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A Magazine by

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Petition on nation's name

Why in news?

- A petition was filed which said, 'India' is a name of foreign origin. The name can be traced back to the Greek term 'Indica'.
- The petition seeks an amendment to Article 1 of the Constitution, which says "India, that is Bharat, shall be a Union of States".
- It wants 'India' to be struck off from the Article. This is to ensure citizens of this country to get over the colonial past and instil a sense of pride in our nationality.
- And it will also justify the hard fought freedom by our freedom fighters.
- The Supreme Court has ordered that a plea be converted into a representation and forwarded to the Union government for an appropriate decision.
- The Court said, "Bharat and India are both names given in the Constitution. India is already called 'Bharat' in the Constitution".

What the constitution says?

- Article 1: The territory of India shall consist of: The territories of the states, The Union territories and Any territory that may be acquired.
- The names of the States and the Unions have been described in the First Schedule. This schedule also held that there were four Categories of State and territories - Part A, Part B, Part C and Part D.
- In the seventh amendment of the Constitution in 1956 the distinction between the Part A and Part B states was abolished. Subsequently states were reorganized on linguistic basis.

Official language in High Courts

Why in news?

- Lawyers have challenged Haryana Official Language (Amendment) Act of 2020, which has unconstitutionally and arbitrarily imposed Hindi as the sole official language to be used in lower courts across Haryana in the Supreme Court.

Issue of Concern

- The lawyers have argued that English is widely used by advocates and the subordinate judiciary in lower courts in justice administration work.
- The imposition of Hindi as the sole language would result in an unreasonable classification between lawyers who are fluent in Hindi and those who are not.
- They say the amendment was a violation of the fundamental right to equality, freedom to practice a profession of choice, dignity and livelihood.

Constitutional Provisions

- Article 348 (1) provides that all proceedings in the Supreme Court and the High courts shall be in English Language until Parliament by law otherwise provides.
- Under Article 348 (2), the Governor of the State may, with the previous consent of the President, authorize the use of the Hindi language or any other language used for any official purpose of the State, in the proceedings of the High Court having its principal seat in that State provided that decrees, judgments or orders passed by such High Courts shall be in English.
- Section 7 of the Official Languages Act, 1963, provides that the use of Hindi or official language of a State in addition to the English language may be authorized, with the consent of the President of India, by the Governor of the State for purpose of judgments etc. made by the High Court for that State.
- The provision of optional use of Hindi in proceedings has already been made in the High Courts of Rajasthan, Uttar Pradesh, Madhya Pradesh and Bihar.

Attorney General reappointed

Why in news?

- Senior Advocate K.K. Venugopal has been reappointed by the President of India as Attorney General (AG) for India for one year.

About

- Article 76 deals with the position of AG of India.
- AG is appointed by the President. He/she must be a person who is qualified to be appointed as a judge of the Supreme Court.
- He/she holds office during the pleasure of the President as the Constitution hasn't explicitly fixed the term of office of the AG as well as it does not contain the procedure and grounds for his/her removal.
- The remuneration of AG is not fixed by the constitution. He/she receives such remuneration as determined by the President.

| Duties | Rights |
|---|---|
| To give advice to the Government of India on the legal matters. To perform other legal duties which are assigned to him/her by the President. To discharge the functions conferred on him/her by the Constitution or any other law. | Right to speak and to take part in the proceedings of both the Houses of Parliament or their joint sitting and any committee of the Parliament of which he/she may be named a member but without a right to vote. Enjoys all immunities and privileges available to the Member of Parliament. Not considered as a government servant and he/she can practice privately too as he/she is not debarred from private legal practice. Right of audience in all courts in the Territory of India. |

International Day of Parliamentarism

Why in news?

- International Day of Parliamentarism was celebrated on 30 June 2020 under the theme "Parliaments in a time of Pandemic".
- The Day is an opportunity for parliaments to take stock, identify challenges, and ways to address them effectively.
- This Day celebrates parliaments and the ways in which parliamentary systems of government improve the day-to-day lives of people all over the world.
- The United Nations General Assembly, in its resolution, recognized the role of parliaments in national plans and strategies and in ensuring greater transparency and accountability at national and global levels.
- It is also the date, in 1889, on which the Inter-Parliamentary Union (IPU), the global organization of parliaments, was established.
- The IPU has permanent observer status at the United Nations General Assembly and is headquartered in Geneva, Switzerland.
- It is a time for parliaments to review the progress they have made in achieving some key goals, for them to move with the times, to include more women and young MPs, and to adapt to new technologies.

Civil Services Board (CSB)

Why in news?

- Punjab government has notified Civil Services Board (CSB) for giving fixed tenure of IAS officers.

| Government's argument in its favour | Opposition to this move |
|--|---|
| It says if the officials have a fixed tenure they will be able to provide better administration. They will also feel safe and try to stick to the rules instead of pleasing political bosses. It says every official | This notification giving for fixed tenure of IAS officers has left some leaders in the state upset. It is because they feel appointment and transfer of IAS officers are a prerogative of the state. They say, if their term is fixed, it will not only create functional and administrative problems, |

| | |
|---|---|
| requires 3-6 months to get into the groove at his new place of posting. If he stays there for two years, it would mean better delivery and stable tenure to people. | but also overstep the authority and jurisdiction of the state government. With the fixed tenure rule and Chief Secretary's board having all power to examine a recommendation for a transfer, the leaders feel their influence has been reduced to a naught and all power handed to the CS. |
|---|---|

About CSB

- In 2013, the Supreme Court directed the Centre and the states to set up CSB to consider transfers and postings of bureaucrats among others.
- CSB puts an end to frequent transfers of civil servants by political bosses. It is mandated to decide on the transfer of a civil servant before completion of his/her fixed tenure.
- It also aims to insulate the bureaucracy from political interference.

Composition of CSB

- Headed by chief secretary of a state.
- It has senior most additional chief secretary or chairman, Board of Revenue, Financial Commissioner or an officer of equivalent rank and status as member.
- In addition, it will have Principal Secretary or Secretary, Department of Personnel in the state government as member secretary.

Suspend sex test rules

Why in news?

- Supreme Court asked the government to explain its decision to suspend crucial rules of a parliamentary law against pre-natal sex determination and sex selection till June end, amid the COVID-19 national lockdown.
- The Central government has arbitrarily and selectively weakened a legislation by suspending one of its provisions, Rule 8 (deals with the mandatory registration of genetic counselling centres, laboratories and clinics), aimed at curbing the pernicious activity of sex-selection and sex-determination.

- Due to the practice of gender biased sex selection in India, the number of girls missing at birth has been estimated at 0.46 million girls per year for the period 2001-12 (which is 5.52 million girl children, missing at birth for the 12-year period).
- Pre-Conception and Pre-Natal Diagnostic Techniques (PCPNDT) Act and the Rules thereunder, are aimed at remedying this social evil.
- This will result in misuse of technology by unscrupulous individuals who will no longer be deterred by the monitoring mechanism provided in the Rules.

Gairsain

Why in news?

- Gairsain (tehsil in Chamoli district, Uttarakhand) has been formally declared as the summer capital of the State.
- It is expected that this declaration will expedite development of the hilly areas.
- Gairsain is located nearly 270-km from existing temporary capital of Dehradun.
- When Uttarakhand was carved out as a separate state from Uttar Pradesh on 9 November 2000, statehood activists had contended that Gairsain was best suited to be the capital of the mountainous state since it was between both Kumaon and Garhwal regions.
- With this recent announcement, there is a lack of clarity on the status of Dehradun. Recently, directory of the state Information department has been published which still mentions this colonial town as the temporary capital.

Change the spelling of names of 1018 cities and towns by TN

Why in news?

- The Tamil Nadu government has renamed 1,018 places in the middle of the prevailing COVID-19 from English language to make their spellings closer to their Tamil pronunciation.

Economy

- Only spelling change of popular and significant places have been taken up for now. Rest is left to various local bodies and departments.

- The government had notified the change in names two years ago, when the Minister for Tamil Official Language and Tamil Culture, Ma Foi K. Pandiarajan, declared it on the floor of the assembly.

Few New Names

- Coimbatore, also known as India's Manchester, is now Koyampuththoor,
- Vellore is now Veeloor
- Mylapore is now Mayilaappoor.
- Poondhamalli is now Poovirunthamalli
- Dharmapuri is now Tharumapuri
- Tuticorin as Thooththukkudi
- Tiruvarur as Thiruvaroor
- Puducherry is Puthucherry
- Dharmapuri is Tharumapuri

Criticism of this step

- Not consulted with people before changing names
- Not concerned about new contracts painting name boards and changing it everywhere
- Government is deliberately trying to divert people during this crisis, so it can get away with its COVID-19 lapses
- Some new spellings have drawn criticism from the people for not matching to their Tamil phonetics. The minister said that such names like, Vellore, which became "Veeloor" will be corrected as "Veloor"
- Even though the state retains its English name - Tamil Nadu - the name of the state capital was changed to Chennai from Madras in 1996.

Amendments to the Essential Commodities Act**Why in news?**

- Cabinet has amended the Essential Commodities Act. Essentials like cereals, pulses, oilseeds, edible oils, onion and potatoes have been excluded from the Essential Commodities Act.
- This will remove fears of private investors of excessive regulatory interference in their business operations.
- The freedom to produce, hold, move, distribute and supply will lead to harnessing of economies of scale and attract private sector/foreign direct investment into agriculture sector.
- It will help drive up investment in cold storages and modernization of food supply chain.

Electronics incentive schemes launched**Why in news?**

- Three schemes approved, with a ₹48,000-crore outlay, to boost large-scale manufacturing of electronics in the country have been launched by the Ministry of Electronics and Information Technology.
 1. Production Linked Incentive (outlay of nearly ₹41,000 crore): Under PLI, which is targeted at mobile phone manufacturing and specified electronic components, the government initially plans to incentivise 10 firms - five global and five local. The PLI Scheme shall extend an incentive of 4% to 6% on incremental sales (over base year) of goods manufactured in India and covered under the target segments, to eligible companies, for a period of five years subsequent to the base year.
 2. Component Manufacturing Scheme (about ₹3,300 crore): The SPECS shall provide financial incentive of 25% on capital expenditure for the identified list of electronic goods, i.e., electronic components, semiconductor/ display fabrication units, Assembly, Test, Marking and Packaging (ATMP) units,

specialized sub-assemblies and capital goods for manufacture of aforesaid goods.

3. Modified Electronics Manufacturing Clusters (about ₹3,800 crore): The EMC 2.0 shall provide support for creation of world class infrastructure along with common facilities and amenities, including Ready Built Factory (RBF) sheds / Plug and Play facilities for attracting major global electronics manufacturers, along with their supply chains.

Significance

- The schemes will help in building a robust manufacturing ecosystem which will be an asset to the global economy and developing a strong ecosystem across the value chain and integrating it with global value chains.
- The Schemes will help offset the disability for domestic electronics manufacturing and hence, strengthen the electronics manufacturing ecosystem in the country.
- All Schemes will enable domestic supply chain of components and state-of-the-art infrastructure and common facilities for large anchor units and their supply chain partners.
- These Schemes shall contribute significantly to achieving a USD 1 Trillion digital economy and a USD 5 Trillion GDP by 2025.
- The three new Schemes are expected to attract substantial investments, increase production of mobile phones and their parts/ components to around Rs.10,00,000 crore by 2025 and generate around 5 lakh direct and 15 lakh indirect jobs.
- Employment generation: With the three new schemes, the government aims to manufacture electronics worth ₹8 lakh crore, while generating employment for about 10 lakh people in the next five years.

One Nation-One Ration Card scheme

Why in news?

- Three more States i.e., Odisha, Sikkim and Mizoram are included in One Nation One Card scheme. The facility so far is enabled in 17 States/UTs.

- One Nation One Ration Card will ensure all beneficiaries especially migrants can access Public Distribution System (PDS) across the nation from any PDS shop of their own choice.
- No poor person is deprived of getting subsidised foodgrains under the food security scheme when they shift from one place to another.
- It also aims to remove the chance of anyone holding more than one ration card to avail benefits from different states.
- This will give freedom to the beneficiaries as they will not be tied to any one PDS shop and reduce their dependence on shop owners and curtail instances of corruption.

23 additional MFP items included in MSP list

Why in news?

- Inclusion of 23 additional Minor Forest Produce (MFP) items in Minimum Support Price (MSP) list has been announced by the Ministry of Tribal Affairs.
- They include Van Tulsi seeds, Van Jeera, Mushroom, Black Rice and Johar Rice among others.
- This enhances the coverage from 50 to 73 items. This comes in view of the COVID-19 pandemic so that much needed support could be provided to the tribal MFP gatherers.

What is this scheme all about?

- The Union Cabinet, in 2013, approved a Centrally Sponsored Scheme for marketing of non-nationalized / non monopolized Minor Forest Produce (MFP) and development of a value chain for MFP through Minimum Support Price (MSP).
- This was a measure towards social safety for MFP gatherers, who are primarily members of the Scheduled Tribes (STs) most of them in Left Wing Extremism (LWE) areas.

Objectives of the scheme

- Ensure that the tribal population gets a remunerative price for the produce they collect from the forest and provide alternative employment avenues to them.

- Establish a system to ensure fair monetary returns for forest dweller's efforts in collection, primary processing, storage, packaging, transportation etc, while ensuring sustainability of the resource base.
- Get them a share of revenue from the sales proceeds with costs deducted.

Implementation

- The responsibility of purchasing MFP on MSP will be with State designated agencies.
- To ascertain market price, services of market correspondents would be availed by the designated agencies particularly for major markets trading in MFP.
- The scheme supports primary value addition as well as provides for supply chain infrastructure like cold storage, warehouses etc.
- The Ministry of Tribal Affairs will be the nodal Ministry for implementation and monitoring of the scheme. The Minimum Support Price would be determined by the Ministry with technical help of TRIFED.

Top to Total

Why in news?

- Union Minister for Food Processing announced the Extension of Operation Greens from TOP (Tomato-Onion-Potato) crops to all Perishable Fruits & Vegetables (TOP to Total).
- Operation Greens was announced in the Budget 2018-2019 to stabilize the supply of Tomato, Onion and Potato (TOP) crops. It is being implemented by the Ministry of Food Processing Industries.
- The scheme has now been extended from tomato, onion and potato (TOP) crops to other all Perishable Fruits & Vegetables (TOP to Total).
- It aims to protect the growers of fruits and vegetables from making distress sale due to lockdown and reduce the post-harvest losses.
- Eligible entities: Food Processors, Co-operative Societies, Individual farmers, Exporters, State Marketing/Co-operative

Federation engaged in processing/ marketing of fruits and vegetables.

- Ministry will provide subsidy 50 % of the cost of the following two components subject to the cost norms:
 1. Transportation of eligible crops from surplus production cluster to consumption centre and/or
 2. Hiring of appropriate storage facilities for eligible crops (for a maximum period of 3 months).

PM formalization of Micro Food Processing Enterprises (PM FME) Scheme

Why in news?

- Union Minister for Food Processing launched the PM Formalization of Micro Food Processing Enterprises (PM FME) scheme as a part of "Atmanirbhar Bharat Abhiyan".
- There are about 2.5 million unregistered, unorganised food processing enterprises which contribute to 74% employment in the food processing sector.
- Two-thirds of them are in rural areas and 80% of them are family-based enterprises supporting livelihood of rural households and minimizing their migration to urban areas.

About the Scheme

- Pan India "Centrally Sponsored scheme" that to be implemented over a period of five years from 2020-21 to 2024-25 with an outlay of Rs 10,000 crore.
- The expenditure under the scheme would be shared in 60:40 ratio between Central and State Governments, in 90:10 ratio with North Eastern and the Himalayan States, 60:40 ratio with UTs with the legislature and 100% by Centre for other UTs.
- It will give financial, technical and business support for up-gradation of existing micro food processing enterprises.
- Under the PM FME scheme, micro-enterprises will get 35% subsidy on eligible project cost, with a maximum ceiling of Rs.10 lakh per unit.
- Support for marketing and branding would be given to develop brands for micro-units and groups with 50% grant at State or regional level which could benefit large numbers micro-units in clusters.

- The Scheme focuses on waste to wealth products, minor forest products and Aspirational Districts.
- The Scheme adopts One District One Product (ODOP) approach to take benefits of scale in terms of procurement of inputs, marketing of products and availing common services.
- ODOP product could be a perishable produce based product or cereal-based products or a food product widely produced in a district and their allied sectors.
- The States would identify food products for a district keeping in view the existing clusters and availability of raw material.

Continuous Galvanized Rebar Production Facility

Why in news?

- Union Minister of Steel inaugurated Continuous Galvanized Rebar Production Facility at Mandi Gobindgarh in Punjab. This will support the much awaited need of supplying galvanized rebar to the construction industry.

An Overview of Steel Sector

Global Scenario

- In CY 2019, the world crude steel production reached 1870 million tonnes (mt) and showed a growth of 3.4% over CY 2018.
- China remained world's largest crude steel producer in same period (996 mt) followed by India (111mt), Japan (99mt) and the USA (88mt).

Domestic Scenario

- The Indian steel industry has entered into a new development stage, post de-regulation, riding high on the resurgent economy and rising demand for steel.
- Rapid rise in production has resulted in India becoming the 2nd largest producer of crude steel during 2018 and 2019 (prov), from its 3rd largest status in 2017. The country was also the largest producer of Sponge Iron or DRI in the world and the 3rd largest finished steel consumer in the world after China & USA in 2019 (prov.)

- In a de-regulated, liberalized economic/market scenario like India the Government's role is that of a facilitator which lays down the policy guidelines and establishes the institutional mechanism/structure for creating conducive environment for improving efficiency and performance of the steel sector.
- In this role, the Government has released the National Steel Policy 2017, which has laid down the broad roadmap for encouraging long term growth for the Indian steel industry, both on demand and supply sides, by 2030-31. The Government has also announced a policy for providing preference to domestically manufactured Iron & Steel products in Government procurement.

Production

- Steel industry was de-licensed and de-controlled in 1991 & 1992 respectively.
- India was the 2nd largest producer of crude steel in the world in 2019.

Galvanized steel

- It is among the most popular steel types because of its extended durability, having the strength and formability of steel plus the corrosion protection of the zinc-iron coating. The zinc protects the base metal by acting as a barrier to corrosive elements, and the sacrificial nature of the coating results in a long-lasting and high-quality steel product.
- This versatility makes it applicable to a variety of projects and industries, including agriculture, solar, automotive, construction, and so on.

National Productivity Council (NPC)

Why in news?

- The 49th Governing Council Meeting of National Productivity Council (NPC), an autonomous body under Department for Promotion of Industry & Internal Trade (DPIIT), was held under the Chairmanship of Commerce and Industry Minister on 27 June 2020.
- That day also marked Bankim Chandra Chatterjee's 182nd Birth Anniversary as well as the MSME Enterprises Day.

About NPC

- NPC is national level organization to promote productivity culture in India.
- Established by the Ministry of Industry, Government of India in 1958.
- It is an autonomous, multipartite, non-profit organization with equal representation from employers' & workers' organizations and Government, apart from technical & professional institutions and other interests.
- NPC is a constituent of the Tokyo-based Asian Productivity Organisation (APO), an Inter Governmental Body, of which the Government of India is a founder member.
- NPC teams up with its clients to work out solutions towards accelerating productivity, enhancing competitiveness, increasing profits, augmenting safety and reliability and ensuring better quality. It provides reliable database for decision-making, improved systems and procedures, work culture as well as customer satisfaction both internal & external.

Banking Regulation (Amendment) Ordinance, 2020**Why in news?**

- Banking Regulation (Amendment) Ordinance, 2020 has been promulgated by the President.
- The Ordinance amends the Banking Regulation Act, 1949 as applicable to Cooperative Banks.
- It also amends Section 45 of the Act, to enable making of a scheme of reconstruction or amalgamation of a banking company for protecting the interest of the public, depositors and the banking system and for securing its proper management, even without making an order of moratorium, so as to avoid disruption of the financial system.

About

- It seeks to strengthen cooperative banks by improving governance and oversight by extending powers already available with RBI in respect of other banks to Co-operative

Banks as well for sound banking regulation, and by ensuring professionalism and enabling their access to capital.

- The amendments do not affect existing powers of the State Registrars of Co-operative Societies under state co-operative laws.
- The amendments do not apply to Primary Agricultural Credit Societies (PACS) or co-operative societies (whose primary object and principal business is long-term finance for agricultural development, and which do not use the word "bank" or "banker" or "banking" and do not act as drawees of cheques).

PM SVANidhi**Why in news?**

- Ministry of Housing and Urban Affairs has launched the PM SVANidhi. This scheme will be implemented by SIDBI under the guidance of Ministry.
- It will also manage the credit guarantee to the lending institutions through Credit Guarantee Fund Trust for Micro and Small Enterprises (CGTMSE).

About

- Its objective is to give affordable Working Capital loan to street vendors to resume their livelihoods that have been badly affected due to COVID-19 lockdown.
- In this Scheme, the vendors can avail a working capital loan of up to Rs. 10,000, which is repayable in monthly instalments in the tenure of one year.
- On timely/early repayment of the loan, an interest subsidy @ 7% per annum will be credited to the bank accounts of beneficiaries through Direct Benefit Transfer on quarterly basis.
- There will be no penalty on early repayment of loan.

Indian money in Swiss banks falls 5.8%**Why in news?**

- According to the latest data from Switzerland's central bank (Swiss National Bank (SNB)), India has moved down three places to 77th rank (74th in the previous year) in

terms of money deposited by its citizens and enterprises with Swiss banks at the end of 2019.

- India remains ranked very low when it comes to money deposited by Indian individuals and enterprises in Swiss banks, including through their India-based branches, accounting for just about 0.06 % of the aggregate funds parked by all foreign clients of Switzerland-based banks.
- In comparison, the top-ranked UK accounted for close to 27 per cent of the total foreign funds parked with Swiss banks at the end of 2019.
- Funds parked by Indian individuals and enterprises in Swiss banks, including through India-based branches, fell by 5.8 per cent in 2019 to 899 million Swiss francs (Rs 6,625 crore).
- Among the top-ranked jurisdictions, the UK is followed by the US, West Indies, France and Hong Kong in the top five.
- The top-five countries alone account for more than 50 per cent of the aggregate foreign funds in the Swiss banks, while the top-10 account for nearly two-thirds.
- The top-15 countries account for nearly 75 per cent of all foreign money in Swiss banks, while the contribution of the top-30 is almost 90 per cent.
- The top-10 countries also include Germany, Luxembourg, Bahamas, Singapore and Cayman Islands.

Skills Build Reignite

Why in news?

- Ministry of Skill Development and Entrepreneurship (MSDE) in partnership with IBM has unveiled Free Digital Learning Platform 'Skills Build Reignite' to reach more job seekers and provide new resources to business owners in India.

About

- The Skills Build Reignite tends to give access to free online coursework and mentoring support designed to help job seekers and entrepreneurs to reinvent their careers and businesses.
- It is a long term institutional training to the nation's youth through its network of training institutes and infrastructure.

- IBM will give multifaceted digital skill training in the area of Artificial Intelligence (AI) and Cloud Computing to students & trainers in the National Skill Training Institutes (NSTIs) and ITIs.
- Directorate General of Training (DGT) under the Ministry of Skill Development & Entrepreneurship (MSDE) is responsible for implementing the program.

