Apollo command module, while the Soviet launched a Soyuz spacecraft.

Space X Crew Dragon:

- It is a reusable spacecraft developed and manufactured by American aerospace manufacturer SpaceX.
- SpaceX is a private company founded in 2002 by Elon Musk. Its headquarters is located in Hawthorne, California (USA).
- It is the fifth class of the USA spacecraft to take human beings into Orbit after the Mercury, Gemini, Apollo and Space Shuttle programs.
- The rocket Falcon 9 was launched from NASA's Kennedy Space Center on 31st May 2020 and carried the spaceship into the orbit.
- The whole mission was carried out under the Demo-2 Mission of NASA and SpaceX.

Significance:

- It clears the way for another SpaceX crew launch and possible tourist flights from 2021.
- SpaceX has now become the first private company to send humans to orbit who have spent more than two months on the space station.
- The landmark mission marked the first time the USA space agency launched humans from American soil since its shuttle program retired in 2011.
- Since then, the USA has relied on Russia's space program to launch its astronauts to the space station.

5.6 Phase II/III Clinical Trials of Covishield

- Recently, the Drugs Controller General of India (DCGI) has given approval to the Serum Institute of India (SII), Pune to conduct Phase II/III clinical trials of Covishield in India.

- SII is the world's largest maker of vaccines and it has a tie-up with AstraZeneca, the Swedish-British pharma giant, to manufacture the Covid-19 vaccine for low- and middle-income countries.

Key Points

Covishield:

- It is the name given to an Oxford-AstraZeneca Covid-19 vaccine candidate which is technically referred to as AZD1222 or ChAdOx 1 nCoV-19.
- It is already being tested in the UK, South Africa and Brazil, where participants are being administered two doses nearly a month apart.
- It had triggered an immune response in humans against the novel coronavirus in early trials and is considered to be one of the global frontrunners for the Covid-19 vaccine.

Background:

- The Subject Expert Committee (SEC) for Covid-19 related therapies of the Central Drugs Standard Control Organisation (CDSCO) felt that the SII needed to take a 'pan India' approach while considering trial sites.
- It recommended that authorisation to market Covishield should be granted after considering clinical data generated from both the India and international trials.

Trials:

- SII can now start its larger phase II/III trials, ahead of other vaccine candidates like Bharat Biotech's Covaxin and Zydus Cadila's ZyCov-D which are still in phase I/II trials.
- However, the exact timings of trial beginning are not clear yet. It would take at least a week to get the ethics committee's approval before starting the trials. If everything goes well, the vaccine could be out by the end of 2020.
- The trials for Covishield will have around 1,600 participants at 18-odd sites across the country including those identified by the National Biopharma Mission and Grand Challenges India Programme.

Current Trend in India:

- India continues to improve the Case Fatality Rate (CFR-number of deaths per positive case) and maintain its global position of having one of the lowest Covid-19 fatalities rates.
- The current CFR is 2.11%.

5.7 Time Capsules under the ground at Ram Temple construction site in Ayodhya

- The Ram Janmabhoomi TeerthKshetra Trust has denied reports about placing of a time capsule under the ground at Ram Temple construction site in Ayodhya.
- The Time Capsule, also known as Kaal Patra, was supposed to contain the history of Ayodhya and Rama Janma Bhoomi Movement.

Key Points

- Time Capsule is a container of any size or shape, which accommodates documents, photos and artefacts typical of the current era and is buried underground, for future generations to unearth.
- To ensure that the capsules do not decay they are built using special engineering techniques like steel or aluminium encasing, vacuuming, use of acid-free paper, etc.
- The time capsules mostly have a scheduled time for reopening, and are supposed to be buried again after opening, with people of the future adding their own contributions to the time capsule.
- The International Time Capsule Society (ITCS), based in the USA and formed in 1990, is now defunct but continues estimating the number of time capsules in the world.
- As per its database, there are 10,000-15,000 times capsules worldwide.