Features

- Personalized coaching for entrepreneurs, seeking advice to assist establish or restart their small businesses as they begin to focus on recovery to emerge out of the COVID 19 pandemic.
- Courses like financial management, business strategy, digital strategy, legal support and more for small business owners.

Shishu Loan

Why in news?

- The Central government has announced 'Mudra Shishu loan' for small businesses and cottage industries so that shopkeepers do not suffer due to the COVID-19 pandemic.
- A 1500 crore interest subvention has been announced.
- 2% interest rate subvention for a period of 12 months shall be offered by the Government.
- It shall benefit small borrowers under the Mudra Shishu loans up to ₹50,000.

About

- PMMY was launched by the Indian PM in 2015 to provide loans up to 10 lakh to the non-corporate, non-farm small/micro enterprises.
- Lending Institutions: Commercial Banks, RRBs, Small Finance Banks, MFIs and NBFCs.
- MUDRA has created three products as per the stage of growth and funding needs of the beneficiary micro unit:
 1. Shishu: Covering loans up to Rs. 50,000.
 2. Kishore: Covering loans above Rs. 50,000 and up to Rs. 5 lakh

3. Tarun: Covering loans above Rs. 5 lakh and up to Rs. 10 lakh.

- Udyami Mitra Portal: It was launched by Small Industries Development Bank of India (SIDBI) to improve accessibility of credit and handholding services to MSMEs.
- Udyam Sakhi: It is an initiative of the Ministry of Micro, Small & Medium Enterprises (MSME) to encourage women entrepreneurs by creating business models revolving around low-cost products and services to empower women and make them self-reliant and self-sufficient.

Kushinagar International Airport

Why in news?

- The Union Cabinet declared Kushinagar Airport in Uttar Pradesh as an International Airport.
- It will offer improved connectivity to the important Buddhist pilgrimage site also.

About

- This step will result in boosting of domestic/international tourism and economic development of the regions. It will be an important strategic location with the international border close by.
- There was no airport there of international standards. A 3-km-long runway strip has already been made. Now, even a big aircraft of Airbus can land at the airport.
- Kushinagar is situated in the north-eastern Uttar Pradesh about 50 km east of Gorakhpur and is one of the important Buddhist pilgrimage sites.
- Several other Buddhist sites are present near Kushinagar like Sravasti (238 km), Kapilvastu (190 km) and Lumbini (195 km).

Animal Husbandry Infrastructure Development Fund (AHIDF)

Why in news?

- The Cabinet Committee on Economic Affairs had approved establishing of Animal Husbandry Infrastructure Development Fund (AHIDF) worth Rs. 15000 crore in

pursuance of recently announced Atma Nirbhar Bharat Abhiyan stimulus package.

About

- AHIDF would facilitate much needed incentivisation of investments in infrastructure for dairy and meat processing and value addition infrastructure and establishment of animal feed plant in the private sector.
- The eligible beneficiaries would be Farmer Producer Organizations (FPOs), MSMEs, Section 8 Companies, Private Companies and individual entrepreneur with minimum 10% margin money contribution by them. The rest 90% would be the loan component to be made available by scheduled banks.
- Indian Government will give 3% interest subvention to eligible beneficiaries. There will be 2 years moratorium period for principal loan amount and 6 years repayment period thereafter.
- Government would also set up Credit Guarantee Fund of Rs. 750 crore to be managed by NABARD. Credit guarantee would be given to those sanctioned projects which are covered under MSME defined ceilings. Guarantee Coverage would be upto 25% of Credit facility of borrower.

Significance

- This will ensure availability of capital to meet upfront investment required for these projects and also help enhance overall returns/ pay back for investors.
- Such investments in processing and value addition infrastructure by eligible beneficiaries would also promote export of these processed and value added commodities.
- Since, almost 50-60% of final value of dairy output in India flows back to farmers, therefore, growth in this sector can have significant direct impact on farmer's income.
- Size of dairy market and farmers' realization from milk sales is closely linked with development of organized off-take by cooperative and private dairies.
- Investment incentivization in AHIDF would not only leverage 7 times private investment but would also motivate farmers to invest more on inputs thereby driving higher productivity leading to increase in farmers income.

The measures approved through AHIDF would also help in direct and indirect livelihood creation for 35 lakh.

'Country of Origin' must on GeM platform

Why in news?

- In order to promote local products, the Government of India has made it mandatory to list the country of origin for all sellers on the Government e-Marketplace (GeM) while registering new products.
- The changes to GeM are in line with the Centre's Atmanirbhar Bharat and Make in India policies.
- Buyers on this platform can now see the percentage of local content in various products.
- They can also switch on a new Make in India filter to see various products that match their preferences on local content like buyers can choose to buy only those products that meet a minimum 50% local content criteria.

Government e-Marketplace (GeM)

- It is a one-stop National Public Procurement Portal to facilitate online procurement of common use Goods & Services required by various Central and State Government Departments / Organizations / Public Sector Undertakings (PSUs).
- It was launched in 2016 which aims to bring transparency and efficiency in the government buying process.
- It operates under the Ministry of Commerce and Industry that has used technology to remove entry barriers for bonafide sellers and has created a vibrant e-marketplace with a wide range of goods and services.
- It also gives the tools of e-bidding and reverse e-auction to facilitate the government users to achieve the best value for their money.
- Currently, GeM has more than 15 lakh products, around 20,000 services, and more than 40,000 Government buyer organizations.

Decarbonising Transport in India

Why in news?

- NITI Aayog in collaboration with International Transport Forum (ITF) launched the "Decarbonising Transport in India" project, with the intention to develop a pathway towards a low-carbon transport system for India.
- India has been a member of ITF, an intergovernmental organisation for transport policy, since 2008.
- The online event informed to transport and climate stakeholders in India about planned project activities.

About the Project

- It will design a transport emissions assessment framework for the country.
- It will provide an opportunity to give inputs for transport challenges and their relation to Carbon Dioxide (CO₂) reduction in the country and will inform transport and climate stakeholders in India about planned project-related activities.
- The current participants in the initiative other than India are Argentina, Azerbaijan, and Morocco.
- The DTEE is a collaboration between the ITF and the Wuppertal Institute, which is supported by the International Climate Initiative (IKI) of the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety.

Garib Kalyan Rojgar Abhiyaan

Why in news?

- Indian PM launched a massive employment -cum- rural public works Campaign named 'Garib Kalyan Rojgar Abhiyaan' to empower and give livelihood opportunities in areas/ villages witnessing large number of returnee migrant workers affected by the devastating COVID-19.
- The villages will join this programme through the Krishi Vigyan Kendras (KVKs) and Common Service Centres (CSCs) by maintaining social distancing in the wake of COVID-19 pandemic.
- This campaign is of 125 days.

- A total of 116 Districts with more than 25,000 returnee migrant workers across six States, Bihar, Uttar Pradesh, Madhya Pradesh, Rajasthan, Jharkhand and Odisha have been chosen for the campaign which includes 27 Aspirational Districts.
- These districts are estimated to cover about 2/3rd of such migrant workers.
- The Abhiyaan will be a coordinated effort between 12 different Ministries/Departments, namely, Rural Development, Panchayati Raj, Road Transport & Highways, Mines, Drinking Water & Sanitation, Environment, Railways, Petroleum & Natural Gas, New & Renewable Energy, Border Roads, Telecom and Agriculture.
- It will involve intensified and focused implementation of 25 different types of works to provide employment to the migrant workers on one hand and create infrastructure in the rural regions of the country on the other hand.

World Investment Report 2020

Why in news?

- UN Conference on Trade and Development (UNCTAD) in its report World Investment Report 2020 mentioned that India received 51 billion US dollar in foreign investment in 2019.

Highlights of the Report

- India was the world's ninth largest recipient of Foreign Direct Investments (FDI) in 2019.
- In the developing Asia region, India was among the top five host economies for FDI.
- FDI to India, the largest South Asian recipient, increased 20 per cent to 51 billion US dollar in 2019.
- Most of the investments were in the information and communication technology and the construction industry.
- A lower but positive economic growth in India in the post-COVID19 pandemic period and India's large market will continue to attract market-seeking investments to the country.
- This would be for the first time since 2005 that global FDI falls below the USD 1 trillion mark.

- Foreign direct investment to developing economies in Asia, hit hard by the economic downturn caused by the coronavirus pandemic, are projected to decline by up to 45 per cent in 2020.
- In South Asia, FDI is also expected to contract sharply in 2020.

UNCTAD

- Permanent intergovernmental body.
- Established by the United Nations General Assembly in 1964.
- It is part of the UN Secretariat.
- It reports to the UN General Assembly and the Economic and Social Council, but has its own membership, leadership, and budget.
- It is also a part of the United Nations Development Group.

Other Reports published by UNCTAD

1. Trade and Development Report
2. Technology and Innovation Report
3. Digital Economy Report

Greenfield Expressway to Amritsar

Why in news?

- Development of a new Greenfield connectivity to Amritsar City from Nakodar via Sultanpur Lodhi, Goindwal Sahib, Khadoor Sahib as part of Delhi-Amritsar Expressway has been announced by the Union Ministry for Road Transport & Highways.
- Under it, the road from Amritsar to Gurdaspur will also be fully developed and made completely signal free. With this, there will be options to travel to Gurdaspur onwards from Nakodar either via Amritsar or via
- This greenfield alignment will not only give shortest and alternate express connectivity to Amritsar city but also to other religious centres of Sultanpur Lodhi, Goindwal Sahib, Khadoor Sahib as well as the recently developed Dera Baba Nanak/Kartarpur Sahib International Corridor in Punjab.

- Once the project is completed, the travel time from Amritsar to Delhi International airport will reduce by about four hours.

- Ministry of Road Transport & Highways have taken up development of Delhi Amritsar Katra Expressway under Bharatmala Pariyojana.

Insolvency and Bankruptcy Code (IBC)

Why in news?

- Government of India had promulgated an ordinance to amend Insolvency and Bankruptcy Code (IBC).
- Under it, fresh insolvency proceedings under the IBC will not be initiated against companies for defaults due to the pandemic COVID-19.
- Default on repayments from 25th of March, the day when the nationwide lockdown began to curb Corona virus infections, will not be considered for initiating insolvency proceedings for a period of six months, which could be extended to one year.
- It suspends sections 7, 9 and 10 of the IBC for a period of 6 months with an enabling provision allowing for it to be extended upto 1 year.
- The changes to IBC to this effect were first announced by union finance minister as part of the Atma Nirbhar Bharat Abhiyan reforms.
- The idea, as per the government, is to “prevent corporate persons which are experiencing distress on account of unprecedented situation, being pushed into insolvency proceedings under the said Code for some time
- To be sure, the amendments will ring-fence those genuinely facing stress from being dragged to bankruptcy courts for reasons that were beyond their control to begin with.
- IBC proceedings against past-defaulters (prior to March 25, 2020) can also continue unhindered. But protection from bankruptcy proceedings for default during this specified period on a permanent basis is bound to have some unintended consequences that must be considered.

World Accreditation Day (WAD) 2020

Why in news?

- WAD was celebrated every year on 9 June.
- The Day aims to highlight as well as promote the role of accreditation in trade & economy.
- The theme for WAD 2020 is “Accreditation: Improving Food Safety”, as decided by the International Accreditation Forum (IAF) and the International Laboratory Accreditation Cooperation (ILAC).
- National Accreditation Board for Certification Bodies (NABCB) and National Accreditation Board for Testing and Calibration Laboratories (NABL), the two accreditation boards of the Quality Council of India (QCI), organised a Webinar to commemorate the event.
- In doing so, accreditation supports the United Nations’ Sustainable Development Goals (SDGs), particularly Good Health and Well-being (SDG 3).
- Accreditation is an important tool to help improve quality, but the ultimate goal is to improve the quality of product and services in the food sector as well as other areas.

Indian Gas Exchange (IGX)

Why in news?

- Indian Gas Exchange (IGX), which is the first nationwide online delivery-based gas trading platform, has been launched by the Union Petroleum and Natural Gas Ministry.

About

- It is fully automated with a web-based interface.
- It has been incorporated as a wholly owned subsidiary of the Indian Energy Exchange, which is India’s energy market platform.
- The trading platform will enable market participants to trade in standardised gas contracts.
- It shall facilitate the growth of the share of natural gas in India’s energy basket and is expected to facilitate transparent price discovery in natural gas.
- It gives hassle-free trading experience to the customers.

- It will allow buyers and sellers of natural gas to trade both in the spot market (financial instruments, such as currencies are traded for immediate delivery) and in the forward market (an over-the-counter marketplace that sets the price of a financial instrument for future delivery).
- The trading of natural gas will be for imported natural gas across three hubs — Dahej and Hazira in Gujarat, and Kakinada in Andhra Pradesh.
- Imported Liquefied Natural Gas (LNG) will be regasified and sold to buyers through the exchange.
- The need for buyers and sellers to find each other shall be removed.
- The price of domestically produced natural gas is decided by the government which will not be sold on the gas exchange.

Turant Customs

Why in news?

- A flagship programme, 'Turant Customs', has been launched by the Central Board of Indirect Taxes and Customs (CBIC, subsidiary of the Department of Revenue under the Ministry of Finance) at Bengaluru and Chennai.
- The start of Turant Customs at Bengaluru and Chennai will be the first phase of the All India roll out which will get completed by 31 December 2020 and the first phase will cover imports of Mechanical, Electrical and Electronics machineries at the ports and airports.

About

- In this programme, importers could now get their goods cleared from Customs after a faceless assessment remotely done by the Customs officers located outside the port of import.
- In other words, the goods imported at Chennai may be assessed by the Customs officers located at Bengaluru and vice versa, as assigned by the Customs automated system.

Importance

- These customs will provide benefit to the importers by eliminating routine interface with the Customs officers and providing uniformity in assessment across the country.
- This would decrease transaction costs and eliminate the practice of port shopping for favourable assessments.
- Its is a mega reform for the ease of doing business.
- This is a giant leap forward to leverage technology for faster Customs clearance of imported goods.

Health and Energy efficient buildings initiative

Why in news?

- Energy Efficiency Services Limited (EESL) along with the U.S. Agency for International Development's (USAID) MAITREE (Market Integration and Transformation Program for Energy Efficiency) program launched the "Healthy and Energy Efficient Buildings" initiative on occasion of World Environment Day to make workplaces healthier and greener.

About

- The initiative aimed at accelerating the adoption of cost-effective energy efficiency as a standard practice within buildings, and specifically focuses on cooling and EESL (promoted by the Ministry of Power Government of India as a Joint Venture of four reputed public-sector undertakings – NTPC Limited, Power Finance Corporation Limited., REC Limited, and POWERGRID Corporation of India Limited) has taken the leadership by being the first to implement this framework in its own offices.
- This initiative is addressing the challenges of retrofitting existing buildings and air conditioning systems so that they are both healthy and energy-efficient.
- This project will address the problems, by developing specifications for future use in other buildings throughout the country, as well as aid in evaluating the effectiveness and cost benefits of various technologies and their short and long-term impacts on air quality, comfort, and energy use.

Payments Infrastructure Development Bank

Why in news?

- The Reserve Bank of India (RBI) is establishing a Payment Infrastructure Development Fund (PIDF) of Rs 500 crore to provide a push to digital payments across the country.

About

- In 2019, the RBI had also proposed to set up an Acceptance Development Fund which will be used to develop card acceptance infrastructure across small towns and cities.
- PIDF has been created to encourage acquirers to deploy point of sale (PoS) infrastructure, both physical and digital, in tier-3 to tier-6 centres and north eastern states.
- The RBI has made an initial contribution of Rs 250 crore covering half the fund. The remaining will come from the card issuing banks and card networks operating in the country.
- The fund will be governed through an advisory council but it will be managed and administered by the RBI.
- The fund is also in line with the measures proposed by the vision document on payment and settlement systems in India 2019-2021.
- The enhanced ability of PoS infrastructure is supposed to reduce demand of cash over time. By 2021, there will be around 5 million active PoS by 2021.

Coal India Arm Western Coalfields

Why in news?

- Coal India Subsidiary Western Coalfields Ltd (WCL) opened three new coal mines in Maharashtra and Madhya Pradesh having combined annual production capacity of 2.9 million tonnes (MT).
- The company launched a surveillance System known as 'WCL EYE' to monitor operations of 15 major mines of the company. It will also assist in monitoring coal stocks.
- It also launched an App called SAMVAAD to connect with its employees and stakeholders.

Three mines opened by WCL

- Adasa Mine, an underground to open cast mine, in Nagpur Area of Maharashtra,
- Sharda underground Mine in Kanhan Area
- Dhankasa underground mine in Pench Area of Madhya Pradesh.

PK Mohanty Committee

Why in news?

- The RBI has constituted a five-member Internal Working Group, headed by RBI Central Board Director P K Mohanty, to review present ownership guidelines and corporate structure for Indian Private Sector Banks.
- It will submit its report by 30 September 2020.

Terms of Reference of the Committee

- To review the current licensing guidelines and regulations relating to ownership and control in Indian private sector banks and suggest appropriate norms.
- To examine and review the eligibility criteria for individuals/entities to apply for banking licenses.
- To study the current regulations on holding of financial subsidiaries through non-operative financial holding company (NOFHC) and suggest the manner of migrating all banks to a uniform regulation in the matter.
- To examine the norms for promoter shareholding at the initial/licensing stage and subsequently, along with the timelines for dilution of the shareholding.

Border adjustment tax

Why in news?

- Due to USA-China trade tensions which are expected to rise even further post-COVID-19, a NITI Aayog member has favoured imposing a border adjustment tax (BAT) on imports to give a level-playing field to domestic industries.

About BAT

- It is a duty that is proposed to be imposed on imported goods in addition to the customs levy that gets charged at the port of entry.
- BAT is a fiscal measure that imposes a charge on goods or services in accordance with the destination principle of taxation.
- BAT seeks to promote “equal conditions of competition” for foreign and domestic companies supplying products or services within a taxing jurisdiction.
- At the macro level, with imports reduced and exports increased, a country can cut its trade deficit.

Issue

- The Indian industry has been complaining to the government about domestic taxes like electricity duty, duties on fuel, clean energy cess, mandi tax, royalties, biodiversity fees that get charged on domestically produced goods as these duties get embedded into the product.
- But many imported goods do not get loaded with such levies in their respective country of origin and this gives such products price advantage in the Indian market.

Provisional estimates of national income for 2019-20**Why in news?**

- The National Statistical Office (NSO), Ministry of Statistics and Programme Implementation, has released the Provisional Estimates of National Income for the financial year 2019-20, both at Constant (2011-12) and Current Prices.
- The NSO's estimates show fourth-quarter and fiscal 2019-20 growth slumped to 3.1% and 4.2%, respectively, the slowest pace in 11 years.
- The government says the lockdown impacted data flow, and with statutory reporting timelines extended the estimates would likely undergo revision.
- However, the fact that GVA numbers for the first three quarters have been revised significantly downwards shows

that the economic worries was deep and widespread even before the novel coronavirus landed on Indian shores.

The GVA method

- In 2015, in the wake of a comprehensive review of its approach to GDP measurement, India opted to make major changes to its compilation of national accounts.
- It aims to bring the whole process into conformity with the UN System of National Accounts (SNA) of 2008.
- As per the SNA, GVA is defined as the value of output minus the value of intermediate consumption.
- GVA is a measure of the contribution to GDP made by an individual producer, industry or sector.
- At its simplest, it gives the rupee value of goods and services produced in the economy after deducting the cost of inputs and raw materials used.
- It can be described as the main entry on the income side of the nation's accounting balance sheet, and from economics, perspective represents the supply side.

GVA estimates by NSO

- As part of the data on GVA, the NSO gives both quarterly and annual estimates of output — measured by the gross value added — by economic activity.
- The sectoral classification provides data on eight broad categories that span the gamut of goods produced and services provided in the economy.
- These are: 1) Agriculture, Forestry and Fishing; 2) Mining and Quarrying; 3) Manufacturing; 4) Electricity, Gas, Water Supply and other Utility Services; 5) Construction; 6) Trade, Hotels, Transport, Communication and Services related to Broadcasting; 7) Financial, Real Estate and Professional Services; 8) Public Administration, Defence and other Services.

Economy to contract 3.2% in FY21: WB**Why in news?**

- The World Bank projected India's economy to contract 3.2% in FY21 as stringent measures to restrict the spread of

the coronavirus pandemic have heavily curtailed activity in Asia's third largest economy.

- In its Global Economic Prospects report, World Bank said the contraction will largely materialize in the year to 31 March and the Indian economy will recover to grow at 3.1% in the following year.
- Spillovers from contracting global growth and balance sheet stress in the financial sector will also adversely impact activity, despite some support from fiscal stimulus and continued monetary policy easing.
- The multilateral lending institution took note of measures taken by the government, including spending on health care to bolster the covid-19 response, wage support, in-kind and cash transfers to lower-income households, deferral of tax payments, as well as loan and liquidity support for small businesses and financial institutions.
- The World Bank said the swift and massive shock of the coronavirus pandemic and shutdown measures to contain it will lead to a contraction of the global economy by 5.2% in 2020.

Society and Health

Pradhan Mantri Garib Kalyan Anna Yojana

Why in news?

- Prime Minister announced the extension of Pradhan Mantri Garib Kalyan Anna Yojana till the end of November.
- It was announced as part of the first relief package during the COVID-19 pandemic.
- A total of 116.02 lakh metric tonnes (LMT) of food grains have been lifted under the scheme.

About

- Central government will spend Rs 90,000 crore more on providing free food to the poor.
- Considered as world's largest food security scheme
- Aims at ensuring sufficient food for the poor and needy during the coronavirus crisis.
- The food needs to be provided to all the beneficiaries under public distribution system (TPDS) for Antyodaya Anna

Yojana (AAY) and priority household (PHH) ration cardholders.

- As per updates, the eligible beneficiaries will receive 5kg of foodgrains and 1 kg Gram per month.

Sanskritik Sadbhav Mandap

Why in news?

- Union Minister of Minority Affairs laid foundation stone for "Sanskritik Sadbhav Mandap" in Rampur (Uttar Pradesh).
- Sanskritik Sadbhav Mandap is a community center which is being established by the Ministry of Minority affairs under Pradhan Mantri Jan Vikas Karyakram (PMJVK).
- The centre will be utilized for various socio-economic-cultural activities, skill development training, coaching, relief activities during disaster such as Corona and different sports activities.
- Pradhan Mantri Jan Vikas Karyakram (PMJVK) is implemented by the Ministry of Minority Affairs to provide better socio economic infrastructure facilities to the minority communities particularly in the field of education, health & skill development.

COVAXIN

Why in news?

- COVAXIN is India's first vaccine candidate against COVID-19, which gets the approval of Drug Controller General of India (DCGI) for Phase I and II clinical trials.
- COVAXIN is an inactivated vaccine created from a strain of the infectious SARS-CoV-2 virus.
- It has been developed by Bharat Biotech in collaboration with the Indian Council of Medical Research (ICMR) and the National Institute of Virology (NIV).
- DCGI is responsible for approval of licences of specified categories of drugs such as blood and blood products, IV fluids and vaccines in India. It comes under the Ministry of Health & Family Welfare.

eBloodServices'**Why in news?**

- 'eBloodServices' App in partnership with the Indian Red Cross Society (IRCS) has been launched by the Union Health Minister.
- eBloodServices aims to allow people to access safe blood easily especially during COVID-19 pandemic.
- It has been developed by the E-Raktkosh team of Centre for Development of Advanced Computing (CDAC) under the Digital India scheme.
- The app will make it easy for a blood seeker to get blood with complete transparency and single window access to the service.
- e-Raktkosh is a Centralized Blood Bank Management System that provides a comprehensive IT solution to standardize and streamline the standard operating procedures, guidelines and workflow of blood banks across the country.
- Indian Red Cross Society is a voluntary humanitarian organization established in 1920 under the Indian Red Cross Society Act. The Chairman of the Society is Union Health Minister.

Nasha Mukht Bharat: Annual Action Plan (2020-21)**Why in news?**

- Nasha Mukht Bharat: Annual Action Plan (2020-21) for 272 Most Affected Districts was e-launched by Minister of State for Social Justice and Empowerment on the occasion of "International Day Against Drug Abuse and Illicit Trafficking".
- The Narcotics Control Bureau has identified the "most affected" 272 districts which mostly belong to Punjab, Haryana, Delhi, Uttar Pradesh and the North-East lead the states.
- These districts have been identified by the Centre as those hugely affected by drug abuse.
- The 'Nasha mukt Bharat' campaign was originally launched in 2015 by Shiromani Akali Dal in Punjab.

- According to the national list of districts most affected by substance abuse, 18 of the 22 districts in Punjab are among those identified by the NCB along with 10 out of Haryana's 22 districts.
- About 8,50,000 Indians inject drugs, about 4,60,000 children and 1.8 million adults need help for inhalant dependence and 7.7 million Indians require help for opioid dependence.

Components of Action Plan

1. Awareness generation programmes.
2. Focus on Higher Educational institutions, University Campuses and Schools.
3. Community outreach and identification of dependent population.
4. Focus on Treatment facilities in Hospital settings.
5. Capacity Building Programmes for Service Provider.

Scheme for Promotion of Academic and Research Collaboration (SPARC)**Why in news?**

- Researchers from the Indian Institute of Technology Madras (IITM) are collaborating with their counterparts in Germany under the Scheme for Promotion of academic and Research Collaboration or SPARC to develop alternative technologies to produce green hydrogen in anticipation of transition to hydrogen-based economy.
- This project aims to develop novel low cost electrocatalysts for hydrogen evolution reactions.
- Conventional methods of generating hydrogen result in a large quantity of carbon dioxide, a greenhouse gas that imposed serious environmental concerns.

About SPARC

- It is an initiative of the Ministry of Human Resource Development.
- The scheme aims at improving the research ecosystem of India's higher educational institutions by facilitating academic and research collaborations between Indian Institutions and the best institutions in the world.

- Indian Institute of Technology Kharagpur is the National Coordinating Institute to implement the SPARC programme.

Atma Nirbhar Uttar Pradesh Rojgar Abhiyan

Why in news?

- Prime Minister has launched a 125-day campaign called Atma Nirbhar Uttar Pradesh Rojgar Abhiyan through video conferencing that will give employment to migrant and daily wage workers in Uttar Pradesh.
- 5000 tool kits will also be distributed in the state under the Atma Nirbhar Bharat Initiative.
- This mega job scheme is part of the Garib Kalyan Rojgar Abhiyaan.
- The Campaign will focus on providing employment in a total of 31 districts of Uttar Pradesh.

How the Abhiyan will be implemented?

- Different departments of the Central & State government have been assigned to give under the campaign to those who need it.
- 25 works related to public infrastructure and for improvement of livelihood opportunities have been chosen for the campaign such as the construction of rural houses under Pradhan Mantri Awas Yojana, plantation drives, construction of roads under Pradhan Mantri Gram Sadak Yojana, etc.
- Work will be provided based on the skill set of the workers.

Navigating the new normal

Why in news?

- NITI Aayog, in partnership with Bill and Melinda Gates Foundation (BMGF), Centre for Social and Behavioural Change (CSBC), Ashoka University, and the Ministries of Health and WCD, launched a behaviour change campaign called 'Navigating the New Normal', and its website.

About the Campaign

- The aim is to develop an appropriate COVID safe behavior in the country, by making people adapt to wearing masks as a part of their daily routine.
- Until a vaccine is developed, it is essential for the citizens of the country to adopt certain behavioral changes in their day to day life by practicing hand hygiene, wearing masks, etc.
- The behaviour change campaign has been designed under the guidance of the Empowered Group 6 (this Group addresses issues related to COVID-19 response activities through effective solutions and formulation of plans).

The behaviour change campaign has two parts

- Web Portal (<http://www.covidthenewnormal.com/>): It contains behavioral norms required for being COVID-safe.
- Media Campaign: As the pandemic has restricted the movement of people across the country, people are spending more time watching television or on the internet. The aim of the behaviour change campaign will reach millions across the country through advertisements, animation for children, virtual awareness campaigns on social networking sites, etc.

International Day against Drug Abuse and Illicit Trafficking

Why in news?

- International Day against Drug Abuse and Illicit Trafficking 2020 is being observed on 26 June under the theme "Better Knowledge for Better Care". UNODC World Drug Report 2020 was also released on the occasion.
- In order to make societies across the world free of drug abuse, on 7th December 1987, by adopting resolution 42/112, the United Nations General Assembly declared 26th June to be observed as the International Day against Drug Abuse and Illicit Trafficking

Focus of 2020 Theme

- For countering the impact that drug has on our societies, it is important that cross border cooperation increases

among countries across the globe. This will help in restricting the negative effects of many kinds of misinformation that has caused challenges for the authorities involved in addressing the drug problem.

- Drug trafficking has hindered the overall development of many developing countries over the years, as the financially weaker sections of society fall prey to various drug or trafficking networks for monetary stability in life. For countering this, understanding has to improve for which better knowledge through greater international cooperation is important for countering these negative impacts on society.

Significance of the Day in 2020

- As per the World Drug Report 2020, if 2009 data are compared to the 2018's, there has been a 30 percent increase in the number of drug consumers across the globe. 269 million people have used drugs in 2018.
- At a time of a global pandemic, the day is to encourage individuals, private sectors, non-profit organizations, and the Governments across the world to continue their efforts in raising awareness about the adverse health consequences of drugs through social media campaigns.

World Drug Report 2020

- United Nations Office of Drugs and Crimes(UNODC) has released the World Drug Report 2020 on the occasion of International Day Against Drug Abuse and Illicit Trafficking.
- United Nations Office on Drugs and Crime(UNODC): It was established in 1997 through a merger between the United Nations Drug Control Programme and the Centre for International Crime Prevention.
- Aim: To assist Member States in addressing the issues of drugs, crime and terrorism.
- Headquarters: Vienna, Austria.

Annual TB Report 2020

Why in news?

- Annual TB Report 2020 has been released by the Union Minister for Health. He also released a Joint Monitoring

Mission (JMM) report, a manual on Direct Benefit Transfer (DBT) to TB patients under NIKSHAY system, a Training Module, and the quarterly newsletter NIKSHAY Patrika.

Highlights of Report

- 20.04 lakh notified TB patients in 2019 in India, which is a 14% increase from 2018.
- Private sector notifications increased by 35% with 6.78 lakh TB patients notified.
- Reduction in the number of missing cases to 2.9 lakh cases as against more than 10 lakhs in 2017.
- Proportion of children diagnosed with TB increased to 8% in 2019 compared to 6% in 2018.
- Expansion of treatment services has resulted in a 12% improvement in the treatment success rate of notified patients. For 2019, it is 81% compared to 69% in 2018.
- Provision of HIV testing for all notified TB patients increased from 67% in 2018 to 81% in 2019.

Nikshay system

- The country is achieving near-complete on-line notification of TB patients through the NIKSHAY system.
- It is developed and maintained by the Central TB Division (CTD), Ministry of Health and Family Welfare in collaboration with the National Informatics Centre (NIC), and the World Health Organization Country office for India.
- Nikshay is an information management system that acts like a one-stop solution for managing patients' information and monitor program activity and performance all over the country.

Commission on Sub-Categorization of OBCs

Why in news?

- The term of the Commission constituted under Article 340 of the constitution has been extended by the Union Cabinet, by 6 months i.e. upto 31 January 2021.

About Article 340

- It lays down conditions for the appointment of a Commission to investigate the conditions of the backward classes.
- The President may by order appoint a Commission consisting of such persons as he/she thinks fit to investigate the conditions of socially and educationally backward classes within India.

Other Constitutional Provisions

- Article 14: Guarantees equality before the law. That means un-equals cannot be treated equally.
- Article 16 (4): Provides that the State can make any provision for the reservation of appointments or posts in favour of any backward class of citizens who, in the opinion of the state, are not adequately represented in the services under the State.

Sub- categorisation

- National Commission for Backward Classes (NCBC) proposed the sub-categorisation of Other Backward Classes (OBCs) back in 2015.
- In October 2017, President appointed a commission to examine the issue of sub-categorisation of OBCs, chaired by retired Justice G. Rohini, to ensure social justice in an efficient manner by prioritising the Extremely Backward Classes (EBCs).
- Sub categorization of the OBCs will ensure that the more backward among the OBC communities can also access the benefits of reservation for educational institutions and government jobs.
- This decision prevents large sections of the creamy layer from taking advantage of the quota system to the detriment of the poorer sections among their own caste groups.
- In effect, the Union government is now seeking to ensure a more equitable distribution of reservation benefits by further differentiating caste groups coming under backward classes on the basis of their levels of social and economic backwardness.

YUKTI 2.0**Why in news?**

- The second phase of YUKTI has been launched in view of Coronavirus by the Union HRD Ministry to help systematically assimilating technologies having commercial potential and information related to incubated start-ups in country's higher education institutions.
- Earlier, the Minister had also launched the YUKTI (Young India combating COVID with Knowledge, Technology and Innovation) web portal.

About the portal

- The portal intends to cover the different dimensions of COVID-19 challenges in a very holistic and comprehensive way and is developed by the MHRD's Innovation Cell and AICTE.
- Through this portal, the Ministry will endeavor to ensure that students, teachers and researchers in higher educational institutions are getting appropriate support to meet the requirements needed to advance their technologies and innovations.
- The database will give a clear picture of the state of the innovation ecosystem of our higher educational institutions.
- This will also help the government to identify bottlenecks and formulate appropriate policies to strengthen the innovation ecosystem in the country.

YUKTI 2.0

- It is the logical extension of an earlier version of 'YUKTI'.
- 'YUKTI 2.0' has been created to help systematically assimilate technologies having commercial potential and information related to incubated startups in our higher education institutions
- YUKTI 2.0 initiative is a very important step in the direction of making Bharat Atma Nirbhar.
- Youngsters are very capable of thinking innovatively and there is the need to make every possible effort to help them convert their ideas into enterprises.

- More importantly, initiatives like YUKTI 2.0 will also help in fostering the culture of innovation and entrepreneurship in our academic institutions.
- YUKTI 2.0 needs to emerge as a Marketplace for connecting innovators with investors, so that innovative technologies can be taken forward for commercialization.
- The portal will prove to be a milestone towards promoting innovations and entrepreneurship culture in our higher education system and involving youth in nation building.

FabiFlu

Why in news?

- Glenmark Pharmaceuticals announced the introduction of an oral anti-viral drug for COVID-19 patients in the age group of 18 and 75 with mild to moderate symptoms. Nearly 80% of all positive cases in the country are in this category.
- Favipiravir can be used in COVID-19 patients with co-morbid conditions such as diabetes and heart disease with mild to moderate COVID-19 symptoms. It offers rapid reduction in viral load within 4 days and provides faster symptomatic and radiological improvement. Of most importance, Favipiravir has shown clinical improvement of up to 88% in COVID-19 mild to moderate COVID-19 cases
- Glenmark, a research-led, is an integrated global pharmaceutical company and it has received manufacturing and marketing approval from India's drug regulator Drugs Controller General of India (DCGI), making FabiFlu the first oral Favipiravir-approved medication in India for the treatment of COVID-19.
- Favipiravir is approved in Japan since 2014 for the treatment of novel or re-emerging influenza virus infections. It has a unique mechanism of action: it is converted into an active phosphoribosylated form (favipiravir-RTP) in cells and recognized as a substrate by viral RNA polymerase, thereby inhibiting RNA polymerase activity.

Sixth International Yoga Day

Why in news?

- Observed on June 21st every year. The UN proclaimed June 21 as International Day of Yoga by passing a resolution on December 11, 2014, during the 69th session of the General Assembly.
- This year, due to social distancing measures adopted by most countries, the theme set by the United Nations is "Yoga for Health – Yoga at Home".
- WHO mentions yoga as a means to improve health in its Global Action Plan on Physical Activity 2018–2030: More active people for a healthier world.

QS World University Ranking 2021

Why in news?

- 17th edition of the QS World University rankings has been released.

What is QS World University rankings?

- It is an annual publication of University rankings by Quacquarelli Symonds (QS)- A british company specialising in the analysis of higher education institutions around the world.
- Previously, it was called Times Higher Education – QS world University rankings. The name changed since 2010.
- It is the only international ranking to have received the approval of International Ranking Expert Group (IREG).
- It rates the worlds top 1000 universities.

How are universities ranked?

To rank institutions, QS uses six indicators:

1. Academic reputation.
2. Employer reputation.
3. Faculty/student ratio.
4. Citations per faculty.
5. International faculty ratio.
6. International student ratio.

I-LAB (Infectious Disease Diagnostic LAB)**Why in news?**

- The Minister for Science & Technology inaugurated and flagged off India's first I-Lab (Infectious disease diagnostic lab) for COVID-19 testing in rural and inaccessible areas of India.
- This mobile testing facility will be deployed through the DBT testing hubs to remote regions of the country for Covid testing.
- This I-Lab has been created in a record time of 8 days by the Andhra Pradesh Med-tech Zone (AMTZ) team with the support of DBT under the National Biopharma Mission being implemented by the Public Sector BIRAC.
- I-Lab has biosafety facility and is capable of performing RT-PCR as well as ELISA tests.

Dexamethasone**Why in news?**

- Researchers leading a major clinical trial in the UK announced that the drug dexamethasone had been found to cut death rates by around a third in the most severely ill among Covid-19 patients.
- It is an anti-inflammatory drug, commonly used to treat conditions in which the body's immune system does not function properly, and causes inflammation and tissue damage.
- Dexamethasone reduces the production of the chemicals that cause inflammation and also reduces the activity of the immune system by affecting the way white blood cells function.
- It falls in a category called corticosteroids, which closely mimic cortisol, the hormone naturally produced by the adrenal glands in humans.

Sahakar Mitra Scheme**Why in news?**

- An initiative by National Cooperative Development Corporation (NCDC)

- Gives an opportunity to professionals from academic institutions to develop leadership and entrepreneurial roles through cooperatives as Farmers Producers Organizations (FPO).
- Assist cooperative institutions access new and innovative ideas of young professionals. The interns gain experience of working in the field giving confidence to be self-reliant.
- It is expected to be a win-win situation both for cooperatives as well as for the young professionals.
- Each intern will get financial support over a 4 months internship period.
 1. Professional graduates in disciplines such as Agriculture and allied areas, IT etc. will be eligible for internship.
 2. Professionals who are pursuing or have completed their MBA degrees in Agri-business, Cooperation, Finance, International Trade, Forestry, Rural Development, Project Management etc. will also be eligible.

Aarogyapath**Why in news?**

- AarogyaPath, a CSIR National Healthcare Supply Chain Portal that aims to provide real-time availability of critical healthcare supplies has been launched.
- It was launched recently to serve manufacturers, suppliers and customers to effectively deal with the Covid-19 pandemic.

Jaya Jaitly Task Force**Why in news?**

- Constituted by Women and Child Development Ministry.
- To examine issues related to age of motherhood, lowering Maternal Mortality Rate and improvement of nutritional levels.
- Headed by Jaya Jaitly and it will submit its report by 31st July of next month.
- The mandate of the task force involves examining the correlation of age of marriage and motherhood with health, medical well-being and nutritional status of mother and

neonate/infant/child, during pregnancy, birth and thereafter.

World Food Safety Day

Why in news?

- Second World Food Safety Day (WFSD) was celebrated on 7 June 2020.
- Theme: "Food safety, everyone's business".
- WFSD was first celebrated in 2019, to strengthen commitment to scale up food safety made by the Addis Ababa Conference and the Geneva Forum in 2019 under the umbrella of "The Future of Food Safety". Through the World Food Safety Day, WHO in collaboration with the Food and Agriculture Organization of the United Nations (FAO) pursues its efforts to mainstream food safety in the public agenda and reduce the burden of foodborne diseases globally.

World Day against Child Labour

Why in news?

- Observed every year on June 12th.
- Intended to foster the worldwide movement against child labour in any of its forms.
- First launched in 2002 to raise awareness and prevent child labour by the International Labour Organisation.
- Theme: COVID-19 - Protect children from child labour now, more than ever".
- UN Sustainable Development Goal Target 8.7 set by the international community calls for an end to child labour in all its forms by 2025.

NIRF Ranking released

Why in news?

- National Institutional Ranking Framework (NIRF) was started in 2015 for ranking institutions of higher education in different categories and domains of knowledge.
- It encourages institutes to compete against each other and simultaneously work towards their growth.

- These rankings attract foreign students, giving a solid base for the 'Study in India' programme for the growth of higher education in India.
- It is also one of the criteria for private institutions assessment for the Institutions of Eminence (IoE) Scheme.

Parameters used for ranking institutions

1. Teaching, Learning and Resources.
2. Research and Professional Practices.
3. Graduation Outcomes.
4. Outreach and Inclusivity.
5. Peer Perception.

Fifth consecutive edition of these rankings

- This year 'Dental' category has been introduced for the first time bringing the total tally to 10 categories/subject domains.
- In international rankings, Indian institutions struggle on the "internationalisation" parameter in global rankings. It is due to the high weightage given to the perception which is a subjective parameter.
- Whereas, in NIRF, 90% of the parameters are completely objective and fact-based, while only 10% is based on the subjective parameter of perception by academic peers and employers.

Periodic Labour Force Survey

Why in news?

- PLFS is India's first computer-based survey which provides estimates of key employment and unemployment indicators such as the labour force participation rate, worker population ratio, proportion unemployed and unemployment rate in rural households annually and on a quarterly basis for the urban households.
- The PLFS also gives the distribution of educated and unemployed people, which in turn can be used as a basis for skilling of youth to make them more employable by industry.

- The survey was launched in 2017 and the first annual report was released (July 2017-June 2018), covering both rural and urban areas, in May 2019.

Key findings

- India's unemployment rate fell between July 2018 and June 2019 to 5.8% from 6.1% during the same period of 2017-18, even as the labour force participation rate rose to 37.5% from 36.9%.
- The worker population ratio increased from 34.7% in the 2017-18 to 35.3% as against.
- Urban unemployment rate decreased from 7.8% to 7.7% in 2018-19 and in rural India, from 5.3% to 5%.
- Female participation rate improved in both urban and rural India during the period under review, going up from 17.5% the year before to 18.6% in 2018-19.

Challenges

- To retain the falling trend in unemployment rate in 2019-20, which has witnessed a long nationwide lockdown between March and June to prevent the spread of Covid-19, resulting in job losses across sectors.
- According to monthly data from the Centre for Monitoring Indian Economy, unemployment rate in India shot up significantly from 7.87% in June 2019 to 23.48% in May 2020.

TULIP Portal

Why in news?

- TULIP is an Urban Learning Internship Program for providing opportunities to fresh Graduates in all ULBs & Smart Cities has been launched.
- It has been conceived pursuant to the Budget 2020-21 announcement by the Finance Minister under the theme 'Aspirational India'.
- It would assist in enhancing the value-to-market of India's graduates and help create a potential talent pool in diverse fields such as urban planning, transport engineering, environment, municipal finance etc.

- It will lead to infusion of energy and fresh ideas with engagement of youth in co-creation of solutions for solving India's urban challenges.
- This launch is also an important stepping stone for fulfilment of MHRD and AICTE's goal of 1 crore successful internships by 2025.

Analysis

- This program will help reap the benefits of India's demographic dividend because of the largest working-age population in the world in the coming years.
- India has a substantial pool of technical graduates for whom exposure to real world project implementation and planning is essential for professional development.
- General education may not reflect the depth of productive knowledge present in society. Instead of approaching education as 'doing by learning,' our societies need to reimagine education as 'learning by doing.'
- Thus TULIP would help fulfil twin goals of providing interns with hands-on learning experience as well as infusing fresh energy and ideas in the functioning of India's ULBs and Smart Cities.

Science and Technology

International Asteroid Day

Why in news?

- International Asteroid Day 2020 was celebrated on 30 June.
- This Day aims to raise public awareness about the asteroid impact hazard and to inform the public about the crisis communication actions to be taken at the global level in case of a credible near-Earth object threat.

Asteroids

- They are made up of metals and rocks and orbit the Sun and are small bodies in the solar system.
- They tend to have shorter and elliptical orbits.
- They do not produce tail atmosphere or a coma.

- The asteroid belt is a torus-shaped region, located roughly between the orbits of the planets Jupiter and Mars.

First Tourist on Space Walk in 2023

Why in news?

- Russian Company- S.P. Korolev Rocket and Space Corporation Energia (RSC Energia, a part of the Roscosmos (Russia's space agency)) has announced that it will take the first tourist for a spacewalk in 2023.
- The announcement came after RSC Energia has signed a deal with Space Adventures (space tourism company in the United States of America).

About

- As per the deal, two tourists will be sent to the International Space Station (ISS) in 2023 under the joint agreement of both the companies.
- From the side of RSC Energia, one of the two tourists will be able to do a spacewalk together with a cosmonaut from Roscosmos.
- Between 2001 to 2009, Space Adventures along with the Roscosmos has taken eight tourists to the ISS.
- In 2001, Dennis Tito (a businessman from the USA) became the World's First Private Space Explorer (first paying space tourist in the world).
- No other space tourist program has been conducted in the world since 2009. None of the space tourists till date have done a spacewalk.

Background

- On 30 May 2020, Falcon 9 rocket of SpaceX successfully carried two astronauts of NASA to the ISS. SpaceX (the United States-based space transportation services and aerospace manufacturer company), which broke the monopoly of the Russian space agency (Roscosmos)
- Until 30 May 2020, only Roscosmos had the technology to successfully able to carry Humans to space. All Human Space Flight missions were conducted with the help of Russian crew spacecraft Soyuz.

- In February 2020, SpaceX has signed an agreement with Space Adventures. Under the agreement, both the companies have planned to carry a space tourism trip next year. The number of space tourists for the trip will be 3. Spacewalk for the tourists under this trip is not a part of the agreement yet.

Ananya, disinfectant spray

Why in news?

- The Defence Institute of Advanced Technology (Pune) has developed a nano-technology based disinfectant spray named Ananya, which is effective in disinfecting all types of surfaces, to combat COVID-19 pandemic.
- 'Nano-technology assisted formulation' can stop the COVID-19 from entering the human body, and neutralise the virus when it comes in contact with this formulation layer.