Famous Time Capsules in the World

- Samuel Adams and Paul Revere Time Capsule: It is the oldest known time capsule from 1795 (USA).
- The “Century Safe”: The world’s first planned time capsule was established at Philadelphia Centennial Exposition (USA) in 1876. It was opened and resealed in 1976.
- The Crypt of Civilization in Georgia: It was built around 1940 at Oglethorpe University in Brookhaven, Georgia and is scheduled for opening in the year 8113 AD. It is a project to preserve all human knowledge and was the brainchild of Thornwell Jacobs, also known as father of time capsules.
- The Voyager and Voyager II Spacecraft: They are currently circling on the edge of our solar system. These capsules were created by NASA to be seen by future generations.

Time Capsules in India

- Outside the Red Fort: This was placed underground in 1972 by the then Prime Minister Indira Gandhi, was dug out by the subsequent government in 1977. It raised a controversy as it was said to glorify Gandhi Nehru family in Indian History.
- At IIT Kanpur Campus: This time capsule was buried on 6th March, 2010 containing details on IIT Kanpur in the form of documents, photographs, and films.
- At The Alexandra Girls’ English Institution, Mumbai: It was set up in the 19th century and is scheduled to be opened in 2062. It contains information on the school.
- At Jalandhar’s Lovely Public University: It was buried in January 2019 and contains 100 items that represent modern-day technology in India.

Significance

- Time Capsules are intended as a method of communication with future people.
- They are also supposed to help future archaeologists, anthropologists, or historians in knowing about the past human civilisation.

Criticism

- Most intentional time capsules are filled with a lopsided view of history. They are often politically motivated and glorify the people who planted them.
- They cannot be regarded as facts and are not very reliable. The information in time capsules has to be verified with other sources of information.
- Many time capsules which have been unearthed were filled with junk telling little about the people of the time.

5.8 RaTG13 Sarbecovirus

- According to a recent study published in Nature Microbiology, the novel coronavirus (SARS-CoV-2) has been circulating unnoticed in bats for decades.
- Bats have been the ‘primary reservoirs’ for SARS-CoV-2, which is likely to have diverged from closely related bat viruses called the RaTG13 sarbecovirus, 40-70 years ago.

Key Points

- The current study confirms an earlier Chinese study and also suggests the probable time of divergence of the two viruses.
- According to that Chinese study, SARS-CoV-2 is most closely related to RaTG13, which was isolated from a horseshoe bat in Yunnan province in 2013.
- Based on the nearly 96% genome sequence identity between SARS-CoV-2 and RaTG13, it was held that an origin in bats is probable for the Covid-19 outbreak.
- SARS-CoV-2 has not arisen from recombination of any sarbecovirus.
- Recombination: It is a process by which pieces of deoxyribonucleic acid (DNA) are broken and recombined to produce new combinations of alleles (forms of a gene). This recombination process creates genetic diversity at the level of genes that reflects differences in the DNA sequences of different organisms.
- The ability of the spike protein in the virus to bind to Angiotensin-Converting Enzyme 2 (ACE2) human receptors had emerged within bats and is an ancestral trait shared with bat viruses and not one acquired recently via recombination.
- The results of the study suggest the presence of a ‘single lineage’ circulating in bats with properties that allowed it to infect human cells.
- This was also the case with the bat sarbecoviruses related to the 2002 Severe Acute Respiratory Syndrome (SARS) lineage.

Methodology:

- The researchers analysed the evolutionary history of SARS-CoV-2 using genomic data on sarbecoviruses.

- They employed three approaches to identify regions in the virus that had not undergone recombination and that could be used to reconstruct its evolution.
- All approaches suggest that RaTG13 and SARS-CoV-2 share a single ancestral lineage and estimate that SARS-CoV-2 genetically diverged from related bat sarbecoviruses in 1948, 1969 and 1982.

Challenging Assumptions:

- The study challenged the idea of pangolins serving as an intermediate host where the virus would have acquired its ability to infect human cells thus facilitating the jump into humans.
- It is possible that pangolins could have been a medium for the transmission to humans, but there is no evidence that pangolins facilitated adaptation to humans by being an intermediate host.
- Current evidence is consistent with the idea that the virus evolved in bats and enabled itself to replicate in the upper respiratory tract of both humans and pangolins.
- Snakes were thought to have served as intermediate hosts of SARS-CoV-2 as well but the present study has found no evidence to support this hypothesis.