About

- The spray can be used on masks, PPEs, hospital linens, and other likely contaminated surfaces like medical instruments, elevator buttons, door knobs, corridors and rooms.
- It has been developed by synthesising silver nanoparticles and a commercially available drug, Ampicillin.
- Properties of this material have been tested by two methods – Nuclear Magnetic Resonance Spectroscopy and Infrared Spectroscopy.
- The formulation has the ability to neutralise the outer protein of the virus and the silver nano-particles have the ability to rupture the membrane of the virus, thereby making it ineffective.
- This is a water based spray and will be effective for more than 24 hours.
- This formulation adheres very effectively to fabric, plastic and metallic objects, and its toxicity to humans is negligible.
- The shelf life of the spray is said to be more than six months.

Nanozymes

Why in news?

- A research team at the Indian Institute of Science (IIS, Bengaluru) has developed nanozymes that can destroy the cell membrane of bacteria by directly targeting its phospholipids.
- Nanozymes are nanomaterials that can disintegrate the cell membranes of a range of diseases causing bacteria.
- The nanomaterial is tested on several potentially pathogenic bacteria causing typhoid, gastroenteritis, dysentery, cholera and pneumonia. It was found that the nanozyme stopped growth and killed the microbes.
- Nanozymes can replace the antibiotics that have become ineffective as several bacteria have developed resistance to them by producing their own enzymes.

Extreme Helium Star (EHe)

Why in news?

- A study by the Indian Institute of Astrophysics (IIA), which detected the presence of singly ionised fluorine for the first time in the atmospheres of hot Extreme Helium Stars, shows that the main formation of these objects involves a merger of a carbon-oxygen (CO) and a Helium (He) white dwarf.

About

- An extreme helium star or EHe is a low-mass supergiant that is almost devoid of hydrogen, the most common chemical element of the universe.
- There are 21 of them detected so far in our galaxy.
- Since there are no known conditions where stars devoid of hydrogen can be formed from molecular clouds, it is theorized that they are the product of the mergers of helium-core and carbon-oxygen core white dwarfs.

Significance of the study

- Clues to the evolution of extreme helium stars require accurate determinations of their chemical composition, and the peculiarities, if any, become very important.

- Fluorine plays a very crucial role in this regard to determine the actual evolutionary sequence of these hydrogen deficient objects.
- The scientists explored the relationship of hot EHe (EHe having effective temperature $\geq 14000\text{K}$), with the cooler EHe, based on their fluorine abundance and spotted it in the former, thus establishing an evolutionary connection across a wide range of effective temperature.
- By comparing the observed fluorine abundances with other abundances of the key elements, the scientists could determine the formation channels responsible for fluorine enrichment.
- The detection of enhanced fluorine abundances in the atmospheres of hot EHe solves a decade-old mystery about their formation.

Hydrogen-Deficient Stars

- Extreme helium stars form a sub-group within the broader category of hydrogen-deficient stars.
- The latter includes cool carbon stars like R Coronae Borealis variables, helium-rich spectral class O or B stars, population I Wolf-Rayet stars, AM CVn stars, white dwarfs of spectral type WC, and transition stars like PG 1159.

Automated Lung Ultrasound (LUS) for COVID-19

Why in news?

- An automated lung ultrasound (LUS), first of its kind in India, has been developed by the IIT-Palakkad for COVID-19 screening and monitoring through cloud-based image analysis and scoring system.
- The app is now available for clinicians to perform automated analysis by just uploading the ultrasound video.
- A nursing assistant (in the absence of a skilled clinician), following a simple protocol of LUS, acquires the lung images and transfers the images to the cloud.
- The images are analysed over the cloud and scores are assigned according to certain criteria either for the type of infection or its severity.
- The approach is not only restricted to COVID-19 detection but also helps to identify other lung infections.

SATYABHAMA**Why in news?**

- SATYABHAMA (Science and Technology Yojana for Aatmanirbhar Bharat in Mining Advancement) Portal has been launched by the Union Minister for Coal for Science and Technology Programme Scheme of Ministry of Mines.

About

- Its aim is to promote research and development in the mining and minerals sector.
- The portal has been designed, developed and implemented by the National Informatics Centre (NIC).
- The portal is also integrated with NGO Darpan Portal of NITI Aayog.
- It has been launched to increase efficiency and effectiveness of the Science and Technology Programme Scheme.
- Under the Science and Technology Programme Scheme, the Ministry of Mines promotes research in applied geosciences, mineral exploration, mining and allied areas, mineral processing, optimum utilization and conservation of the mineral resources of the country.

Global Partnership on Artificial Intelligence (GPAI)**Why in news?**

- India joined the league of leading economies including USA, UK, EU, Australia, Canada, France, Germany, Italy, Japan, Mexico, New Zealand, Republic of Korea, Singapore to launch the Global Partnership on Artificial Intelligence (GPAI or Gee-Pay).
- It has joined the as a founding member to support the responsible and human-centric development and use of AI.

About

- GPAI is an international and multi-stakeholder initiative to guide the responsible development and use of AI, grounded in human rights, inclusion, diversity, innovation, and economic growth.

- This is also a first initiative of its type for evolving better understanding of the challenges and opportunities around AI using the experience and diversity of participating countries.

- GPAI will be supported by a Secretariat, to be hosted by Organization for Economic Cooperation and Development (OECD) in Paris, as well as by two Centers of Expertise- one each in Montreal and Paris.

Lunar Polar Exploration**Why in news?**

- NASA finalized the contract, which is worth \$187 million, to Orbital Science Corporation of Dulles, Virginia, which is a wholly-owned subsidiary of Northrop Grumman Space.
- The contract for the initial crew module of the agency's Gateway lunar orbiting outpost.

About

- NASA has issued this contract to design the habitation and logistics (HALO) support for the Gateway, which is a part of NASA's Artemis program that aims to send the first woman and the next man to the Moon by 2024.
- Essentially, the Gateway is a small spaceship that will orbit the Moon, meant for astronaut missions to the Moon and later, for expeditions to Mars.
- It will act as a temporary office and living quarters for astronauts, distanced at about 250,000 miles from Earth.
- The spaceship will have living quarters, laboratories for science and research and docking ports for visiting spacecraft.
- Further, astronauts will use the Gateway at least once per year and not stay around the year like they do on the International Space Station (ISS). Compared to the ISS, the Gateway is much smaller, while the ISS is about the size of a six-bedroom house.
- NASA has targetted the completion of the Gateway for 2026, while work on the spaceship is already underway. By 2022, NASA plans to ready the power and propulsion for the spaceship, which will be launched on a partner-provided commercial rocket.

Nature Index 2020**Why in news?**

- Nature Index ratings for the year 2020 have been released.

Highlights of Index

- The top five positions have gone to the United States of America, China, Germany, United Kingdom and Japan.
- Three of the autonomous institutions of the Department of Science & Technology, Government of India have found their place among top 30 Indian Institutions.
- These are the Indian Association for the Cultivation of Science (IACS), Kolkata at 7th position, Jawaharlal Nehru Centre for Advanced Scientific Research (JNCASR), Bangalore at 14th position and S.
- N. Bose National Centre for Basic Sciences, Kolkata at 30th position.
- Globally the top-rated Indian institutions in this list are Council of Scientific and Industrial Research (CSIR), a group of 39 institutions at the 160th position and Indian Institute of Science (IISc) Bangalore at the 184th position.

About Index

- The Nature Index is a database of author affiliations and institutional relationships.
- The database is compiled by Nature Research, a division of the international scientific publishing company Springer Nature that publishes academic journals.
- It tracks contributions to research articles published in 82 high-quality natural science journals, chosen by an independent group of researchers.
- It serves as an indicator of high-quality research in the Natural and Physical Sciences.
- The Index provides a close to real-time proxy of high-quality research output and collaboration at the institutional, national and regional level.
- The Index is updated monthly and also releases annual tables of country.

- The Index provides several metrics to track research output and collaboration.
- These include article count, fractional count, and multilateral and bilateral collaboration scores.

International Relations
Nepal-Bharat Maitri**Why in news?**

- A Memorandum of Understanding (MoU) was signed for the construction of a sanitation facility at the Pashupatinath Temple, Kathmandu under Nepal-Bharat Maitri: Development Partnership.
- This initiative is another milestone in strengthening cultural ties and people-to-people contacts between the two countries.
- In 2018, Nepal-Bharat Maitri - Pashupati Dharmashala was inaugurated in Kathmandu.
- The facility will be implemented by Kathmandu Metropolitan City
- India has pledged to extend financial assistance amounting to Rs. 2.33 crore.

Kholongchhu Hydroelectric Project**Why in news?**

- The Concession Agreement for the 600 MegaWatt Kholongchhu (Joint Venture) Hydroelectric Project was signed between Bhutan government and Kholongchhu Hydro Energy Limited.
- Kholongchhu Hydroelectric Project is a run-of-the-river project located on the lower course of the Kholongchhu River in Trashiyangtse district in eastern Bhutan.
- The project will be implemented by Kholongchhu Hydro Energy Limited, a joint venture company formed between Druk Green Power Corporation(DGPC) of Bhutan and Satluj Jal Vidyut Nigam Limited(SJVN) of India.

Day of the Seafarer 2020**Why in news?**

- This year, the annual Day of the Seafarer (DoS) is celebrating its 10th anniversary on 25 June under the theme "Seafarers are Key Workers".
- The 2020 Day of the Seafarer campaign pays tribute to seafarers, acknowledging their sacrifice and the issues they face. Many seafarers have been away from home for months and are unsure when they will be able to return home due to travel restrictions.
- The campaign also seeks to raise awareness of the work achieved by seafarers in response to the pandemic and to thank them for their contribution. Everyone is invited to recognize that the ability of seafarers to deliver vital goods is central to responding to, and eventually overcoming, this pandemic.
- The campaign encourages everyone to treat seafarers with the respect and dignity they deserve so that they can continue to provide their vital services to keep world trade moving.
- Seafarers are on the frontline of the COVID-19 pandemic, playing an essential role in maintaining the flow of vital goods, such as food, medicines and medical supplies. However, the crisis has led to difficult working conditions for seafarers, including uncertainties and difficulties about port access, re-supply, crew changeovers and repatriation.

Arms Trade Treaty (ATT)**Why in news?**

- China will join the UN Arms Trade Treaty that is designed to control the flow of weapons into conflict zones. It comes after U.S. President Donald Trump announced plans last year to pull the U.S. out of the agreement.
- The Communist Party leadership's top legislative body voted to adopt a decision on joining the UN Arms Trade Treaty that is designed to control the flow of weapons into conflict zones.

- It comes after US President Donald Trump announced plans last year to pull the United States out of the agreement -- which entered into force in 2014.
- It also stated that China only exports such products to sovereign countries and not to non-state actors.
- A study by the Stockholm International Peace Research Institute said China is now the second largest arms producer in the world, behind the US.

About ATT

- It is a multilateral treaty that regulates the international trade in conventional weapons.
- The treaty requires member countries to keep records of international transfers of weapons and to prohibit cross-border shipments that could be used in human rights violations or attacks on civilians.
- It entered into force on 4th December 2014.
- The ATT is an attempt to regulate the international trade of conventional weapons for the purpose of contributing to international and regional peace; reducing human suffering; and promoting cooperation, transparency, and responsible action by and among states.
- The treaty was negotiated in New York City at a global conference under the auspices of the United Nations (UN) in 2012.

United Nations Relief and Works Agency for Palestine Refugees (UNRWA)**Why in news?**

- India has announced contributing \$10 million to the UNRWA over the coming two years.
- It was announced during the virtual Ministerial Pledging Conference for UNRWA.
- Capacity enhancement through training and building durable institutions is a major plank of its developmental assistance to Palestine, according to India.
- This contribution would be an additional amount over and above USD 5 million contributions announced for 2020.
- India is helping countries in need of critical, life-saving drugs amidst COVID-19 pandemic.

United Nations Relief and Works Agency (UNRWA)

- It is a United Nations agency established by the General Assembly in 1949.
- It supports the relief and human development of Palestinian refugees across in the field of education, health care, relief and social services, camp infrastructure and improvement, protection and microfinance.
- It works to assist and provide relief to Palestine refugees in Jordan, Lebanon, Syria, West Bank, including East Jerusalem and the Gaza Strip.
- It is funded almost entirely by voluntary contributions and financial support and currently serves 5.4 million Palestinian refugees 20 per cent of the world's refugees.

World Refugee Day**Why in news?**

- World Refugee Day was observed on 20 June 2020 with the theme "Every Action Counts".
- This day is dedicated to raising awareness of the situation of refugees throughout the world.
- Devastating conflicts and persecution uproot thousands of people from their homes and countries every year. According to the United Nations, every minute, 20 people are forced to leave behind everything, and escape conflict and war.

Who is a refugee?

- According to the United Nations 1951 Refugee Convention, people who fled their homes and countries due to "a well-founded fear of persecution because of his/her race, religion, nationality, membership of a particular social group, or political opinion" is a refugee.
- On December 4, 2000 the United Nations General Assembly adopted a resolution relating to the status of refugees, and decided that June 20 would be marked as World Refugee Day, to spread awareness and honour the resilience of refugees.

COVID-19 pandemic and refugee crisis

- The UNHCR is working with governments to help the displaced people by stepping up sanitation and hygiene services. It is also working with people to create awareness. It is important to ensure that they are protected and get proper treatment if infected by the deadly virus, says the global body.
- Apart from refugees, there are other UN-designated displaced persons such as asylum seekers, internally displaced people, or IDPs, who have not crossed international borders and stateless people who do not have a nationality.

COVID-19 active response and expenditure support programme**Why in news?**

- Indian Government and the Asian Infrastructure Investment Bank (AIIB) signed a \$750 million "COVID-19 Active Response and Expenditure Support Programme" to help India to strengthen its response to the adverse impacts of the COVID-19 pandemic on vulnerable households.
- The project is being financed by the AIIB and Asian Development Bank (ADB) in the amount of \$2.250 billion, of which \$750 million will be provided by AIIB and \$1.5 billion will be provided by ADB.
- The primary beneficiaries would be families below the poverty line, farmers, healthcare workers, women, women's SHGs, widows, PWDs, senior citizens, low wage earners etc.

About AIIB

- It is a multilateral development bank with a mission to improve social and economic outcomes in Asia, began operations in January 2016.
- AIIB has now grown to 102 approved members worldwide.
- AIIB is a brainchild of China. The prime aim of the AIIB is infrastructure development.
- By establishing interconnectivity across Asia through advancement in the construction of infrastructure and

other productive services, the AIIB can stimulate growth and economic development in the Asian Region.

SIPRI Yearbook 2020

Why in news?

- The Stockholm International Peace Research Institute (SIPRI) launched SIPRI Yearbook 2020, which assesses the current state of armaments, disarmament and international security.

Key Findings

- The nine nuclear-armed states—the United States, Russia, the United Kingdom, France, China, India, Pakistan, Israel and North Korea—together possessed 13,400 nuclear weapons at the start of 2020, a decrease from the 13 865 nuclear weapons at the beginning of 2019.
- Despite an overall decrease in the number of nuclear warheads in 2019, all nuclear weapon-possessing states continue to modernize their nuclear arsenals.
- With 6,375 and 5,800 warheads, Russia and the United States together possess more than 90% of global nuclear weapons.
- China and Pakistan possess more nuclear weapons than India. It pegs the number of nuclear warheads in the Chinese arsenal at 320, while the nuclear forces of Pakistan and India are estimated to have 160 and 150 weapons, respectively. In 2019, India had 130-140 warheads.
- China is developing a nuclear triad for the first time, made up of new land- and sea-based missiles and nuclear-capable aircraft.

Inter-Parliamentary Alliance on China

Why in news?

- Senior lawmakers from eight democracies including the US have united to counter Communist China. They have launched the Inter-Parliamentary Alliance on China (IPAC).

IPAC

- IPAC is a new cross-parliamentary alliance to help counter what the threat posed by China's growing influence on global trade, security and human rights.
- The participating nations include the US, Germany, UK, Japan, Australia, Canada, Sweden, Norway, as well as members of the European parliament.
- It is an international cross-party group of legislators working towards reform on how democratic countries approach China.
- The group aims to “construct appropriate and coordinated responses, and to help craft a proactive and strategic approach on issues related to China.”

India vows \$15 mn to GAVI

Why in news?

- Recently, India pledged 15 million dollars to Gavi, the international vaccine alliance, during the virtual Global Vaccine Summit hosted by the UK Prime Minister.
- Over 50 countries, business leaders, UN agencies, civil society, government ministers, Heads of State and country leaders participated in this virtual summit.

Background

- Since the outbreak of COVID-19, there have been serious efforts of vaccine development around the globe. As many as 100 different types of vaccines are being developed with some already in phase 2 of clinical trials.
- Many governments, pharma and biotech companies are collaborating on different fronts of vaccine development as it requires a great deal of expertise and investment.

Key highlights of the announcement

- India stands in solidarity with the world in these challenging times as our civilisation teaches to see the world as one family and country had tried to live up to this teaching
- PM of India mentioned that India shared the country's available stocks of medicines with over 120 countries. He said by forging a common response strategy in its immediate neighbourhood and by providing support to

countries that sought it, while catering to its own population simultaneously.

- He mentioned that the COVID-19 pandemic has exposed the limitations of global cooperation and for the first time in recent history, the humankind faces a clear common enemy which requires a common strategy to win over.
- He mentioned Mission Indradhanush, which aims to ensure full vaccination of the country's children and pregnant women and informed them about the added six new vaccines to the National Immunization Programme of India.
- He mentioned that India is also the world's foremost producer of vaccines and it has contributed to the immunization of about 60 per cent of the world's children and India recognizes and values the work of GAVI.

What is GAVI?

- It was created in 2000, with headquarters at Geneva Switzerland, Gavi is an international organisation – a global Vaccine Alliance, bringing together public and private sectors with the shared goal of creating equal access to new and underused vaccines for children living in the world's poorest countries.
- Its mission is to save lives, reduce poverty, protect the world against the threat of epidemic and work towards achieving SDGs.
- Gavi's impact draws on the strengths of its core partners, the World Health Organization, UNICEF, the World Bank and the Bill & Melinda Gates Foundation.
- Gavi has helped in vaccination of more than 760 million children in world' poorest countries preventing more than 13 million deaths.
- Gavi also works with donors, including sovereign governments, private sector foundations and corporate partners, NGOs etc.

India-Pakistan Ties

Why in news?

- The shelling and the retaliations along the Line of Control (LoC) with Pakistan are a matter of concern because it has

been allowed to go on so long as to become an everyday occurrence.

- All of May 2020, the Pir Panjal range, which fronts the Kashmir Valley, has seen mortar and small arms firing.

Issue of Concern

- This has been a worrying trend, as when the shells reach deeper they fall in residential areas, in villages like Churunda and Silikote.
- When shells begin raining, villagers panic, leave their homes and run further, to temporary shelters.

Way Ahead

- This additional disruption to life in the aftermath of the dilution of Article 370 in August 2019 and the COVID-19 lockdown, is something that should be addressed with urgency.
- Shelling should not be allowed to be a regular occurrence.
- Ceasefire with Pakistan along the Line of Control is obviously not working, and the government needs to build bomb shelters for civilians until normalcy returns.
- India needs to re-engage with Pakistan and end the ceasefire violations along the border.

India-Nepal Ties

Why in news?

- India and Nepal have reached a new low in bilateral relations when both countries are facing a humanitarian crisis.
- The Nepal government's decision to pass the constitutional amendment ratifying a change in its maps that include Lipulekh, Kalapani and Limpiyadhura, territories that India controls, marks a decidedly new phase in ties.
- Nepal's purposeful manner in pursuing the amendment at exactly the same time as the India-China border stand-off bolsters the belief among some in India that Nepal is speaking with confidence borne from Beijing's backing.
- Regardless of the truth of those accusations, or who is more responsible for the downslide in ties, the speed with

which the constitutional amendment was passed has left little space for diplomacy now.

Issue of Concern

- In May, the Defence Minister of India inaugurated the Link Road to Mansarovar Yatra. The announcement and its timing surprised even the keen observers of India-Nepal relations.
- No one thought that a road project in this territory would get inaugurated so urgently and through video conferencing.
- The announcement immediately put the Nepal government, the people and political players there on high alert.
- Nepal's sharp reaction was unexpected — the road was being built for years, so for it to pretend that it was unaware of this development and therefore surprised at its inauguration defies logic. As per the Sugauli Treaty (1816), all the territories east of Kali (Mahakali) River, including Limpiyadhura, Kalapani and Lipu Lekh, belong to Nepal.
- The Oli government, which seeks to build its legacy by overturning what it calls "unequal" agreements made by the monarchy, could also cause a security nightmare for India if it opens up other parts of their long boundary, and reverses old commitments on open and unsecured border posts.

Way Ahead

- The time of a pandemic is not the time to have a hostile neighbourhood.
- At this moment, India should ideally lead in creating momentum for deeper regional and sub-regional cooperation in South Asia. Ironically, the recent developments with Nepal have been the opposite of that.
- It is time to repose faith in constructive dialogue with empathy to resolve any matter that disturbs the calm between the two countries.
- In good and bad times, India and Nepal have to live together. Diplomatic dialogue should be resumed at the earliest possible.

- Embassies on both sides should be allowed to function freely.
- Nothing of the sort that happened in 2015 should be repeated now. India should not shy away from a dialogue even during the COVID-19 crisis.

Internal Security

Maareech

Why in news?

- The Indian Navy has inducted an advanced anti-torpedo decoy system known as 'Maareech', which is capable of being fired from all frontline ships.

About

- It has been designed and developed indigenously by the Defence Research and Development Organization (DRDO)
- It is capable of detecting, locating and neutralizing incoming torpedo.
- This induction stands testimony to the joint resolve of the Indian Navy and DRDO towards indigenous development of defence technology.
- It has also given a major fillip to the "Make in India" initiative and the country's resolve to become "atmanirbhar" (self-reliant) in niche technology.
- Bharat Electronics Limited, a defence PSU, will undertake the production of this decoy system.
- Anti-submarine warfare capability of the Indian Navy has received a major boost today with the conclusion of a contract for advanced torpedo decoy system 'Maareech' capable of being fired from all frontline warships.

CERT-In warns of large-scale phishing attack

Why in news?

- Indian Computer Emergency Response Team (CERT-In), the government's cyber watchdog, has warned of large-

scale phishing attack across the country, taking advantage of the Covid-19 pandemic.

- The warning is based on the findings of Cyfirma, a Singapore based cyber intelligence firm and has been attributed to the notorious North Korea backed cybercrime group- Lazarus Group.
- The attackers will send fake emails, social media posts or text messages related to COVID-19 to the targets, in order to steal their credentials, financial information or compromise their computers.
- These phishing campaigns will impersonate Government agencies, local departments that are responsible for disbursement of the government financial aid.
- These malicious emails could be sent through spoofed addresses – e.g.- ncov@gov.in. They could include links or files that can deliver malicious code.

What are Phishing Campaigns?

- Coined in the mid 90s, the term phishing refers to fraudulent attempts to steal money and sensitive information such as usernames, passwords or credit card details of people or organisations by impersonating oneself as a trustworthy entity through an electronic communication means.
- Phishing attacks are cyber security threats performed through social engineering techniques.
- Common motives behind phishing: Financial Access, Identity theft, Installing malware – virus, worm, trojan horse, spyware, ransomware, Spreading misinformation and disinformation, Psychological Warfare – Through Vishing (Using Telephone) and Smishing (SMS), Sexual exploitation of minors
- Types/techniques of phishing: Spear Phishing, Whaling, Catfishing/Catphishing, Clone Phishing, Voice Phishing, Link Manipulation, and Website Forgery

Deep Submergence Rescue Vehicle (DSRV) Complex

Why in news?

- The Deep Submergence Rescue Vehicle (DSRV) Complex was inaugurated at Visakhapatnam.

- The complex is equipped with state of the art facilities and has been designed to accommodate the newly inducted submarine rescue system and store the DSRV assets in the rescue-ready state.

About DSRV

- The system consists of a Submarine Rescue Vessel, a Remote Operations Vehicle, Side Scan Sonar and other associated equipment.
- It has Diver Decompression Chambers and hyperbaric medical equipment to decompress submariners after being rescued from a sunken submarine.
- This system has the capability to be mobilised by air or road, to facilitate submarine rescue operations even at distant locations in an effective and rapid manner.
- The Indian Navy has inducted two such systems which will provide rescue cover to submarines on the West and East coast of India respectively.
- At present, there are around 40 nations that operate submarines, out of which only a few have any form of submarine rescue capability, India being one of them.
- The third-generation submarine rescue capability of Indian Navy can be sought by the other navies for assistance during contingencies in the Indian Ocean Region (IOR) which may prove a gamechanger for India's role in IOR.

Data Practices misinterpreted by Google

Why in news?

- The plaintiffs have filed the lawsuit on behalf of Google users in the U.S. at the U.S. District Court for the Northern District of California. They allege Google has violated the federal wiretap law as well as a California privacy law.
- A proposed class action lawsuit filed against Google alleges that the Internet search giant tracks and collects browsing data “no matter what” steps users take to safeguard their privacy.

Issue

- The plaintiffs allege that Google tracks, collects, and identifies the browsing data of even those users who browse the Web privately via, say, the Incognito mode.
- They claimed that Google “accomplishes its surreptitious tracking” through near ubiquitous tools such as Google Analytics, Google Ad Manager, and other plug-ins.
- Google Analytics and other tools are implemented only when their code is embedded into the code of existing websites. The petitioners reckon “over 70% of online websites and publishers on the internet” employ Google Analytics.
- When a user accesses websites that employ these Google tools, Google automatically gets information about the user’s IP address, URL of the site, and many, many more details.
- “Google designed its Analytics code such that when it is run; Google causes the user’s browser to send his or her personal information to Google and its servers in California.
- It also has been alleged that Google has been misrepresenting its data collection practices.

Malabar Naval Exercise to include Australia

Why in news?

- India is prepared to expand the Malabar trilateral naval exercise involving India, the U.S. and Japan, to permanently include Australia.

About Ex. Malabar

- Exercise Malabar is a trilateral naval exercise involving the United States, Japan and India as permanent partners.
- Originally begun in 1992 as a bilateral exercise between India and the United States, Japan became a permanent partner in 2015.
- Past non-permanent participants are Australia and Singapore.
- The annual Malabar series began in 1992 and includes diverse activities, ranging from fighter combat operations from aircraft carriers through Maritime Interdiction Operations Exercises.

Significance of Australia’s inclusion

- Earlier, India had concerns that it would give the appearance of a “quadrilateral military alliance” aimed at China.
- Now both look forward to the cooperation in the ‘Indo-Pacific’ and the strengthening of defence ties.
- This has led to a convergence of mutual interest in many areas for a better understanding of regional and global issues.
- Both are expected to conclude the long-pending Mutual Logistics Support Agreement (MLSA) as part of measures to elevate the strategic partnership.

Eurasian Group on Combating Money Laundering and Financing of Terrorism (EAG)

Why in news?

- Indian officials attended the 32nd special Eurasian Group on Combating Money Laundering and Financing of Terrorism (EAG) plenary meeting, under the aegis of the Financial Action Task Force. The meeting was held online.

What is EAG?

- The EAG is a regional body comprising nine countries: India, Russia, China, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Belarus.
- Established in 2004, it is an associate member of the FATF.
- The founding conference was held in Moscow on October 6, 2004 and was attended by six founding countries: Belarus, Kazakhstan, China, Kyrgyzstan, Russia and Tajikistan.
- In 2005 and 2010, the group was expanded to include Uzbekistan (2005), Turkmenistan (2010) and India (2010).
- The Agreement on the Eurasian Group on Combating Money Laundering and Financing of Terrorism was signed in Moscow in June 2011, granting the EAG the status of a regional intergovernmental organization.

Main tasks of the EAG

- Assisting member-states in implementing the 40 FATF anti-money laundering Recommendations and the 9 Special FATF Recommendations on combating terrorist financing (FATF 40+9 Recommendations).
- Developing and conducting joint activities aimed at combating money laundering and terrorist financing.
- Implementing a program of mutual evaluations of member-states based on the FATF 40+9 Recommendations, including assessment of the effectiveness of legislative and other measures adopted in the sphere of AML/CFT efforts.
- Coordinating international cooperation and technical assistance programs with specialized international organizations, bodies, and interested states.
- Analyzing money laundering and terrorist financing trends (typologies) and exchanging best practices of combating such crimes taking into account regional specifics.

Geography and Environment

Sun's Corona

Why in news?

- Scientists have recently discovered tiny flashes of radio light emanating from all over the Sun, which could help in explaining the long-pending coronal heating problem.
- The data was collected with the help of the Murchison Widefield Array (MWA) radio telescope.
- The radio lights or signals result from beams of electrons accelerated in the aftermath of a magnetic explosion on the Sun.
- These observations are the strongest evidence till date that the tiny magnetic explosions, originally referred to as 'nanoflares' by Eugene Parker (eminent American solar astrophysicist). Researchers believe that these explosions could indeed be heating up the corona.

About

- The Sun's corona is the outermost part of the Sun's atmosphere. It is usually hidden by the bright light of the Sun's surface. It can be seen using special instruments.
- It can be viewed during a total solar eclipse.
- The corona is about 10 million times less dense than the Sun's surface. This low density makes the corona much less bright than the surface of the Sun.
- The corona is far from its surface. But the corona is hundreds of times hotter than the Sun's surface.
- The corona extends far out into space. From it comes the solar wind that travels through our solar system. The corona's temperature causes its particles to move at very high speeds. These speeds are so high that the particles can escape the Sun's gravity.

About Widefield Array (MWA) radio telescope

- It is a joint project between an international consortium of organisations to construct and operate a low-frequency radio array.
- Operating in the frequency range 70–300 MHz, the main scientific goals of the MWA are to detect neutral atomic Hydrogen emission from the cosmological Epoch of Reionization (EoR), to study the sun, the heliosphere, the Earth's ionosphere, and radio transient phenomena, as well as map the extragalactic radio sky.

Assessment of Climate Change over the Indian Region

Why in news?

- Ministry of Earth Sciences (MoES) has published the first Assessment of Climate Change over the Indian Region.
- It is India's first-ever national forecast on the impact of global warming on the subcontinent in the coming century.
- These projections are based on a climate forecasting model developed at the Indian Institute of Tropical Meteorology (IITM), Pune, and this will be part of the next report of the Intergovernmental Panel on Climate Change (IPCC), expected to be ready in 2022.
- This is a significant step for climate science and policy in India because existing projections are put in the context of historical trends in land and ocean temperatures, monsoon

rainfall, floods, droughts and Himalayan warming and glacier loss.

Report Highlights

- The report indicates a rise in average surface air temperatures by 5°C by the end of the century if human activities keep emitting GHGs at the current rate.
- According to the latest estimates by the IPCC, the global average temperature in the last century has gone up by 1.1°C.
- There will be variability in the rainfall, especially during the monsoon season which brings 70% of the rainfall received by India and is one of the primary drivers of its rural agrarian economy.
- Monsoon rainfall could change by an average of 14% by 2100 that could go as high as 22.5%.

Representative Concentration Pathway (RCP)

- According to Assessment of Climate Change over the Indian Region, in a worst-case scenario, average surface air temperatures over India could rise by up to 4.4°C by the end of the century as compared to the period between 1976 and 2005.
- Under an intermediate scenario of RCP 4.5, the country's average temperature could rise by up to 2.4°C.
- The rise in temperatures will be even more in the Hindu Kush-Himalayan region where the average could reach to 5.2°C.
- The region is already highly vulnerable to climate-related variability in temperatures, rainfall and snowfall.
- By 2100, the frequency of warm days and warm nights might also increase by 55% and 70% respectively, as compared to the period 1976-2005 under the RCP 8.5 scenario.
- The incidences of heat waves over the country could also increase by three to four times.
- Their duration of occurrence might also increase which was already witnessed by the country in 2019.

Gynandromorph

Why in news?

- A peculiar dragonfly, the Scarlet Skimmer (*Crocothemis servilia*) was spotted in the Puzhakkal area of the Kole wetlands in Thrissur.

About

- “gyne” from Greek meaning female, “andro” for male, and “morph” meaning variety
- Individual animals that have both genetically male and female asymmetry.
- Gynandromorphs have been reported in mosquitoes, fruit flies, spiders, crustaceans, and other arthropods as well as in birds. But they are most dramatic in those butterfly species in which both types of a body part can be distinguished physically due to sexual dimorphism.

Key features

- The spotted individual showed bilateral Gynandromorphism. Male dragonflies typically have prominent blood-red colouration in almost all their body parts, including the head, thorax, abdomen and legs, and the female is a pale yellow in colour with a dark brown thorax and legs.
- Gynandromorphs have the potential to inform about the underlying sex-determining mechanisms in certain insects and can also be used to refine hypotheses of homology between sexually dimorphic structures such as the genitalia.

First domestication of chicken

Why in news?

- A study by scientists has revealed new details about the earliest domestication of chicken, which involved sequencing of genomes from all four species of the genus *Gallus*, five sub-species of Red Jungle Fowl and various domestic chicken breeds collected worldwide.

- The DNA sequencing of 863 genomes has showed the first domestication of chicken occurred in southwestern China, northern Thailand and Myanmar.
- The results contradicted the earlier claim that chickens were domesticated in northern China and the Indus Valley.
- The study revealed single domestication from Red Jungle Fowl sub-species *Gallus gallus spadiceus*.
- The study also demonstrated that all five Red Jungle Fowl sub-species were genetically differentiated from each other approximately 50,000 years ago (much earlier than domestication), corresponding to their geographic ranges and taxonomic classifications.

Bhitarkanika fishing cats

Why in news?

- Odisha Government has started a two-year conservation project for Fishing Cats in Bhitarkanika National Park.
- They are a medium-sized wildcat found in South and Southeast Asia.
- In India, fishing cats are mainly found in the mangrove forests of the Sundarbans, on the foothills of the Himalayas along the Ganga and Brahmaputra river valleys and in the Western Ghats.
- In 2012, the West Bengal government officially declared the Fishing Cat as the State Animal.
- IUCN Red List: Vulnerable.
- CITES: Appendix II
- Indian Wildlife Protection Act, 1972: Schedule I
- Threat: Habitat Destruction, Hunting, Poaching among others.

Money Laundering and the Illegal Wildlife Trade Report

Why in news?

- The Financial Action Task Force (FATF) released its first global report on the illegal wildlife trade titled the "Money Laundering and the Illegal Wildlife Trade" report.
- This is the first ever report of the FATF on Illegal Wildlife Trade (IWT).

- FATF aim is to provide guidance to countries on measures they can take to combat money laundering from the illegal wildlife trade.
- It is an inter-governmental body which was established in 1989 during the G7 Summit held in Paris.
- Its secretariat is located at the Organisation for Economic Cooperation and Development (OECD) headquarters in Paris.
- Its objective is to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering and terrorist financing and other related threats to the integrity of the international financial system.
- It comprises 37 member jurisdictions and 2 regional organisations representing most major financial centres in all parts of the globe.

Haritha Haram Programme

Why in news?

- By planting a sapling of a Black Plum at Medak districts Narsapur forest is on 25 June 2020, the Chief Minister of Telangana has launched the sixth phase of the Haritha Haram Programme.
- The Chief Minister also inaugurated Urban Forest Park at Narsapur.
- The large scale tree plantation programme has also generated employment in the state as the pits for the plantation of saplings are dug under the National Rural Employment Guarantee Scheme (NREGS).

About Programme

- The programme was launched on 3 July 2015.
- Through the programme, the Telangana state government has set a target to increase the forest cover in the state to 33 per cent from the 24 per cent (as per 2015 records) by planting a total of 230 crore saplings across the state.
- As per records, a total of 182 crore saplings have been planted to date across the state.

- The saplings are planted across the state with the help of departments such as forest, municipal administration, Panchayati raj and rural development etc.

Herbal Roads project in UP

Why in news?

- The Uttar Pradesh government has decided to develop 800 km roads as Herbal belt with medicinal and herbal trees along both sides of the road.
- PWD Department will make arrangement for rainwater recharging system on these herbal roads

About the project

- These 800-kilometre roads will be along National and State highways passing through the state and the herbal garden along with them will keep airborne, bacterial and other diseases at bay.
- These herbal roads will have trees like Peepal, Neem, Sehjan along with other herb varieties like Brahmi, Ashvagandha and Jatropha.

Significance

- These plants will provide the raw material for the medicines and will also help in curbing the erosion of land.
- This scheme will help both development and beautification along with promoting biodiversity.
- There are a lot of benefits of herbs like Brahmi can be used for enhancing the memory and Ashwagandha as a general tonic for the body. It has been noted in the recent study that Ashwagandha could be effective in fighting the COVID-19.

Macaws

Why in news?

- The Directorate of Revenue Intelligence (DRI) has busted a wildlife smuggling syndicate with seizure of a consignment of exotic macaws (identified as Hyacinth macaw, Pesquet's parrot, Severe macaw and Hahn's macaw) which had been smuggled from Bangladesh to Kolkata.

- The joint operation for the same was carried out in coordination with the Wildlife Crime Control Bureau (WCCB) and the Customs Department at the Kolkata airport.
- West Bengal and northeast India are vulnerable to cross-border wildlife smuggling because of their proximity to the Bangladesh and Myanmar borders, and to Thailand.

Protection available for seized macaws

- They are protected under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), with hyacinth macaw being accorded the highest protection.
- Illegally imported birds are confiscated under Section 111 of the Customs Act, read with the CITES provisions and the Foreign Trade Policy.
- Also, Sections 48 and 49 of the Wildlife Protection Act prohibit trade or commerce in wild animals, animal articles, or trophies. The accused can be sentenced to seven years of jail for the offense.

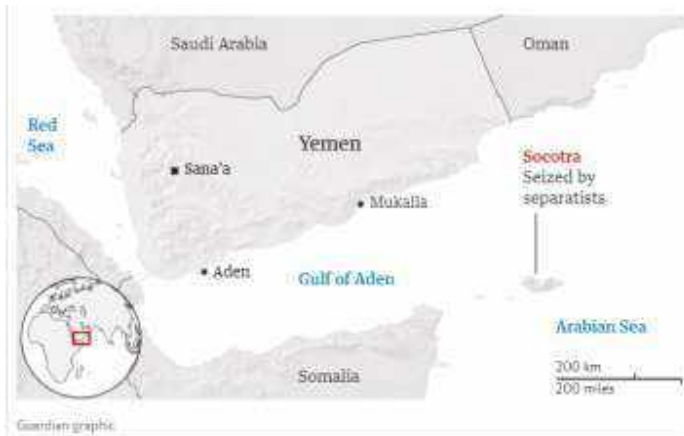
Socotra Island

Why in news?

- Southern separatists have seized control of Yemen's island of Socotra in the Arabian Sea, deposing its governor and driving out forces of the Saudi-backed government.
- Socotra, a UNESCO world heritage site due to its unique fauna and flora, is located in the shipping lane linking Asia to the Europe via the Red Sea and Suez canal.
- Socotra Archipelago, in the northwest Indian Ocean near the Gulf of Aden, is 250 km long and comprises four islands and two rocky islets which appear as a prolongation of the Horn of Africa.
- The site is of universal importance because of its biodiversity with rich and distinct flora and fauna: 37% of Socotra's 825 plant species, 90% of its reptile species and 95% of its land snail species do not occur anywhere else in the world.
- The site also supports globally significant populations of land and sea birds (192 bird species, 44 of which breed on

the islands while 85 are regular migrants), including a number of threatened species.

- The marine life of Socotra is also very diverse, with 253 species of reef-building corals, 730 species of coastal fish and 300 species of crab, lobster and shrimp.

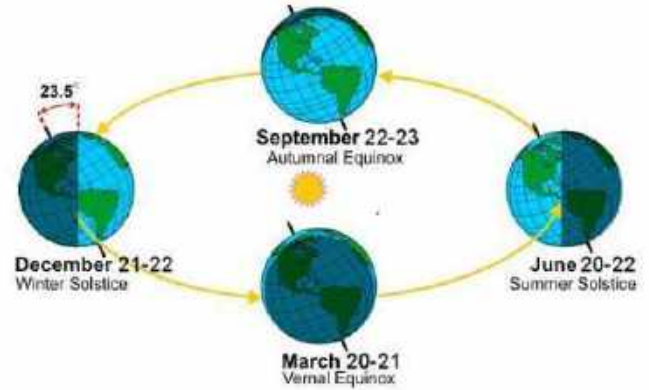


International Day of the Celebration of the Solstice

Why in news?

- International Day of the Celebration of the Solstice was observed on June 21. The Day was proclaimed by the United Nations General Assembly on June 20th of 2019.
- This day brings awareness about solstices and equinoxes and their significance for several religions and ethnic cultures.
- Solstice is that the point at which the Sun is at its greatest distance from the world and equinox is when space is that the lowest.
- The solstices and equinoxes symbolize the fertility of the land, agricultural and food production systems, cultural heritage and their millenary traditions.
- There are two solstices that occur annually: around the summer solstice (commonly referred to as "Summer Solstice" for being the primary day of summer and therefore the longest day of the year) and December 21 (commonly referred to as "Winter Solstice" for being the primary day of winter and the shortest day of the year).
- The summer solstice occurs when the sun is directly over the Tropic of Cancer which is located at 23.5° latitude North and for every place north of the Tropic of Cancer, the sun is

at its highest point in the sky and this is the longest day of the year.



Golden Langurs

Why in news?

- Primatologists have observed that the Gee's golden langur (*Trachypithecus geei*), endemic to the semi-evergreen and mixed-deciduous forests straddling India and Bhutan, induce stillbirth of babies killed inside the womb of females, besides practising infanticide.
- They are found in Assam, India and neighboring Bhutan where they live year-round.
- Golden langurs occupy moist evergreen and tropical deciduous forests as well as some riverine areas and savannas in Assam and Bhutan.
- Their hair ranges from dark golden to creamy buff and their faces are black and hairless except for a long pale beard. It has been noted that their fur changes colors according to the seasons.
- IUCN Red list: Endangered
- CITES: Appendix I
- Wildlife Protection Act: Schedule I
- Threats: The main reason for low numbers of golden langurs is because of their localized habitat and the rapid loss of this habitat due to deforestation.

Annular Solar Eclipse

Why in news?

- A rare celestial event, annular solar eclipse popularly called as ring of fire eclipse will be visible on June 21, 2020.
- The first solar eclipse of this year takes place on the summer solstice, which is the longest day in the Northern Hemisphere.
- When the moon comes between the sun and the earth, the shadow falls on the surface of the earth. The sun is entirely covered by the moon for a brief period. Those places that are engulfed by the dark, dense umbral shadow of the moon, experience the total solar eclipse.
- In the regions that plunge into the soft diffused penumbral shadow of the moon, a partial eclipse is witnessed. In all solar eclipses, the sun, moon and earth may not be perfectly aligned. In such situations, there is a partial eclipse. When the three celestial bodies happen to be in a straight line, there is a total solar eclipse.
- The distance between the earth and the moon at the moment of the eclipse can dictate the type of eclipse that will take place. The distance between the earth and the moon is always changing due to the egg-shaped elliptical orbit of the moon.
- This means there are times where it is closer to the earth and appears slightly bigger in the sky. There are also moments where it is farther away and appears somewhat smaller in the sky. Coincidentally, during the eclipse that takes place on June 21, 2020, the apparent size of the moon is smaller than that of the sun by one per cent.

World Day to Combat Desertification and Drought

Why in news?

- World Day to Combat Desertification and Drought is being observed on June 17, 2020 with the theme "Food. Feed. Fibre. - the links between consumption and land."
- The day is observed every year on June 17 to promote public awareness of international efforts to combat desertification.
- This day was proclaimed by the United Nations General Assembly resolution in 1995, after the day when United Nations Convention to Combat Desertification was drafted.

- This year's observance is focused on changing public attitudes to the leading driver of land degradation: humanity's relentless production and consumption.
- As populations become larger, wealthier and more urban, there is far greater demand for land to provide food, animal feed and fibre for clothing.
- Meanwhile, the health and productivity of existing arable land is declining, worsened by climate change.
- Clothing and footwear production causes 8 per cent of global greenhouse gas emissions, a figure predicted to rise almost 50 per cent by 2030.

Pangolin

Why in news?

- China has accorded the pangolin the highest level of protection and removed the scales of the Pangolin from its list of approved traditional medicines.
- Pangolin are scaly anteater mammals of the order Pholidota. They have large, protective keratin scales covering their skin and they are the only known mammals with this feature.
- Out of the eight species of pangolin, the Indian Pangolin and the Chinese Pangolin are found in India
- Indian Pangolin is widely found in India, except the arid region, high Himalayas and the North-Eastern. The species is also found in Bangladesh, Pakistan, Nepal and Sri Lanka.
- Chinese Pangolin is found in Himalayan foothills in Eastern Nepal, Bhutan, Northern India, North-East Bangladesh, through Southern China and Taiwan.

IUCN Conservation Status

- Indian pangolin – Endangered
- Chinese pangolin – Critically Endangered
- Threats: a) Hunted for its meat across the northeastern States and in central India. and b) Smuggled for scales especially in China as it is believed that scales possess magic or charms and have medicinal properties.

Amarnaya River Oil Spill in Russia

Why in news?

- Russia has declared a state of emergency after a power plant fuel leak in its Arctic region caused 20,000 tonnes of diesel oil to escape into a local river, turning its surface crimson red.

Details of the spillage

- The Amarnaya River, into which the oil has been discharged, is part of a network that flows into the environmentally sensitive Arctic Ocean.
- The state-owned TASS news agency reported that the emergency measures were announced within Russia's Krasnoyarsk Region, located in the vast and sparsely populated Siberian peninsula.

How did the leak happen?

- The thermoelectric power plant at Norilsk is built on permafrost, which has weakened over the years owing to climate change.
- The power plant is located near the Region's Norilsk city, around 3000 km northeast of Moscow.
- This caused the pillars that supported the plant's fuel tank to sink.
- Around 20,000 tonnes of diesel oil was released into the Amarnaya river, which has since drifted 12 km on its surface.

What has Russia done so far?

- Boom obstacles were placed in the river, but they were unable to contain the oil because of shallow waters.
- The state of emergency declared would bring in extra forces and federal resources for the clean-up efforts.

What is the extent of the damage?

- Environmentalists have said the river would be difficult to clean, given its shallow waters and remote location, as well as the magnitude of the spill.