Concerns:

- The long divergence period raises the possibility of other undocumented virus lineages circulating in horseshoe bats that have the potential to jump from bats to humans.
- Different and yet unstudied bat sarbecoviruses that have descended from the SARS-CoV-2/RaTG13 common ancestor form a clade with properties to infect many different mammals, including humans.
- Due to the lack of better sampling, it is impossible to estimate whether or how many of these additional lineages exist.
- The diversity and dynamic process of recombination amongst lineages in the bat reservoir makes identifying viruses difficult.
- Many species of bat harbour several viruses which can cross over to new hosts. With the disruptions of their habitats, humans will face more such threats.

5.9 SFTS Infection in China

- Recently, deaths and infections have been reported due to the Severe Fever with Thrombocytopenia Syndrome (SFTS) in East China's Jiangsu and Anhui provinces.
- The new health threat emerges amidst the ongoing Covid-19 pandemic which also emerged in China first.

Key Points

- SFTS is caused by the Severe Fever with Thrombocytopenia Syndrome Virus (SFTSV) which belongs to the Bunyavirus family and is transmitted to humans through tick bites.
- A tick called Asian Longhorned Tick (*Haemaphysalis longicornis*) is believed to be the primary vector (carrier) of the virus.

- The virus is often transmitted to humans from animals like goats, cattle, deer and sheep and regular contact with these animals makes farmers, hunters and pet owners vulnerable to the disease.
- Despite being infected by the virus, animals generally do not show any symptoms associated with SFTSV.

Origin and Spread:

- The virus was first identified in China over a decade ago and the first few cases were reported in rural areas of Hubei and Henan provinces in 2009.
- Researchers identified the virus by examining blood samples obtained from a cluster of people exhibiting similar symptoms.
- The virus eventually travelled to other East Asian nations, including Japan and South Korea, significantly raising the total number of cases.
- Due to more awareness about the health risks posed by tick bites, the fatality rate of the infection has started to drop significantly.

Incubation Period:

- It is the interval between being infected and showing symptoms. For SFTS, the incubation period is anywhere between 7 and 13 days.
- The disease usually spreads between March and November and the total number of infections generally peaks between April and July.

Symptoms:

- Fever, fatigue, chill, headache, nausea, myalgia (muscle pain), diarrhoea, vomiting, abdominal pain, gingival haemorrhage, conjunctival congestion, etc.
- Early warning signs include severe fever, thrombocytopenia (low platelet count) and leukocytopenia (low white blood cell count).
- More serious cases include multi-organ failure, hemorrhagic manifestation and the appearance of symptoms related to Central Nervous System (CNS) diseases.
- The CNS consists of the brain and the spinal cord and it controls most functions of the body and mind.

Prevention:

- Avoid wearing shorts while walking through tall grass, the woods, and any other environment where ticks are likely to thrive.
- Using tick-repellent lotions and sprays on the exposed body parts.

Treatment:

- There is no vaccine to treat the disease yet. However, the antiviral drug Ribavirin is known to be effective in treating the illness.

- Ribavirin is also used to treat Crimean-Congo Haemorrhagic Fever (CCHF) which is also transmitted by ticks.

Current Case Fatality Rate:

- It rests between approximately 16%-30%.
- SFTS has been listed among the top 10 priority diseases blueprint by the World Health Organisation (WHO) due to its fast spreading rate and high fatality rate.
- WHO's Research and Development Blueprint identifies diseases and pathogens that have the potential to cause a public health emergency but lack effective treatments and vaccines.
- This watchlist for priority research and development includes Ebola, several other hemorrhagic fevers, Zika, Nipah, Middle East respiratory syndrome coronavirus (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS) and disease X, which represents the need to prepare for an unknown pathogen that could cause a serious epidemic.

5.10 Sun's coronal magnetic field measured

- An international team of solar physicists have measured the global magnetic field of the sun's corona, or outer atmosphere, for the very first time.

Details:

This development could help answer some of the solar phenomena.

Temperature profile of the sun:

- The core of the Sun is at a temperature of about 15 million degrees, while its outer layer, the photosphere is only 5700 degrees hot. The sun's corona or outer atmosphere, which stretches up to several million kilometres beyond its surface, is much hotter than the surface (one million degrees or more).
- This is unusual given that while the surface is cooler than the interior, the atmosphere of the Sun (corona) rises substantially.
- Popular explanations with respect to the coronal heating involve the magnetic field of the corona.