- This is the second-largest known oil leak in modern Russia's history in terms of volume.
- The clean-up effort could take between 5-10 years.

Lonar lake

Why in news?

- Maharashtra's Lonar Lake has turned pink. According to experts, it is due to the salinity and presence of algae in the water body.

About

- It is an ancient circular lake created by a meteorite strike in Maharashtra.
- Lonar crater lake was identified as a unique geographical site by a British officer named CJE Alexander in 1823.
- Lonar crater became a geo-heritage site in 1979.
- It is relatively young geologically, at just 50,000 years old.
- Lonar Lake lies within the only known extraterrestrial impact crater found within the great Deccan Traps, a huge basaltic formation in India

Online waste exchange platform

Why in news?

- Andhra Pradesh Government launched the India's first online waste exchange platform and it will be handled by the AP Environment Management Corporation (APEMC)
- It will help the authorities monitor the movement of hazardous waste real-time using the tools incorporated in the platform.
- The APEMC will streamline collection of the waste from industries, sort and streamline the waste as hazardous or non-hazardous or e-waste according to category, and scientifically dispose it off at various waste disposal centres.

Indian gaur

Why in news?

- The first population estimation exercise of Indian gaur carried out in the Nilgiris forest division in February 2020,

which has revealed that more than an estimated 2,000 Indian gaurs inhabit the 300 sq. km range.

- Around, 60 gaurs die each year in the Nilgiris forest division, mainly due to accidents, owing to their proximity to human habitations.

About Indian Gaur

- The gaur, *Bos gaurus*, also called the Indian bison, is one of the largest extant bovines.
- Native to South and Southeast Asia
- It has been listed as Vulnerable on the IUCN Red List since 1986.
- The Western Ghats and their outflanking hills in southern India constitute one of the most extensive extant strongholds of gaur, in particular in the Wayanad, Nagarhole, Mudumalai and Bandipur complex.

Haldwani Bio-Diversity Park

Why in news?

- Uttarakhand opened its biggest Bio-Diversity park in Haldwani on World Environment Day.

Features of the Park

- There are thematic gardens, a soil museum, species of plants, lichens, mosses and algae from the Jurassic era, a vermicompost unit, an interpretation centre, and a state-of-the-art weather station.
- The Park has 40 unique sections having 479 rare plant species of cactus, medicinal herbs, different types of trees, etc.
- The various species of plants have been brought to the park from diverse terrains like Niti Mana Valley and even from some glaciers around Kedarnath.
- The plant species in the biodiversity park is divided into spiritual & religious, scientific, human health, and aesthetic value sections.
- The spiritual section has trees that find mention in holy scriptures like Guru Granth Sahib, Quran, Bible, and others.

- It showcases the different kinds of soil found in various topographies of Uttarakhand — alpine, bhabhar, sub-mountainous, mountainous, tertiary, loam, terai.
- Various environmental concepts and conservation issues including global warming, forest rivers, species extinction, internal communication of plants and recent developments like spread of virus from animals to human beings are explained at the interpretation centre inside the park.

Census of Asiatic Lion

Why in news?

- Census of Asiatic lion was recently conducted by the Gujarat government and the details have been released.

About the lion census

- The census is conducted once every five years. This year it was delayed due to lockdowns.
- The first Lion Census was conducted by the Nawab of Junagadh in 1936; since 1965, the Forest Department has been regularly conducting the Lion Census every five years.
- The 6th, 8th and 11th Censuses were each delayed by a year, for various reasons.

Key findings of this year

- 28% rise in population of Lions: Total estimated Lions in Gir region is 674. It was 523 in 2015.
- 36% Expanse in distribution: Today, Asiatic lions are present in Protected Areas and agro-pastoral landscapes of Saurashtra covering nine districts, over an expanse of about 30,000 sq. km. It was 22,000 sq. km in 2015.

Factors responsible for steady rise in population

- Over the last several years, the lion population in Gujarat has been steadily rising because.
 1. community participation
 2. emphasis on technology
 3. wildlife healthcare
 4. proper habitat management
 5. steps to minimise human-lion conflict

How it was carried out?

- This year, the count was estimated not from a Census, but from a population “observation” exercise called Poonam Avlokan
- Poonam Avlokan (developed in 2014) is a monthly in-house exercise carried out every full moon.
- Field staff and officers spend 24 hours assessing the number of lions and their locations in their respective jurisdictions.
- Unlike previous census, which had nearly 2000 participants, this census had around 1400 staff and a few experts.
- These staff kept moving in their respective territories and made their estimates based on inputs provided by lion trackers and on chance sightings.

Concerns over the estimates

- Few experts are doubtful about the estimated numbers as it could be an overestimation. It is because 12 lions were killed in a flash flood in Amreli just a month after the 2015 census.
- More than two dozen lions in an outbreak of canine distemper virus (CDV) and babesiosis in 2018.
- A babesiosis outbreak was reported this summer too, and around two dozen lions are reported killed.

Relocation of lions to other regions

- Presently, Asiatic lions are confined only to Gujarat. A single epidemic could wipe the entire population and the species might become extinct. Hence, introduction of species to new areas and states might be a good idea.

World Environment Day

Why in news?

- Union Minister of Housing and Urban Affairs recently launched advisories on the occasion of World Environment Day.

- These advisories have been prepared by the Central Public Health and Environmental Engineering Organisation (CPHEEO) under Swachh Bharat Mission (Urban).
- These advisories are:
 1. Advisory on Material Recovery Facilities (MRFs) for Municipal Solid Waste (MSW)
 2. Advisory on Landfill Reclamation
 3. Draft advisory on On-site and Off-site Sewage Management Practices.
- These are part of an effort to find and facilitate sustainable solutions to some of the key problems which prevent holistic sanitation and solid waste management.
- A toolkit for a communication campaign on faecal sludge management titled ‘Malasur- The Demon of Defeca’ was also released.
- It aims at heightening the risk perception of faecal sludge.

About the Day

- It is celebrated on 5th June every year.
- This year’s theme is ‘Biodiversity’.
- In India, Ministry of Environment, Forest & Climate Change held virtual celebrations on this year’s theme with focus on Nagar Van (Urban Forests).
- It relaunched a scheme (Nagar Van Scheme) for creating urban forest in 200 corporations and cities because all these cities have gardens but not forests.
- The forests shall come up either on existing forest land or on any other vacant land offered by urban local bodies.
- Wajre Urban forest in Pune, Maharashtra has been developed on a 40 acre degraded land area. It sets right model for Nagar Van scheme.
- The urban forests will help in reducing pollution in these cities.
- Since it began in 1974, the event has grown to become a global platform for public outreach that is widely celebrated in over 100 countries.
- World Environment Day 2019 is being hosted by China with a theme of “Air Pollution”. India hosted World Environment Day 2018 emphasizing on prevention of ‘Plastic Pollution’.

- The Government launched #SelfiewithSapling campaign as part of the World Environment Day celebrations, urging people to plant a sapling and post a selfie with it on social media.

State of India's Environment in Figures 2020 Report

Why in news?

- The State of the Environment report was released.
- It mentions that one in five of all internal displacements in India was caused by disasters, mostly by floods, cyclones and drought in 2019.

Highlights

- There were more than 50 lakh internal displacements in India last year, the highest in the world and this refers to the number of movements, not people.
- Flooding caused by the south-west monsoon led to 26 lakh displacements, while Cyclone Fani alone led to 18 lakh displacements, followed by Cyclone Vayu and Bulbul and the report also broke down 2011 census data on migrant populations.
- There were over 45 crore migrants in the country at the time of disasters, with the vast majority migrating within their own State. In 2011, over 1.7 crore new migrants had moved for employment purposes, mostly from rural to urban areas.
- The report also offers a snapshot of data on forests, water, waste, air, land, wildlife and other natural resources.

Schizothorax Sikusirumensis

Why in news?

- A new species, Schizothorax sikusirumensis, of fish has been discovered in Arunachal Pradesh.
- This fish was collected from the junction of River Siku and Sirum near Gakang area under Mebo circle of East Siang District.
- The fish species belongs to genus Schizothorax.
- The name of this fish species has been derived from the name of the rivers where it was found.

- The fish inhabits the water logged area of torrential river drainage.

Coral Triangle Day

Why in news?

- This Day is held every year on 9 June.
- It is a massive celebration of the Coral Triangle, which is the world's epicentre of marine biodiversity, which encompasses the seas of 6 countries in the Asia-Pacific region: Indonesia, Malaysia, Papua New Guinea, the Philippines, Solomon Islands, and Timor Leste.
- The event aims to shed light on ocean conservation and the numerous ways to protect and conserve the Coral Triangle.
- Coral Triangle is considered as one of the 3 mega ecological complexes on Earth, together with Congo Basin and the Amazon Rainforest. The region contains 76% of all known coral species, 37% of all known coral reef fish species and 53% of the world's coral reefs.
- The first Coral Triangle Day was celebrated on June 9, 2012 in conjunction with World Oceans Day which is celebrated every year on June 8.

Cyclone Nisarga

Why in news?

- Nisarga (Cyclonic Storm) has been formed over East central Arabian Sea. The name in the new list was suggested by Bangladesh.
- Nisarga crossed very close to the Mumbai coast while entering the land.
- Cyclone Nisarga is expected to be weaker than Cyclone Amphan in strength and intensity.
- However in case of both the cyclones, the exceptional warm ocean temperatures seem to be behind the intense storms.

What is a cyclone?

- Tropical Cyclone is any large system of very high-speed winds that circulates about a center of low atmospheric

pressure in a counter-clockwise direction north of the Equator and in a clockwise direction to the south.

- Factors like wind speed, wind direction, temperature and humidity contribute to the development of cyclones.
- Before cloud formation, water takes up heat from the atmosphere to change into vapour. When water vapour changes back to liquid form as raindrops, this heat is released to the atmosphere.
- The heat released to the atmosphere warms the air around. The air tends to rise and causes a drop in pressure. More air rushes to the centre of the storm. This cycle is repeated.
- Cyclones have always been more frequent in Bay of Bengal, but they have been less frequent off of India's western coast — a trend that has been gradually changing, according to scientists.
- Further, cyclones formed in the Bay of Bengal are stronger than those on the Arabian Sea side. The relatively cold waters of the Arabian Sea discourage the kind of very strong cyclones that are formed on the Bay of Bengal side.

Art & Culture

Pune NGO aims to revive spirit of 'Lal-Bal-Pal'

Why in news?

- To revive the Independence-era spirit of the 'Lal-Bal-Pal', Pune-based non-governmental organisation (NGO) 'Sarhad' will launch a series of literary and cultural programmes to strengthen connections between Maharashtra and West Bengal.
- It will be a two-year-long event and is named 'Maharashtra-Bengal friendship chapter'. It is envisioned as a people's cultural revivalist movement in these two States.
- Punjab, Bengal and Maharashtra have played significant roles during the struggle for Indian Independence. The historical association and cultural bonds among the three States was solidified in the modern era by the trinity of 'Lal-Bal-Pal'.

- After Independence, while the socio-cultural bonds between Maharashtra and Punjab have grown stronger, Maharashtra's ties with Bengal have somewhat weakened, despite a rich pedigree of literary and cultural affinity in the past.
- It will commence on Tilak's death centenary (August 1, 1920-August 1, 2020) and will go on till August 15, 2022 to mark the 150th birth anniversary of the great philosopher, Sri Aurobindo Ghosh.

Keeladi excavations

Why in news?

- Archaeologists working at Konthagai excavation site in Tamil Nadu found a skeleton measuring, 75 cm in height. It was found between two urns and is believed to be that of a child.
- Konthagai, about 4 km away from Keeladi in Sivaganga district, was believed to be the burial site of that civilisation.
- It was taken up for excavation in the ongoing sixth phase at the Keeladi site.
- Archaeologists have excavated three urns so far.
- Excavations in Keeladi prove that an urban civilisation existed in Tamil Nadu in the Sangam era on the banks of the river Vaigai.
- Many antiquities have been unearthed that provide crucial evidence to understanding the missing links of the Iron Age [12th century BCE to 6th century BCE] to the Early Historic Period [6th century BCE to 4th century BCE] and subsequent cultural developments.

Ashadhi Bij, the Kutchi New Year

Why in news?

- Recently, the Prime Minister has greeted the people on the special occasion of Ashadhi Bij - The Kutchi New Year.

About

- It is an auspicious day for framing community in Northern India especially Gujarat, Uttar Pradesh and other places.

- It falls on the second day in bright half of Ashadhi month (Ashadhi Sud Beej).
- It is a small festival mainly celebrated to predict monsoon.

Sankalp Parva

Why in news?

- On the call of Prime Minister, Union Culture Ministry will celebrate "Sankalp Parva" to plant trees from 28th June to 12 July 2020.
- Sankalp Parva: It is an initiative that has been taken on the call of the Prime Minister to plant at least five trees either in office campus or wherever it is possible to ensure a clean and healthy environment of the country.
- Trees: The Ministry of Culture has recommended planting five trees which represent the herbal heritage of the country namely: Bargad, Awla, Pepal, Ashok and Bel.

Vivekananda Yoga University (VaYU)

Why in news?

- As part of the 6th International Yoga Day commemorations, the world's first yoga university outside India has been launched in Los Angeles, offering programmes that combine scientific principles and modern research approaches to the ancient Indian practice of yoga.
- The Vivekananda Yoga University (VaYU) was jointly launched by Indian Minister of State for External Affairs and Chairperson of the Standing Committee on External Affairs during a virtual event held at the Consulate General of India in New York.
- Eminent Indian yoga guru Dr. H R Nagendra, Chancellor of Swami Vivekananda Yoga Anusandhana Samsthana (SVYASA) is the first Chairman of VaYU.
- VaYU will offer online graduate programmes based on scientific principles and modern research approaches to yoga.

Aguada Fenix

Why in news?

- Scientists using an aerial remote-sensing method (LIDAR) have discovered the largest and oldest monumental construction located at a site called Aguada Fenix near the Guatemalan border built by the ancient Maya civilization.

About

- The structure is a colossal rectangular elevated platform built between 1,000 and 800 BC in Mexico's Tabasco state.
- Unlike the soaring Maya pyramids at cities such as Tikal in Guatemala and Palenque in Mexico erected some 1,500 years later, this recent discovered structure was not built of clay and earth, not of stone and likely was used for mass rituals.
- The structure measured nearly a quarter mile (400 meters) wide and nine-tenths of a mile (1,400 meters) long and stood 33 to 50 feet (10 to 15 meters) high. In total volume, it exceeded ancient Egypt's Great Pyramid of Giza which was built 1,500 years earlier.
- The site looks similar to the older Olmec civilization center of San Lorenzo to the west in the Mexican state of Veracruz, but the lack of stone sculptures related to rulers and elites, such as colossal heads and thrones, suggests less social inequality than San Lorenzo and highlights the importance of communal work in the earliest days of the Maya.
- There has always been debate over whether Olmec civilization led to the development of the Maya civilization or if the Maya developed independently.

Lidar (Light Detection and Ranging) is a remote-sensing technique that employs a pulsed laser and other data obtained flying over a site to generate 3-D information about the shape of surface characteristics.

Festival of Raja Parba

Why in news?

- Odisha celebrate a unique festival called Raja Parba. This is a three-day-long festival dedicated to Mother Earth (Bhuma Devi, the consort of Lord Vishnu). Raja Parba celebrates womanhood also. The festivities begin a day before Mithuna Sankranti and conclude two days after that.

About the festival

- First day: It is called Pahili Raja. The preparation begins one day before Pahili Raja, and it is called Sajabaja.
- Second day: It is called Mithuna Sankranti
- Third day: It is called Bhu daha or Basi Raja.
- Primarily, it is a time for the unmarried girls to prepare for their matrimony. They follow various customs related to the festival by consuming nutritious food like Podapitha, not walking barefoot, taking a bath on the first day, and merrily swinging on ropes attached to a tree.

Story

- Bhuma Devi undergoes her menstrual cycle during this period. Interestingly, the word 'Raja' in Odia means menstruation, and it is derived from Rajaswala, meaning a menstruating woman. Surprisingly, it is a festival that celebrates this aspect of womanhood which makes the feminine entity unique. Menstruation is considered as a sign of fertility, and therefore, it celebrates femininity and her ability to give birth to another life.
- During the Parba, Odia people do not undertake any construction works or tilling that requires the earth to be dug. And by not doing such activities, they pay ode to the Mother Earth who needs a break from routine work.
- The festival concludes with a custom called Vasumati Snana or the bathing of Bhuma Devi. Women worship a stone that symbolises the Mother Earth. They give her a bath with turmeric paste and offer her flowers and smear her with Sindoor.
- This festival is also associated with the end of the summer season and the arrival of the monsoon. And therefore, it is also associated with agriculture and cultivation related communities and activities.

Talamaddale

Why in news?

- A performance of 'talamaddale', a variant of Yakshagana theatre, was streamed live on social media on 13 June 2020 due to COVID-19.

- Tala-Maddale is an ancient form of performance dialogue or debate performance popular in the Karavali and Malnad regions of Karnataka and Kerala.
- The plot and content of the conversation is drawn from popular mythology but the performance mainly consists of an impromptu debate between characters involving sarcasm, puns, philosophy positions and humour.
- Unlike the Yakshagana performance, in 'talamaddale,' the artists sit across in a place without any costumes and engage in testing their oratory skills based on the episode chosen.
- If music is common for both Yakshagana performance and 'talamaddale', the latter has only spoken word without any dance or costumes. Hence it is an art form minus dance, costumes and stage conventions.

NAIMISHA 2020

Why in news?

- It is an initiative to provide a chance to participants and art enthusiasts to create and learn from practicing artists.
- The programme includes online workshops sessions on painting, sculpture, printmaking and indrajaal (an interdisciplinary creative workshop).
- Organised by National Gallery of Modern Art (NGMA).
- The exhibition of selected artworks from the program will be displayed on So'ham, the cultural media platform of NGMA.

General Studies I (Indian Heritage and Culture, History and Geography of the World and Society)

Excavation at Kodumanal

Why in news?

- A team from the State Department of Archaeology, Chennai has recently identified 250 cairn-circles at the village in Erode district.

- The Kodumanal excavation of 10 pots and bowls, instead of the usual three or four pots, placed outside 3-chambered burial cists and inside the cairn-circle, throw light on burial rituals and the concept of after life in megalithic culture.

About

- Earlier excavations revealed that the site served as a trade-cum-industrial center from 5th century BC to 1st century BC as inscribed in Pathitirupathu of Sangam Literature also.
- The rectangular chambered cists, each two metres long and six metres wide, are made of stone slabs, and the entire grave is surrounded by boulders that form a circle.
- Previous excavations have revealed that multi-ethnic groups lived at the village, located about 500 metres away from the Noyyal River.

Belief in afterlife

- The grave could be possibly of a village head or the head of the community as the size of two boulders, each facing east and west, are bigger than the rest of the boulders.
- Believing that the deceased person will get a new life after death, pots and bowls filled with grains were placed outside the chambers.

Megalithic Culture

- Upto 2nd century BC, the upland portions of the peninsula were inhabited by people who are called megalithic builders.
- They are known not from their actual settlements which are rare, but from their graves. These graves are called megaliths because they were encircled by big pieces of stone.
- They contain not only skeletons of people who were buried but also pottery and iron objects.
- The people used various types of pottery including red ware but black and red ware seems to have been popular with them.
- Obviously the practice of burying goods in the graves with the dead bodies was based on the belief that the dead

would need all these in the next world. These goods give us an idea of their sources of livelihood.

- Tridents, which later came to be associated with Shiva, have also been found in the megaliths.
- However, compared to the number of agricultural tools that were buried, those meant for fighting and hunting are larger in number. This would show that megalithic people did not practice an advanced type of agriculture.
- The megaliths are found in all upland areas of the peninsula, but their concentration seems to be in eastern Andhra Pradesh and in Tamil Nadu. The beginnings of this culture can be traced to circa 1000 BC but in many cases the megalithic phase lasted from about the fifth to the first century BC, in a few places this phase persisted even as late as the early centuries of the Christian era.

Environmental Performance Index 2020

Why in news?

- 12th edition of Environment Performance Index (EPI) 2020 has been released by Yale University and Columbia University in collaboration with the World Economic Forum
- India secured 168th rank in recent Index, while its rank was 177th in 2018.

Key highlights

- EPI Index 2020 measured the environmental performance of 180 countries.
- The index considered 32 indicators of environmental performance and included 10-year trends in environmental performance at the national and global levels.
- Denmark topped the index with a score of 82.5.
- India scored 27.6 out of 100 in the 2020 EPI index and its performance was worse than all South Asian countries, except Afghanistan.
- India scored below the regional (South-Asia) average score on all five key parameters on environmental health, including air quality, sanitation and drinking water, heavy metals and waste management.

- These findings resonated with the concerns raised by the 'State of India's Environment 2020 in Figures', published by the Centre for Science and Environment.
- It has also scored below the regional average on parameters related to biodiversity and ecosystem services too.
- India was at second position after Pakistan on 'climate change' among the South-Asia countries.
- Pakistan's score (50.6) was the highest under the climate change category.

Significance

- A ten-year comparison progress report in the index showed that India slipped on climate-related parameters.
- The report indicated that black carbon, carbon dioxide emissions and greenhouse emissions per capita increased in ten years.

Way Ahead

- India needs to re-double national sustainability efforts on all fronts.
- It needs to focus on a wide spectrum of sustainability issues, with a high-priority to critical issues such as air and water quality, biodiversity and climate change.

Global Education Monitoring Report 2020

Why in news?

- Global Education Monitoring Report 2020 has been released by the UNESCO, highlighted that COVID-19 had worsened the inequalities in education systems worldwide.

Key Findings

- Almost 91% of students around the world were out of school during the height of school closures in April 2020
- About 40% of low and lower middle income countries have not supported learners at risk of exclusion like poor, linguistic minorities and learners with disabilities during this crisis.

- Poorer countries opted for radio and television (TV) lessons, 55% of low-income, 73% of lower-middle-income and 93% of upper-middle-income countries adopted for online learning platforms for primary and secondary education, all of which offered less or more imperfect substitutes for classroom instruction.
- 17% of low and middle-income countries are planning to recruit more teachers, 22% to increase class time and 68% to introduce remedial classes when schools reopen to combat the situation.
- India has used a mix of all three systems (radio, TV and online platforms) for educational continuity.

Challenges Ahead

- Governments increasingly rely on technology but the digital divide limits the approach.



- Cancellation of examinations in India may result in scoring dependent on teachers' judgments of students, which could be affected by stereotypes of certain types of students.
- Higher drop-out rates are also a concern.
- School closures interrupt support mechanisms for various disadvantaged students.

Analysis

- The COVID-19 pandemic has increased inequalities in education systems across the world.
- Classes on Zoom, WhatsApp and Skype are becoming the norm for students, parents and teachers. Yet, this abrupt transition to online hardly compensates for the absence of the classroom experience.

- There are a few parents who aren't comfortable with technology themselves. So, their children, too, might look at it negatively. At times, classes get disturbed due to internet issues.
- In nuclear families, especially, parents might have to miss work to take care of their children. Some of them could be healthcare professionals, who are desperately needed to mitigate the pandemic. There is pressure on teachers, too.
- Conducting large-scale, high-stakes examinations, however, will be more complicated. Most board and entrance examinations have been either postponed or suspended, causing disruptions in the academic calendar. The students who are slated to appear for next year's board exams, for instance, have already lost instructional time.
- Meanwhile, millions from Government schools and colleges, especially in rural areas, will not even have access to education due to the lockdown.
- According to the Key Indicators of Household Social Consumption on Education in India report, based on the 2017-18 National Sample Survey, less than 15% of rural Indian households have Internet (as opposed to 42% urban Indian households). A mere 13% of people surveyed (aged above five) in rural areas — just 8.5% of females — could use the Internet. The poorest households cannot afford a smartphone or a computer.
- Governments, NGOs and other public-private organisations are trying to alleviate this serious deficiency.
- Teachers who are intimidated by technology now have to take the bull by its horns. For many who are proficient at planning and teaching in the traditional classroom, planning for an online setting requires some re-learning.

Way Forward

- The Government needs to subsidise phone data and phones for people in rural areas. There needs to be an aggressive push to do this as quickly as possible
- ThinkZone, a startup from Odisha, is using Interactive Voice Response (IVR), Short Message Service (SMS) and radio to help households with no Internet access. It has partnered with a local radio channel to broadcast activity-

based learning modules for students aged three to 10. The activities are available in Odia, Hindi and English.

- The implications of school closures in the country are not just about education ; they are manifold. An unprecedented social disaster can be avoided if more entities — Government and private — pitch into short-term and long-term futures of the children in this digital divide.

Adultery

Why in news?

- The Supreme Court has refused to review its 2018 judgment which decriminalised adultery.
- A five-judge Review Bench led by Chief Justice of India upheld the September 2018 verdict of Constitution Bench which had struck adultery out of the penal statute book.

What is IPC Section 497?

- As per Section 497 of IPC, it is a punishable offence for a man to have sexual intercourse with a married woman without the consent of her husband.
- The man committing such an offence shall be imprisoned for five years or more and can also be asked to pay a fine.
- In India, adultery was a ground for divorce under Section 13 (1) of Hindu Marriage Act, 1956.
- The 42nd report of the Law Commission of India Report in 1971 and the Malimath Committee on Criminal Law Reforms of 2003 recommended amendment to the adultery law. Both reports suggested that Section 497 of the IPC should be made gender-neutral.

Concerns associated

- One big concern regarding this law is that it does not appear to be gender-neutral.
- Section 497 does not enable a woman to file a complaint against her husband when he has had sexual intercourse with another woman.
- Section 497 treats a married woman as her husband's "chattel". The provision is a reflection of the social dominance of men prevalent 150 years ago.

Apex Court's Judgement

- The judgement in 2018 was based on a writ petition filed by a Kerala resident, Joseph Shine, represented by advocate Kaleeswaram Raj.
- The original judgment was by a Constitution Bench led by then chief justice Dipak Misra who found that Section 497 (adultery) of the Indian Penal Code cannot “command” married couples to remain loyal to each other for the fear of penal punishment.
- The court had reasoned that there was no data to support claims that abolition of adultery as a crime would result in “chaos in sexual morality” or an increase of divorce.
- The judges stated that Section 497 seems outdated. In fact, it appears to violate the Articles 14 and 21.
- Adultery can be grounds for civil issues including dissolution of marriage but it cannot be a criminal offence.
- The Bench had also held that Section 198 (2) of the CrPC, which gave the cuckolded husband the exclusive right to prosecute his wife’s lover, was manifestly Section 198 (2) of the CrPC arbitrary.

Cons of Decriminalisation of adultery

- It will encourage extra-marital affairs leading to conflicts in families.
- It may lead to more number of divorce cases.
- It may have a negative impact on children in case of separation between wife and husband.
- Some experts think that it will destroy the ancient institution of marriage and culture in India as it promotes westernisation.

General Studies II (Governance, Constitution, Polity, Social Justice and International relations)

India-Australia virtual meet

Why in news?

- India and Australia raised their relationship in the first virtual bilateral summit to a “Comprehensive Strategic

Partnership (CSP)” after a ‘virtual’ summit between Prime Minister and Australian Prime Minister.

- Visit of Australian Prime Minister to India, in January 2020, was postponed due to the devastating bushfires in Australia, and now because of the COVID-19 pandemic.

Key takeaways from the summit

- CSP would raise the level of “trust” required to improve the “trade and investment flows” between India and Australia which at present is at a low.
- The Mutual Logistics Support Agreement has been signed during the summit that should enhance defence cooperation and ease the conduct of large-scale joint military exercises.
- **Mutual Logistics Support Agreement (MLSA)** will allow both militaries the reciprocal use of bases, humanitarian and disaster relief cooperation, port exercises, and passage exercises.
- Other agreements included a framework arrangement on cyber technology, an MoU on mining and processing critical and strategic minerals like Australian rare earth metals used for electronics, governance, vocational training and water management.
- They also agreed to increase the frequency of meetings between the two Prime Ministers, and took the “2+2” format of bilateral meetings to the level of Foreign and Defence Ministers, who will meet to “discuss strategic issues” at least every two years.
- A joint declaration on a “Shared Vision for Maritime Cooperation in the Indo-Pacific.” It is as follows:
 1. Both India and Australia share a vision of a free, open, inclusive and rules-based Indo-Pacific region to support the freedom of navigation, over-flight and peaceful and cooperative use of the seas.
 2. By adherence to international law including the United Nations Convention on the Law of the Sea (UNCLOS) and peaceful resolution of disputes rather than through unilateral or coercive actions.
- The two leaders had not discussed including Australia for “Malabar” or quadrilateral maritime exercises that would

include India, Australia, U.S. and Japan, something that China has opposed in the past.

India and Australia

- India is the 5th largest trade partner of Australia with trade in goods and services at A\$ 29 billion representing 3.6% share of the total Australian trade in 2017-18, with export at A\$ 8 billion and import at A\$ 21 billion.
- India's main exports to Australia are Refined Petroleum, medicaments, while our major imports are Coal, copper ores & concentrates, Gold, and education related services.
- A Civil Nuclear Cooperation Agreement provides the framework for substantial new trade in energy between Australia and India. It ensures that Uranium mining companies in Australia may fulfil contracts to supply Australian uranium to India for civil use.
- Australia and India conducted AUSINDEX, their largest bilateral naval exercise, and there are further developments on the anvil, including Australia's permanent inclusion in the Malabar exercise with Japan.
- In 2018, Indian Air Force participated for the first time in the Exercise Pitch Black in Australia. The third edition of AUSTRALIND (Special Forces of Army Exercise) was held in September 2018.
- A broader maritime cooperation agreement with a focus on Maritime Domain Awareness (MDA) is also in the works and Australia has agreed to post a Liaison Officer at the Indian Navy's Information Fusion Centre - Indian Ocean Region (IFC-IOR) at Gurugram.
- Under the New Colombo Plan of Australian government, 900 Australian undergraduates have studied and completed internships in India during the period 2015-16
- The Indian community in Australia has the population of nearly half a million (2.1 % of the population), and another over 1,50,000 persons of Indian descent immigrated from other countries (Fiji, Malaysia, Kenya and South Africa).
- India is one of the top sources of skilled immigrants to Australia.
- Both India and Australia are members of the Commonwealth, IORA, ASEAN Regional Forum, Asia Pacific

Partnership on Climate and Clean Development, and have participated in the East Asia Summits.

- Australia is an important player in APEC and supports India's membership of the organisation. In 2008, Australia became an Observer in SAARC.
- Both countries have also been cooperating as members of the Five Interested Parties (FIP) in the WTO context.

Concerns

- India's trade deficit with Australia has been increasing since 2001-02 due to India-Australia Free Trade Agreement. It is also a contentious issue in the ongoing RCEP negotiations which India left.
- The two countries are also discussing a Comprehensive Economic Cooperation Agreement (CECA), however, the progress is currently stalled.
- Non-trade barriers such as Sanitary and Phyto-Sanitary (SPS) measures some of the products where Australia has a genuine comparative advantage are not exported in substantial amounts to India.
- Australia's relatively lower share of services trade with India (4.3 percent) can be attributed to legislative barriers such as licence requirements.
- Statistics from India's Ministry of Commerce and Industry indicate that there is a fall in the FDI inflow from Australia to India from US\$ 518.64 million in 2010-12 to US\$ 260.49 million in 2016-18.

Way forward

- There are a host of emerging issues — from reforming the World Health Organisation to 5G technology and from strengthening the international solar alliance to building resilience against climate change and disasters — that lend themselves to intensive bilateral political and institutional engagement.
- Utilising current innovations in digital trade; such digitisation of economic activities have changed the landscape of trade, enhancing associations between economies and, in particular, South-South flows.
- Removal of trade barriers would lead to an increase in the exports of these commodities, although the increasing

number of disputes at the WTO with regard to the Australian sector can act as a serious impediment.

- Imports of intermediate inputs would enhance the export-competitiveness of domestic firms and boost the 'Make in India' campaign, in addition to curbing cost-push inflation in the domestic economy.
- Leveraging the trilateral dynamics between ASEAN, Australia and India: It is evident in policy areas such as maritime security, climate change, energy security, law enforcement, governance and the politics of security institutions.

India won non-permanent member of UNSC in 2021-22

Why in news?

- India's candidature for the United Nations Security Council's Non-Permanent seat was endorsed by the 55-member Asia-Pacific Group.
- In its quest for global peace and security, India has played a leadership role in the United Nations General Assembly and in the Security Council. India has been a non-permanent Member of the UN Security Council seven times since 1950-51.
- Due to some important reasons, India decided to pursue its candidature for 2021-22, else, by rotation, that seat would have reached India only in the 2030s.

Reasons

- Unique Role Played by India: In the present scenario, there is near-complete polarisation among the permanent members, with the U.S., the U.K. and France on one side, and Russia and China on the other. India's ability to work with both sides holds crucial importance for the functioning of UNSC.
- Sentimental Value: The year 2022, marks 75th year of Indian Independence and a place in UNSC would add to the planned celebrations.
- Strategic Concerns: India has faced many trade and security challenges from China, US and Pakistan recently. India would be able to voice its concerns and seek for its

redressal by the international community. Moreover, India will be hosting the G-20 meeting in New Delhi in 2022.

United Nations Security Council

- The Security Council is one of the six main organs of the United Nations. Its primary responsibility is the maintenance of international peace and security. While other organs of the United Nations make recommendations to member states, only the Security Council has the power to make decisions that member states are then obligated to implement under the Charter.
- It has 15 Members (5 as Permanent Members and 10 as Non-Permanent Members), and each Member has one vote.
- Five permanent members: China, France, Russian Federation, the United Kingdom, and the United States. Each of the Permanent Members has Veto Power over every decision of UNSC.
- The Permanent Residence of UNSC in the UN Headquarters New York City, USA.
- The presidency of the Council rotates monthly, going alphabetically among member states.

How are non-permanent members elected?

- Each year the General Assembly elects five non-permanent members (out of 10 in total) for a two-year term. The 10 non-permanent seats are distributed on a regional basis as follows: five for African and Asian States; one for Eastern European States; two for the Latin American and Caribbean States; and two for Western European and other States.

Powers of Non – Permanent Members of UNSC

- A Security Council decision does not receive support if at least seven non-permanent members of the Security Council vote against its adoption, regardless of the support of all states – permanent members.
- A non-permanent member can influence the work of the Security Council through the monthly presidency of the Council. The chair of the Security Council has influence on

shaping the monthly programme of the Council. It is also granted a number of powers of an organizational nature.

- The non-permanent members can play an important role in matters concerning their respective geographic regions and thematic issues.
- The importance of non-permanent members is also increased during serious political crises, during which permanent members do not represent a unanimous position but where the differences between them are not deep enough to completely paralyze the work of the Council.
- Incorporating the most important issues during informal meetings gives non-permanent members a chance to protect their interests and place issues that are important to them within the content of negotiated documents.
- In recent years, non-permanent members have not only played a significant role in the process of negotiating the content of documents, they have also started to present their own proposals for solutions.

Significance

- The development is particularly significant given that Pakistan and China, both countries with which India has had diplomatic challenges at the UN. In the next step, India will need the vote of two-thirds of the 193 UN General Assembly members to finally win a non-permanent seat on the UNSC.

India's Quest for Permanent Seat at UNSC

Permanent membership of the Security Council is an important and legitimate aspiration for India in order to play its rightful role in the maintenance of international peace and security. This can be substantiated through the following points:

- India was one of the first countries to raise the issue of apartheid in South Africa at the United Nations and was one of the earliest signatories to the Convention on the Elimination of All Forms of Racial Discrimination in 1965
- India's nuclear doctrine at the United Nations is in consonance with its commitment to achieve global

disarmament and maintain international peace and security. India is the only nuclear weapons state to demand total elimination of nuclear weapons.

- India's international identity has long been shaped by its role in U.N. peacekeeping, with more than 100,000 Indian troops having served in U.N. missions during the past 50 years.
- India has an independent capability to place satellites in orbit, including production of the necessary launch vehicle
- India's bid for permanent membership of UNSC is backed by 4 Permanent Members, namely France, Russia, the United Kingdom and United States.

G7 postponed and its expand

Why in news?

- U.S. President postponed the summit and dismissed the current configuration of the "Group of Seven" or G-7 of the world's most developed nations as "outdated".
- He also announced that he would like to expand it to a G-11, by adding India, Russia, South Korea and Australia.

Approval of other countries

- India, Australia and South Korea have welcomed the invitation. Russia, that lost its membership of the grouping in 2014 over its annexation of Crimea, said it would attend "if treated as an equal".
- The proposed G-11 grouping would recognise India's place amongst the world's richest nations, and acknowledge its global voice.
- However, the Indian government must weigh the benefits proposed along with some of the factors that are still unclear.
- As host, USA can invite any country as a G-7 special invitee, but changing its composition will require the approval of the other members.
- Already, there are some concerns over Russia, which could derail the entire G-11 plan, making any concrete decision by New Delhi on the issue premature.

US-China ties: a new COLD WAR

- The U.S. government's decision to restrict passenger planes from China from 16 June 2020 is in response to China's refusal to allow U.S. airlines to resume flights to the country.
- A trade war which USA launched in 2018 is yet to be resolved fully.
- In recent months, USA had attacked China over its handling of the COVID-19 pandemic.
- The U.S. has also decided to end Hong Kong's special trade status in protest against Beijing's move to introduce a new national security law for the Special Administrative Region.
- Repeated targeting of China by Washington and Beijing's counter moves make it look like the world's largest and second largest economies have entered into a new cold war.
- Disputes such as this could be resolved through talks and cooperation.
- From trade and technology to the pandemic and Hong Kong, the battle lines have been drawn.
- Ties between China and the U.S. are still not as bad as they were between the Soviet Union and the U.S.
- Beijing and Washington are still economically and financially entangled.
- The world is not divided into two ideological blocs (Capitalism vs Communism), as it had been during the Cold War. The possibility of a military confrontation is very low.

About G7

- The G7 emerged as a restricted club of the rich democracies in the early 1970s.
- Oil prices quadrupled just after the 1973 Arab-Israeli War.
- Members of the Organization of the Petroleum Exporting Countries (OPEC) imposed an embargo against Canada, Japan, the Netherlands, and the United States, shocked their economies.
- Although the French were spared the embargo, the chill winds of the OPEC action reverberated around the world.
- French President invited the Finance Ministers of five of the most developed members of the Organisation for Economic Cooperation and Development.
- United States, Germany, Japan, Italy, and the United Kingdom, joined for an informal discussion on global issues.
- This transformed into a G7 Summit of the heads of government from the following year, with the inclusion of Canada (1976), and the European Commission/Community (later Union) in 1977.
- On the initiative of U.S. President Bill Clinton and British Prime Minister Tony Blair, the G7 became the G8, with the Russian Federation joining the club in 1998.
- This ended with Russia's expulsion following the annexation of Crimea in 2014.
- When constituted, the G7 countries accounted for close to two-thirds of global GDP.

The limitations of G7

- The success or otherwise of multilateral institutions are judged by the standard of whether or not they have successfully addressed the core global or regional challenges of the time.
- The G7 failed to head off the economic downturn of 2007-08, which led to the rise of the G20.
- In the short span of its existence, the G20 has provided a degree of confidence, by promoting open markets, and stimulus, preventing a collapse of the global financial system.
- The G7 has not covered itself with glory with respect to contemporary issues, such as the COVID-19 pandemic, climate change, the challenge of the Daesh, and the crisis of state collapse in West Asia.
- It had announced its members would phase out all fossil fuels and subsidies, but has not so far announced any plan of action to do so.
- The G7 countries account for 59% of historic global CO2 emissions ("from 1850 to 2010"), and their coal fired plants emit "twice more CO2 than those of the entire African continent".
- Three of the G7 countries, France, Germany, and the U.K., were among the top 10 countries contributing volunteers to the Daesh, which had between 22,000-30,000 foreign fighters just two years ago.

- West Asia is in a greater state of turmoil than at any point of time since the fall of the Ottoman Empire. This has resulted into a migrants crisis that persuaded many countries in Europe to renege on their western liberal values.
- It made the Mediterranean Sea a death trap for people fleeing against fear of persecution and threat to their lives.

Way Ahead

- Despite its border tensions with China, India must also consider its objectives in attending a grouping that appears aimed at fuelling a new Cold War between the U.S. and China.
- Finally, an evaluation of the G-7's effectiveness as a multilateral forum thus far is needed, given deep member differences on issues including climate change, security contributions, Iran, etc. In France, last year, the grouping was unable to issue a joint communiqué due to these differences — a first in its 45-year-old history.
- India deserves its place on the global stage, but on G-11, it must be clear about its aims.

Vamsadhara river water dispute

Why in news?

- Chief Ministers of Andhra Pradesh and Odisha held talks to iron out all differences with regard to the sharing of waters of Vamsadhara River.

Issue

- Andhra Pradesh wants to build the Neradi bridge across the river which will be possible after Odisha's consent only.
- According to Odisha, the flood flow canal would result in drying up the existing river bed and consequent shifting of the river affecting the groundwater table. The state also raised the issue of scientific assessment of available water in Vamsadhara at Katragada and Gotta Barrage, Andhra Pradesh and the basis for sharing the available water.

Interstate River Water Disputes

- This is one of the most contentious issues in the Indian federalism today.
- In State List, Entry 17 deals with water i.e. water supply, irrigation, canal, drainage, embankments, water storage and water power.
- In Union List, Entry 56 empowers the Union Government for the regulation and development of inter-state rivers and river valleys to the extent declared by Parliament to be expedient in the public interest.
- Article 262 gives for the adjudication of inter-state water disputes. Parliament may by law give for the adjudication of any dispute or complaint with respect to the use, distribution and control of waters of any inter-state river and river valley.
- According to Article 263, the President of India may also set up an interstate council to inquire and recommend on the dispute that has arisen between the states.
- The Parliament has enacted the River Boards Act and the Inter-State Water Disputes Act in 1956.
- The Inter-State Water Disputes Act empowers the Central government to establish an ad hoc tribunal for the adjudication of a dispute between two or more states in relation to the waters of an inter-state river or river valley. Many Inter-State Water Disputes Tribunals have been set up so far, but they had their own problems.
- The award of the tribunal is final and binding on the parties to the dispute.
- Neither the Supreme Court nor any other court is to have jurisdiction in respect of any water dispute which may be referred to such a tribunal under this Act.

Vamsadhara River

- It is an important east-flowing river between Rushikulya and Godavari, in Odisha and Andhra Pradesh.
- It runs for a distance of about 254 kilometres, where it joins the Bay of Bengal at Kalingapatnam, Andhra Pradesh.

Reservation not a Fundamental Right

Why in news?

- All political parties from Tamil Nadu had filed a writ petition in the Supreme Court seeking direction to the Centre to implement 50% Other Backward Class (OBC) reservation in the all-India NEET seats surrendered by the state.
- They have accused the Centre of “violating the right of the people to have a fair education” by neither implementing the 50% quota for OBC in Tamil Nadu nor providing 27% reservation for OBC candidates in other states for the All India Quota seats.
- Supreme Court observed that the right to reservation isn't a fundamental right.
- It ruled that nobody can claim right to reservation as a fundamental right, and hence not giving the benefits of quota cannot be considered as a violation of any constitutional right.
- However, the apex court pointed that a writ petition under Article 32 of the Constitution can be filed only in case of violation of fundamental rights.
- Earlier, the Court had ruled that reservation in promotion is not a fundamental right.

Constitutional Provisions regarding Reservations

- Article 16(1) and 16(2): Assure citizens equality of opportunity in employment or appointment to any government office.
- Article 15(1): Prohibits any discrimination against any citizen on the grounds of religion, caste, sex or place of birth.
- Articles 15(4) and 16(4): Equality provisions do not prevent the government from making special provisions in matters of admission to educational institutions or jobs in favour of backward classes, particularly the Scheduled Castes (SCs) and the Scheduled Tribes (STs).
- Article 16(4A): Allows reservations to SCs and STs in promotions, as long as the government believes that they are not adequately represented in government services.
- In the Indra Sawhney case of 1992, the Supreme Court fixed the upper limit for the combined reservation quota should not exceed 50% of seats.

- 103rd Constitution Amendment Act was passed in 2019 empowering both Centre and the states to provide 10% reservation to the EWS category of society in government jobs and educational institutions.

Secrecy of Ballot

Why in news?

- The Supreme Court observed that Secrecy of ballot is the cornerstone of free and fair elections.
- The choice of a voter should be free and the principle of secrecy of ballots is an important postulate of constitutional democracy.
- The judgment came on an appeal against the Allahabad High Court decision setting aside the voting of a no-confidence motion in a Zila panchayat in Uttar Pradesh in 2018.
- The High Court found that some of the panchayat members had violated the rule of secrecy of ballot. It relied on CCTV footage to conclude that they had either displayed the ballot papers or by their conduct revealed the manner in which they had voted.

Secret Ballot/Australian ballot

- ‘Secret Ballot’ refers to the process of casting of a vote by a voter in such a way that no one comes to know in whose name the voted is casted except by the voter. It aims to achieve the goal of political privacy.
- It aims to prevent attempts to influence the voter by intimidation, blackmailing, and potential vote-buying.

SC Judgment

- Justice Khanna, who wrote the judgment, referred to Section 94 of the Representation of People Act, which upholds the privilege of the voter to maintain confidentiality about his/her choice of vote.
- It is the policy of the law to protect the right of voters to the secrecy of the ballot.
- Even a remote or distinct possibility that a voter can be forced to disclose for whom he/she has voted would act as

a positive constraint and a check on the freedom to exercise of the franchise.

- The privilege ends when the voter decides to waive the privilege and instead volunteers to disclose as to whom he/she had voted.

Reservation for Economically Weaker Sections

Why in news?

- In Sikkim, the State Cabinet decided to allow Economically Weaker Sections of people who do not fall in the reserved category of ST, SC and OBC for 10 per cent Central reservation.
- This was a long-pending aspiration of a section of people who had been deprived privileges, especially with regard to availing employment and educational opportunities outside the state, including All India services.
- This reservation will not apply to scientific and technical posts and other such posts which are outside the purview of the Central services.

Reservation for EWSs in Educational Institutions

- The central government issued an order in 2019, adding 103rd Amendment Act of 2019, providing 10% reservation in the Economically Weaker Sections (EWSs) in admission to educational institutions.
- The benefit of this reservation can be availed by the persons belonging to EWSs who are not covered under any of the existing schemes of reservations for SCs, STs, and OBCs .