Solar eruptions:

- The surface of the Sun is dynamic. There are multiple mechanisms of eruptions of the Sun, such as solar flares and coronal mass ejections.
- A solar flare is a sudden flash of increased brightness on the Sun, usually observed near its surface.
- A coronal mass ejection is a significant release of plasma and accompanying magnetic field from the solar corona.

Magnetic reconnection:

- Magnetic reconnection is a process where opposite polarity magnetic field lines connect and some of the magnetic energy is converted to heat energy and also kinetic energy which leads to the generation of heating, solar flares, solar jets, etc.

5.11 Landslide near Eravikulam National Park

Recently, landslides have been reported at the Nayamakkad tea estate at Pettimudy which is located about 30 km from Munnar, adjacent to the Eravikulam National Park (ENP), Kerala.

Key Points

Features of ENP:

- It is located in the High Ranges (Kannan Devan Hills) of the Southern Western Ghats in the Devikulam Taluk of Idukki District, Kerala.
- It spreads over an area of 97 square km and hosts South India's highest peak, Anamudi (2695 m), in its southern area.
- The Rajamalai region of the park stays open to the public for tourism.

History:

- The Government of Kerala acquired the area from the Kannan Devan Hills Produce Company under the Kannan Devan Hill Produce (Resumption of lands) Act 1971.
- It was declared as Eravikulam-Rajamala Wildlife Sanctuary in 1975 and was elevated to the status of a National Park in 1978.

Topography:

- The main body of the park comprises a high rolling plateau (plateau at different elevation or with varying heights) with a base elevation of about 2000 m from mean sea level.
- Three major types of plant communities found in the park are: Grasslands, Shrub Land and Shola Forests (mosaic of montane evergreen forests and grasslands).
- The park represents the largest and least disturbed stretch of unique Montane Shola-Grassland vegetation in the Western Ghats.

Flora:

- It houses the special Neelakurinji flowers (Strobilanthes kunthianam) that bloom once every 12 years and the next sighting is expected to be in 2030.
- Apart from that, it has rare terrestrial and epiphytic orchids, wild balsams, etc.
- An epiphyte is an organism that grows on the surface of a plant and derives its moisture and nutrients from the air, rain, water or from debris accumulating around it.

Fauna:

- The park holds the largest viable population of the endangered Nilgiri Tahr (*Nilgiritragus hylocrius*).

- It has other little known fauna such as Nilgiri Marten, Ruddy Mongoose, Small Clawed Otter, Dusky Striped Squirrel, etc.

Significance:

- It is regionally important as a catchment area for both east (tributaries of River Pambar) and west (tributaries of River Periyar and Chalakkudy) flowing rivers.
- Locally, it is important for maintaining the climate and providing drinking water to the surrounding estates and for irrigation.
- Proximity: The park is in continuity with the neighboring Chinnar Wildlife Sanctuary, Anamudi Shola National Park, Pampadum Shola National Park, Kurinjimala Sanctuary and Anamalai Tiger Reserve.

5.12 GoI launched National portal “SURAKHSYA” on Human Elephant conflict

- Ministry of Environment, Forest and Climate Change (MoEFCC), India has launched National Portal on human-elephant conflict called "Surakhsya".
- The beta version of the portal on Human-Elephants Conflict is for the collection of real-time information. The portal was launched on the occasion of World Elephant Day, which is observed on 12th August.

SURAKHSYA:

- SURAKHSYA will manage the conflicts on a real-time basis.
- It will help to set the data collection protocols, data transmission pipelines, and data visualization tools to enable policy-makers to leverage HEC data for policy formulation and for preparation of Action Plans for mitigation of conflicts.
- The beta version of the SURAKHSYA portal was launched for data testing before the pan India roll out for adoption by the states, which is likely to be done before the year-end.
- The move by the Government of India is aimed to save Elephants and other animals. GoI is currently taking measures towards robust, practical, and cost-effective solutions to end the Human-Animal Conflict.

5.13 SalivaDirect: Covid-19 Test

- The **USA Food and Drug Administration (FDA)** has authorised the emergency use of a new saliva-based laboratory diagnostic test for Covid-19 - ‘**SalivaDirect**’.

Highlights:

- A new rapid diagnostic test called SalivaDirect, for the novel coronavirus, that uses saliva samples was granted an emergency use authorisation by the U.S. Food and Drug Administration (FDA).
- It is an inexpensive test, developed by a team from the Yale School of Public Health.
- Collecting and testing saliva samples involves three steps — collecting saliva without preservative buffers, proteinase K treatment and heat inactivation, and dualplex RT-qPCR virus detection.

Significance:

- It has high sensitivity and can detect the virus even when the number of virus copies in the saliva sample is as low as 6-12 copies per microlitre.
- According to a preprint, the sensitivity of the new test is about 93%.
- In contrast, tests using nasopharyngeal swabs lead to false negative results due to errors at the time of sample collection.
- The new test makes sample collection non-invasive and reduces the need for trained healthcare workers to collect the samples.
- This reduces the risk of infection during collection.
- The easier saliva test is likely to increase testing compliance. It can allow for at-home, self-administered sample collection for accurate large-scale SARS-CoV-2 testing.

5.14 Sarabhai Crater

- The **Indian Space Research Organization (ISRO)** has named a **crater captured by Chandrayaan 2 Orbiter** after **Vikram Sarabhai**.

Sarabhai Crater

- “Sarabhai” Crater is named after Dr Vikram Sarabhai and around 250 to 300 kilometreseast of this Crater is where the Apollo 17 and Luna 21 Missions had landed.
- The crater captured in 3D images shows that the Crater has a depth of around 1.7 Kms taken from its raised rim and the slope of Crater walls is in between 25 to 35 degree.
- These findings will help the Space Scientists to understand further the process of the lunar region filled with lava.

Background:

- Sarabhai was an Indian physicist and astronomer who initiated space research and helped develop nuclear power in India.
- He is internationally regarded as the Father of the Indian Space Program.
- Known as the cradle of space sciences in India, the Physical Research Laboratory (PRL) was founded in 1947 by him. He was the founder of ISRO.
- He started a project for the fabrication and launch of an Indian satellite.
- As a result, the first Indian satellite, Aryabhata, was put in orbit in 1975 from a Russian cosmodrome.

5.15 Invisible Shield against Electromagnetic Interference

- Recently, scientists from the Centre for Nano and Soft Matter Sciences (CeNS), Bengaluru, have designed a metal mesh structure to construct an invisible shield against Electromagnetic Interference (EMI).

- CeNS is an autonomous institute under the Department of Science & Technology, Government of India.

Key Points

- The scientists have developed a copper metal mesh on polyethylene terephthalate (PET) sheet, instead of continuous film, which exhibits a visible transmittance of about 85%.
- Transmittance describes how much light passes through a sample. In other words, it is light that is not absorbed, scattered, or reflected. It is usually measured in percentage.
- The metal mesh networks on the substrate are more transparent than continuous film because it covers only 7% area of the substrate, unlike 100% coverage of continuous film.
- Metal mesh provides better electromagnetic shielding compared to the same thickness of continuous metal film where transparency can be compromised.

5.16 Scientists convert tamarind waste and cotton waste to super capacitor

- Scientists at the International Advanced Research Centre for Powder Metallurgy & New Materials (ARCI), under Department of Science and Technology (DST), Government of India, have developed a cost-effective electrode material for making affordable super capacitor devices, from waste biomass like tamarind seeds and industrial cotton waste.
- With this discovery, tamarind seeds and cotton waste may soon be used to make low-cost super capacitors for energy storage. The scientists have used waste biomass to develop materials for making cost-effective super capacitor devices.

Highlights:

- The scientists have converted the waste materials into highly porous carbon fibres by activation process. It was then utilised the porous carbon fibres to make high-performance super capacitor electrodes.
- The electrode materials are made from biomass waste. It was tested with the help of a rapid testing protocol developed by Scientists at Centre for Fuel Cell Technology, ARCI-Chennai to evaluate different porous electrode materials for their suitability in super capacitors.
- The method involves Electrochemical Impedance Spectroscopy (EIS) and records the impedance offered by a material under a small perturbation and the capacitance was formed by the arrangement of electrolyte ions over the electrode surface, which is called as double-layer capacitance.
- The scientists tested the pore characteristics and stability of the activated carbon material prepared from tamarind seed and its suitability for super capacitor application.
- The Dynamic Electrochemical Impedance Spectroscopy (DEIS) results that are observed by the ARCI team showed a superior double layer capacitance value at all the applied potentials for the optimized

sample with high surface area (2645 m² g⁻¹) within 1 hour of the experiment, validating that the material could be used for super capacitor electrode.

- It is expected that this will respond to the intense hunt for super capacitor materials to meet the widespread demand for super capacitors.
- This discovery can pave the way towards affordable electric vehicles and hybrid vehicles which bank on super capacitors significantly for their application in braking systems and start-stop cycles.

5.17 INS Viraat to be scrapped

Indian Naval Ship (INS) Viraat will be scrapped at a ship breaking yard at Alang in Gujarat soon. The decision to scrap INS Viraat was taken in 2019.

Key Points

- INS Viraat holds the Guinness World Record for being the longest serving warship of the world.
- Viraat, a Centaur class aircraft carrier weighing 27,800 tonnes, served in the British Navy as HMS Hermes for 25 years from November 1959 to April 1984. It was commissioned into the Indian Navy in May 1987 after refurbishment.
- The Centaur class of aircraft carriers of the Royal Navy was the last of the light fleet carrier designs started during the closing years of World War II (1939-45).
- Viraat played a major role in Operation Jupiter in 1989 during the Sri Lankan Peacekeeping operation. It also saw action during Op Parakram in 2001-2002, post the terrorist attack on Parliament.
- The indigenous Advance Light Helicopters 'Dhruv' and the Russian twin rotor Kamov-31 have also operated from the ship.
- It was decommissioned in March 2017, and the Navy had been incurring expenditure since then on its upkeep, such as the provision of electricity and water, and repairs. It was also taking up space in the crowded Naval dockyard.
- There had been demands from various quarters to not let Viraat go the way of Vikrant, India's first carrier that was eventually scrapped.
- In 2014, INS Vikrant, which played a role in the 1971 war with Pakistan was broken down in Mumbai.
- However, several attempts by the Navy to preserve the carrier, by converting it into a museum or by other means, failed.
- The vessel could not be handed over to any state government because of lack of "self-sustaining financially complete" proposal to preserve it. The state governments of Maharashtra and Andhra Pradesh had planned to preserve the aircraft carrier (in the form of a museum).
- India is currently doing with only the 44,500-tonne INS Vikramaditya, the refurbished Admiral Gorshkov inducted from Russia in November 2013.

- The trials of the first indigenous aircraft carrier (IAC-I, to be named as INS Vikrant) being built at the Cochin Shipyard have been derailed by the pandemic.
- The government's approvals for a third carrier, the 65,000-tonne IAC-II (tentatively christened INS Vishal) has been pending since May 2015.

5.18 Star Formation in Dwarf Galaxies

- Astronomers from the Aryabhata Research Institute of Observational Sciences (ARIES) have found out the reasons behind intense star formation in some dwarf galaxies.
- ARIES is an autonomous institute of Department of Science & Technology (DST).

Key Points

- Amidst the billions of galaxies in the universe, a large number are tiny ones - 100 times less massive than the Milky-way galaxy. Most of these are called dwarf galaxies and form stars at a much slower rate than the massive ones.
- Dwarf galaxies are the most abundant type of galaxy in the universe but are difficult to detect due to their low luminosity, low mass and small size.
- However, some dwarf galaxies have been seen forming new stars at a mass-normalized rate i.e. 10-100 times more than that of the Milky-way galaxy.
- The star-formation activities do not last longer than a few tens of million-years, a period which is much shorter than the age of these galaxies - typically a few billion years.

5.19 Early Galaxy Detected by AstroSat

- A team of Scientists from the Inter University Centre for Astronomy and Astrophysics (IUCAA) has discovered one of the earliest galaxies called AUDFs01 using AstroSat.
- The galaxy is located in the Hubble Extreme Deep field, 9.3 billion light-years away from Earth.
- The team comprises scientists from India, Switzerland, France, USA, Japan and Netherlands

Key Points

- The galaxy was discovered using UltraViolet Imaging Telescope (UVIT) on Astrosat. AstroSat detected Extreme Ultraviolet light from the galaxy.
- Earlier, NASA's Hubble Space Telescope (HST), which is significantly larger than UVIT, did not detect any UV emission from this galaxy because it is too faint.
- AstroSat/UVIT was able to achieve this unique feat because the background noise in the UVIT detector is much less than the ones on HST.
- These observations lasted for more than 28 hours in October 2016, but it took nearly two years since then to carefully analyse the data to ascertain that the emission is indeed from the galaxy.

5.20 Asteroid 2018VP1 is on a collision course with Earth

According to the National Aeronautics and Space Administration (NASA), an asteroid named 2018VP1

is on a collision course with Earth.

Key Points

- Asteroid 2018VP1 has a diameter of about 2 metres, around the size of a small automobile.
- Only 1 in 240 chance that 2018VP1 would impact the Earth. It would likely burn up into a fireball after entering the Earth's atmosphere before reaching the ground.
- According to NASA, such an event happens about once every year.

Asteroid Collision with Earth:

- Objects that can cause significant damage upon impact are larger than 30 metres.
- As per NASA's Near-Earth Object Observations Programme, asteroids that are 140 metres or larger (bigger than a small football stadium) are of "the greatest concern" due to the level of devastation their impact is capable of causing.
- No asteroid larger than 140 metres has a "significant" chance of hitting the Earth for the next 100 years.
- The Chicxulub Impactor was an asteroid that caused the sudden extinction of most dinosaur species 66 million years ago,
- It had a diameter of over 10 kilometres.

5.21 Controlling Dengue Using Bacteria

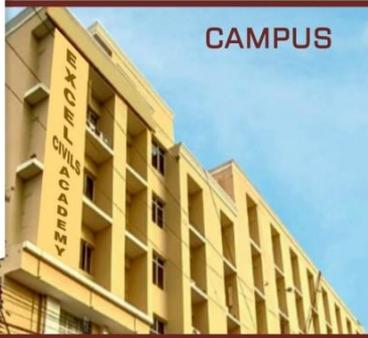
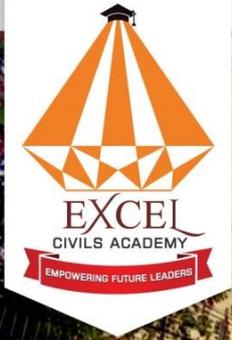
Researchers from the World Mosquito Program have used mosquitoes infected with Wolbachia bacteria to successfully control dengue in Yogyakarta city of Indonesia.

The World Mosquito Program is an Australia-based not-for-profit initiative that exists to protect the global community from mosquito-borne diseases.

Key Points

- The Aedes aegypti mosquito, that spreads Dengue and other diseases such as Chikungunya, Zika and Yellow fever cannot do so when they are artificially infected with a bacterium, Wolbachia.
- The bacteria Wolbachia "inhibits" viral infection, that is, even if people encounter mosquito bite, they will not be infected. This happens because bacteria do not allow the virus to replicate in the mosquito thereby minimising its number within the mosquito.
- The scientists infected some mosquitoes with Wolbachia and then released these in the city where they bred with local mosquitoes, until nearly all mosquitoes in the area were carrying Wolbachia bacteria. This is called the Population Replacement Strategy.
- At the end of 27 months, the researchers found that the incidence of dengue was 77% lower in areas where Wolbachia-infected mosquitoes had been released, as compared to areas without such deployments.
- This method does not only block Dengue Virus but also many other viruses present in mosquitoes.

- A French company InovaFeed, which produces insects to feed livestock, is partnering with WMP to develop the first industrial-level production of Dengue- controlling mosquitoes.
- Indian Council of Medical Research (ICMR) also has been working on a similar project developing a strain of Aedesaegypti containing Wolbachia, known as Puducherry Strain.
- The strain was developed at the Vector Control Research Centre (VCRC), Puducherry in collaboration with Monash University in Australia.



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