General Studies III (Technology, Economic Development, Bio-Diversity, Environment, Security and Disaster Management)

Assam Gas leak

Why in news?

- On 27 May 2020, natural gas was continuously flowed out of a gas well in Assam following a blowout — or a sudden, uncontrolled release of gas/oil.
- This happened after the blowout at the Oil India Limited's (OIL) Baghjan gas well in Assam's Tinsukia district.
- People from surrounding villages have been evacuated, while a variety of fish and an endangered Gangetic dolphin have died.

Reasons behind blowouts

- The pressure balance in a well may be disturbed leading to 'kicks' or changes in pressure. If these are not controlled in time, the 'kicks' can turn into a sudden blowout.
- There are many possible reasons behind blowouts, "from simple lack of attention, poor workmanship, bad maintenance, old age, sabotage to morpho-tectonic factors".

Challenges

- The control of a blowout depends on the size of the reservoir and the pressure at which the gas/oil is flowing out.
- This reservoir was particularly difficult to control since it was a gas well and ran the risk of catching fire at any point.

Impact to the neighbourhood

- Many families with large number of people have been evacuated to relief camps. There are reports of deaths of a river dolphin, and a variety of fish.
- Also close is the Maguri-Motapung wetland —an Important Bird Area notified by the Bombay Natural History Society.

- **Dibru-Saikhowa National Park** houses some of the rare and endangered species of flora and fauna – around 36 species of mammals and nearly 400 species of birds.
- While many blowouts automatically collapse on their own, it can take up to months. To control a blowout, the first step is to pump in water, so that the gas does not catch fire.

Killing Pregnant Elephant

Why in news?

- Recently, in Kerala, a pregnant elephant was died due to the harmful use of a food bomb that caused widespread anger.
- Numbers of elephants are killed every year in India as their paths cross those of humans, but the image of a mortally wounded animal will remain imprinted on the mind.

Human-animal Conflict

- The tragic accident is a reminder of the rising conflicts between humans and animals that are only destined to grow, as commercial pressures eat into already decreasing habitat.
- A major failing of conservation in India is that the needs of farmers and wild animals do not go hand in hand.
- The perpetrators may be prosecuted for the elephant's death, but that can do little to reduce the larger issue of lost ranges and blocked corridor.
- India has thousands of elephants — just under 30,000 according to available counts — but no strong science-imbued policy that encourages soft landscapes and migrating passages that will reduce conflict.
- Shrinking feeding grounds for elephants cause serious worry, because the animals look for soft landscapes adjoining forests such as coffee, tea and cardamom estates.
- In the absence of these, they wander into food-rich farms falling in their movement pathways.

Challenges

- With the absence of large predators outside forests and the huge availability of easily accessible food crops, deer, monkeys, boar and other species inevitably fill this space.
- India does not allow rural people to hunt animals, but neither does the government cull animals regularly despite their numbers shooting up.
- While the government has the provision to declare overabundant animals “vermin”, and cull them under the Wildlife Protection Act, it very rarely does this.
- Vocal urban wildlife activist groups generally create a social media storm when such decisions are taken and challenge the order in court. These groups have no empathy for the farmers who struggle to make their ends meet while growing food for all of us.
- Given the widespread destruction of crop by these animals, farmers urgently need a safety net.
- Compensation schemes are one part of the solution, but in India this is always only a fraction of the market value of the crop, which is already precariously low.
- Poor farmers spend a lot of time navigating bureaucratic processes to get it. And there is no end to this process.
- The start of the monsoon is when animals move into human habitation more, partly on account of jackfruit and other crops/fruits.

Way Ahead

- Landscapes which are seen nothing more than a resource to be exploited for minerals and cash crops, elephants and other creatures have little chance of escaping deadly conflict.
- A culture shift to protect, rather than prospect, would genuinely enrich people and save biodiversity.
- At a policy level, a good starting point would be to reorient the forest department.
- It is time to do away with the wildlife-territorial dichotomy of management that currently exists. Beyond that there are no universal solutions.
- Solutions vary based on the context, the kinds of crops grown, density of people, socioeconomic status, etc.
- Farmers should be empowered and subsidised to better protect their land rather than wait for compensation or be

forced to resort to these extreme, illegal measures out of desperation.

Integrated flood warning system: Mumbai

Why in news?

- Maharashtra's CM and Union Minister for Health and Family Welfare, Science and Technology launched an Integrated Flood Warning System known as 'IFLOWS-Mumbai'.

About 'IFLOWS-Mumbai'

- It is a joint initiative between the Ministry of Earth Sciences (MoES) and Brihanmumbai Municipal Corporation (BMC).
- It is a monitoring and flood warning system.
- The system has provisions to capture the urban drainage within the city and predict the areas of flooding.
- It comprises of various modules namely Data Assimilation, Flood, Inundation, Vulnerability, Risk, Dissemination and Decision Support System.
- The system is designed to generate flood warnings for specific geographical areas of the city.
- All this information will then be routed to authorities.
- It thereby will minimize the damage from cyclones and heavy rain events in Mumbai by evacuating people to safe areas.
- It will be able to relay alerts of possible flood-prone areas anywhere between 6 to 72 hours in advance such as:
 - 1.the height the floodwater could attain
 - 2.location-wise problem areas across all 24 wards
 - 3.calculation on the vulnerability and risk of elements exposed to flood

The early warning forecast would include alerts on -

- 1.rainfall information
- 2.tide levels
- 3.storm surge for low-lying areas anticipated to be affected

How does it work?

- The primary source for the system's flood assessments is the amount of rainfall.
- Mumbai being a coastal city, the system also factors in tidal waves and storm tides.

This is being done by measuring -

- 1.the city's rainfall, how much water drained out
- 2.topography, land use, infrastructure development
- 3.population
- 4.lakes, creeks
- 5.data on river bathymetry of all rivers namely Mithi, Dahisar, Oshiwara, Poisar and Ulhas

The system incorporates -

- weather models from the National Centre for Medium Range Weather Forecasting (NCMRWF), India Meteorological Department (IMD)
- field data from the rain gauge network of 165 stations set up by Indian Institute of Tropical Meteorology (IITM), BMC and IMD

What is the need?

- Mumbai, the financial capital of India, has been experiencing floods with increased periodicity.
- The flood during 26 July 2005, when the city received a rainfall of 94 cm, a 100-year high in a span of 24 hours had paralyzed the city completely.
- The flood on 29 August 2017 had brought the city to a standstill.
- In 2019, there were post-monsoon and unseasonal rainfall as late as October and two tropical cyclones in the Arabian Sea.
- These have left a trail of destruction in Mumbai.
- Urban flooding is common in the city from June to September, resulting in the crippling of traffic, railways and airlines.
- As preparedness for floods before they occur, the IFLOWS-Mumbai system will help in warning the citizens.
- Mumbai is only the second city in the country after Chennai to get this system.

- Similar systems are being developed for Bengaluru and Kolkata.

Data of over one lakh Indians posted for sale on dark web

Why in news?

- According to cyber intelligence firm Cyble, over 1 lakh scanned copies of Indians' national IDs, including Aadhaar, PAN card and passport, have been put on dark web for sale.
- The leaked data seems to have originated from a third party and not from the government system.
- The personal data leaked by cyber criminals leads to various nefarious activities such as identity thefts, scams, and corporate espionage. Many criminals use the personal details in the IDs to win trust of the people over a phone call for fraudulent activities.

Data Protection in India

- The Information Technology Act, 2000 amended in 2008 contains provisions for the protection of electronic data.
- According to the Supreme Court in the Puttaswamy judgement (2017), the right to privacy is a fundamental right and it is necessary to protect personal data as an essential facet of informational privacy.
- Recently, the Indian Parliament tabled the Personal Data Protection (PDP) Bill, 2019 which would be India's first attempt to domestically legislate on the issue of data protection. The Bill categorises certain personal data as sensitive personal data. This includes financial data, biometric data, health data, caste, religious or political beliefs.

Space Sector Reforms

Why in news?

- Reforms in the Space sector have been approved by the Union Cabinet to boost private sector participation in the entire range of space activities from satellite-based service provision to rocket launches.

- This is to be implemented by a new agency, the Indian National Space Promotion and Authorization Centre (IN-SPACe).
- India is among a handful of countries with advanced capabilities in the space sector. With these reforms, the sector will receive new energy and dynamism.
- This is a big deal, along the pattern of deregulation that we last saw in the 1990s.

Key Benefits

- Finance minister, while delivering the fourth chunk of the Rs 20 lakh crore Aatma Nirbhar Bharat Special Economic Package or self-reliant, aimed to transform the Indian economy into a self-reliant one.
- Liberalizing India's space sector is a necessary condition for the country to achieve greater self-reliance not just in space, but in the broader high technology domain.
- The proposed reforms are a part of Aatma Nirbhar Bharat Special Economic Package and these reforms will enhance the socio-economic use of space assets and activities, including through improved access to space assets, data and facilities.
- This will not only result in an accelerated growth of this sector but will enable Indian Industry to be an important player in global space economy.
- With this, there is an opportunity for large-scale employment in the technology sector and India becoming a Global technology powerhouse.
- The newly created Indian National Space Promotion and Authorization Centre (IN-SPACe) will provide a level playing field for private companies to use Indian space infrastructure.
- It will also hand-hold, promote and guide the private industries in space activities through encouraging policies and a friendly regulatory environment.
- The Public Sector Enterprise 'New Space India Limited (NSIL)' will endeavour to re-orient space activities from a 'supply driven' model to a 'demand driven' model, thereby ensuring optimum utilization of our space assets.

- These reforms will allow ISRO to focus more on research and development activities, new technologies, exploration missions and human spaceflight programme.
- Some of the planetary exploration missions will also be opened up to private sector through an 'announcement of opportunity' mechanism.
- This is the most significant development in the sector since the formation of the Indian Space Research Organisation (ISRO) half a century ago.

Issue of Concern and Way Ahead

- The government must focus on getting the basics right upfront. The regulatory structure is crucial to how the industry develops.
- It is not sufficient for the government to merely declare that the doors to private investment in space are open—it must signal that all investors will be treated fairly and the rules will not be changed mid-way to benefit incumbents or favoured players.
- A credible signal of this would come from a structural separation of individuals and entities involved in governance from those participating in commercial activities.
- IN-SPACe is to be an "autonomous nodal agency". It will be autonomous, but it will only be a nodal agency, and not the national space authority.
- IN-SPACe itself will face two major challenges from the outset. The first would be to oversee the division of roles and resources between ISRO and NewSpace, and once that is done, to ensure that private players get fair, non-discriminatory access to common infrastructure.
- For IN-SPACe to be an effective facilitator, the Prime Minister's Office will have to empower it to go beyond being a nodal agency and take on the authority—perhaps by delegation—to issue the numerous licences and clearances required from other ministries and departments.
- India aims to become self-reliant and for that goal to be achieved, New Delhi must aggressively fight for an open global economy. The paradox of self-reliance is that it can only be achieved through openness. This is so in space as in most other things.

India bans Chinese Apps

Why in news?

- Government of India has banned 59 apps originating from China, including very popular ones like the short video platform TikTok, UC Browser, ShareIt, and CamScanner etc.
- The notification is expected to be followed by instructions to Internet service providers to block these apps.
- Users will soon see a message saying access to the apps has been restricted on the request of the government.

Legal Reasons

- The Ministry of Information and Technology said that it has received many complaints in this regard.
- There were reports on misuse of some mobile apps.
- There was stealing and secretly transmitting users' data in an unauthorised manner to servers that have locations outside India.
- The ban has been enforced under Section 69A of the Information Technology Act, 2000.
- It offers the power to issue directions for blocking for public access of any information through any computer resource.
- This is done in the interest of -
 1. Sovereignty and integrity of India
 2. Defence of India, security of the State
 3. Friendly relations with foreign States
 4. Public order
 5. For preventing incitement to the commission of any cognizable offence relating to above

Impact of the ban

- New social media platforms like Helo and Likee, as well as video chat app Bigo Live, are immensely popular among Indians who are not comfortable in English.
- The TikTok app has over 100 million active users in the country.
- About 30% of TikTok's downloads is said to be coming from India.

- But TikTok was seen as having more potential in terms of personalisation of content and overall influence.
- TikTok made relentless push into India's hinterland. Evidently, the app supports over 15 Indian languages.
- This enabled the app to work on regional talent in a very personalised manner.
- These users will have to look for substitutes.
- Also, most of these platforms have Indian creators, for many of whom this is the only source of income.
- Many of these apps have offices and employees in India, and a few thousand jobs could be at stake now.

Has TikTok been banned earlier?

- In, May 2019, in the run up to the general elections, the government banned the app's downloads for 2 weeks following a Madras High Court ruling.
- The Court observed that it could expose children on the app to graphic content or predators.
- TikTok had appealed and the court subsequently reversed its ruling.

Impact on China

- The move comes as an exercise of coercive diplomacy with China amid the tense standoff in Ladakh.
- The decision has been taken in a specific strategic and national security context. However, the government has, for now, picked up a low-denomination item - mobile apps.
- It could be a warning to bigger Chinese businesses in India, and to China itself.
- This has only a limited impact on Indian businesses.
- It has a disproportionately large presence in the mass consumer segment.
- This may not hurt India given the alternatives in the app space.
- Instead, this move focuses on the technology sector.
- A ban on physical goods would have also adversely affected India's business and economy while hardly making a dent on China's.

MSME sector

Why in news?

- International Micro, Small and Medium-sized Enterprises (MSME) Day is being observed on 27 June under the theme "COVID-19: The Great Lockdown and its impact on Small Business."
- MSME Ministry launched the Credit Guarantee Scheme for Sub-ordinate Debt (CGSSD) which is also known as "Distressed Assets Fund-Sub-ordinate Debt for MSMEs".
- MSME Ministry has issued consolidated notification for classification and registration of MSMEs to be effected from July 1. This notification would supercede all earlier notifications with regard to classification or registration of MSMEs.

Registration Process

- An MSME would hereafter be referred to as Udyam and the registration process as Udyam Registration.
- The Registration can be filed online based on self-declaration. Uploading of documents, papers or certificate as proof would not be necessary.
- The basic criteria for MSME classification would be on investment in plant, machinery and equipment and turnover.
- Export of goods or services or both would be excluded while calculating the turnover of any enterprise and investment calculation linked to the IT return of the previous year.
- Champions Control Room across the country have been made legally responsible for facilitating entrepreneurs in registration and thereafter.

Classification of MSMEs

- Micro enterprises: Investments not exceeding Rs one crore and turnover of Rs 5 crore.
- Small enterprises: Investment up to Rs 10 crore and turnover of up to Rs 50 crore.
- Medium enterprises: Investments not exceeding Rs 50 crore and turnover of Rs 250 crore.

Significance of MSMEs

- With around 63.4 million units throughout the geographical expanse of the country, MSMEs contribute around 6.11% of the manufacturing GDP and 24.63% of the GDP from service activities as well as 33.4% of India's manufacturing output.
- They have been able to give employment to around 120 million persons and contribute around 45% of the overall exports from India.
- About 20% of the MSMEs are based out of rural areas, which indicates the deployment of significant rural workforce in the MSME sector.

Institute for Defence Studies and Analyses(IDSA)

Decoding Cyberattack on Australia

The COVID-19 outbreak has led to increase the use of digital platforms as modes of communication as well as transaction. However, lack of adequate cybersecurity measures has opened up multiple entry points for malicious cyber actors to exploit the network and system vulnerabilities to their advantage.

Recently, several public and private-sector organisations in Australia encountered massive cyberattacks. According to Mr. Scott Morrison (Prime Minister), these attacks are "targeting Australian organisations across a range of sectors, including all levels of government, industry, political organisations, education, health, essential service providers and operators of other critical infrastructure."

The malware suspected to have been used in the attacks is known as Aria-body, developed by a Chinese cyber-crime group called Naikon.

Aria-body has alarming capability to hand control of a computer to the hacker, including access to files, use of email and ability see what's being typed in real-time.

What is a cyberattack?

In computers and computer networks an attack is any attempt to expose, alter, disable, destroy, steal or gain unauthorized access to or make unauthorized use of an asset. Australia is experiencing the three Ds of cyber-crime i.e. Disrupt, Deny and Destroy.

Form of Attack

The attackers have used common "copy-paste compromises" which was deciphered on investigations from the cyber actor's heavy use of "proof-of-concept" exploit code, web shells and other tools copied from open source.

Attackers are primarily using "remote code execution vulnerability" to target the country's network and systems. It is a common form of cyberattack in which the perpetrator tries to insert its own software code into vulnerable systems such as a server or database. This attempt could have been carried out by customised "spear-phishing" techniques, like sending targets links to malicious files and websites aimed at harvesting passwords.

The Suspect

The Australian Strategic Policy Institute found that the attack was "95 percent or more" likely to have been launched from China because of its scale and intensity. Australian investigators found that the attacker used codes and techniques known to have been used by China in the past.

These attacks came at a time when the two countries were falling out over the origins of the coronavirus wherein Australia attempted to launch a UN investigation into China's role in the origins of the virus.

The tension between the two countries has been growing over a host of issues including trade, travel and, most recently, the death sentence handed over to an Australian citizen Karm Gillespie, allegedly a drug smuggler.

China has denied any role in the cyberattacks. China has also put economic sanctions on some Australian imports and threatened to boycott Australian goods.

Indian context

- A cybersecurity firm, Cyfirma, has also warned India against a potential large-scale cyberattack in view of ongoing tensions with China. On June 19, the Indian Computer Emergency Response Team (CERT-In) issued an advisory about a planned large-scale phishing attack campaign against India.
- Cyfirma had gathered the information based on conversations taking place in the Chinese hacker forum on the dark web. The firm traced the list back to their sources and found links to two hacking groups, Gothic Panda and Stone Panda. These groups are known to have a direct affiliation to the People's Liberation Army (PLA).
- Subsequently, on June 23, Maharashtra Cyber, the state police cyber wing, stated that "at least 40,300 cyber attacks were attempted in the last four-five days on the resources in Indian cyberspace". Meanwhile, India has banned 59 apps reportedly linked to the Chinese Government and involved in data extraction for coercive purposes.

Conclusion

The Australian Government has announced that it is recruiting 500 additional cyberspies to strengthen the country's cybersecurity amidst escalating tensions due to suspicion of meddling and espionage by foreign countries.

Pakistan's CPEC Obsession: Boon or Bane?

Since its inception, the China-Pakistan Economic Corridor (CPEC) has evoked a lot of interest among the policymakers, analysts, and strategists around the world. While the ruling elite in Pakistan considers it a boon that would transform Pakistan's future, many analysts have viewed it as a Chinese game-plan to turn Pakistan into a permanent colony, a rentier-cum-client state. Others in Pakistan have called it a debt trap and a neocolonial ploy.

What make it controversial?

- The secrecy that shrouds the terms of reference, specifically involving the rate of interest and other conditionalities of the Chinese loans to fund CPEC, makes this project even more controversial.

- Other than Punjab the optimism of the federal government is not shared by the rest of the provinces.
- It almost bypasses the Khyber Pakhtunkhwa Province and seeks to exploit the resources of Balochistan without passing on the benefits to its people.

Investment or Debt Trap?

- Started in 2013, the CPEC, the flagship project under China's Belt and Road Initiative (BRI), received a major boost in April 2015 when China initially pledged US\$ 46 billion towards project implementation over a period of 15 years. This was later increased to US\$ 62 billion.
- A major share of it (US\$ 35 billion) was marked for energy production (of about 17 GW in all and 10 GW by 2020) to help Pakistan tide over its existing energy shortfall of about 4.5 GW and usher in an era of industrialisation and development.
- Five years later, Pakistan has an additional aggregate of 5.918 GW of power harnessed majorly from its coal-fired plants, and also partly from hydro, solar and wind power. As per the estimates given by the Pakistan Planning Commission, the total expenditure has been about US\$ 9.309 billion, out of which, as per the State Bank of Pakistan (SBP) figures, China has invested upward of US\$ 6 billion during 2015-2020. In other infrastructure projects, mainly involving roads, investment to the tune of about US\$ 4.3 billion has been made.
- Though the country is now energy surplus, the unit cost of power production is too high for the local people to afford. The power companies are selling power at a high price, especially in Karachi where it is Pakistani Rupee or PKR 17.69 per unit.
- Pakistani observers hold the view that CPEC has come as a gift to the Chinese state-owned enterprises. They profit from tax relaxation and have been assured of good returns from the CPEC projects through sovereign guarantees. They also have easy access to financial capital through banking facilities and other incentives. Therefore, local industries have found it hard to compete with their Chinese counterparts.
- For China, apart from such investments with assured returns, the extension of the Karakoram Corridor till the seaport of Gwadar in Balochistan Province is of significant strategic relevance. It connects the energy-deficient region

of Xinjiang in western China with the energy-rich regions in western Asia through this port.

- Thus, Gwadar is being termed as a “gateway” to the CPEC and a state-owned Chinese company, Overseas Port Holding Company, has taken this port on lease for 40 years. It will retain over 91 per cent of the revenue from its marine operations and 85 per cent of the revenue from the management of an adjacent free-zone.
- Access to a deep-sea port is also of tremendous strategic significance for a country seeking to enhance its influence in the Indian Ocean and secure uninterrupted supply of oil from the Gulf.
- Moreover, the Chinese are also reportedly working towards settling hundreds of thousands of their citizens in the Gwadar Port. The China-Pakistan Investment Corporation (CPIIC) Global, a construction company tasked with developing real-estate in the port area, has already bought the 3.6 million square foot International Port City and will build a \$150 million gated community for the Chinese professionals in the proposed new financial district in Gwadar.

Myth of Development

- In the initial years, the CPEC projects did contribute to Pakistan’s growth due to a rise in domestic consumption.
- For example, the demand for cement, smaller machinery and other products increased because of the work on energy and road infrastructure projects. But this also led to an increase in the import bill since big machinery and other goods were imported, resulting in a deficit in the balance of payment.
- The import-driven economy, artificially, kept the value of rupee strong. Once this phase was over, the economy came under huge stress.
- Pakistan’s growth witnessed a decline of around 1.9 per cent during 2018-19. The World Bank has projected a negative -1 per cent GDP growth for Pakistan in the upcoming fiscal year 2020-21.
- The government has been forced to devalue the currency and reach out to the IMF for a bailout. Considering Pakistan’s economic situation, the IMF has asked Pakistan to clarify the debts it owes to China as it did not want the bailout package to be used for repaying the Chinese loan.

Conclusion

Undeterred by criticism and concerns expressed by the analysts worldwide, Pakistan and Chinese officials are now finalising new infrastructure projects worth billions which include the railway project ML-1 with an estimated cost of \$7.2 billion.

Even an agreement has been signed for investment in the Diamer-Bhasha Dam (DBD) project. Given Pakistan’s economic situation, repaying these loans would be difficult. The external debt of the central government has increased from PKR 11 trillion in June 2019 to PKR 11.23 trillion in February this year.

According to the World Bank, the rupee depreciated by 7.3 per cent in March this year and real GDP growth is projected to contract by 1.3 per cent. The total public debt to GDP ratio stood at 72.1 per cent.

All these will have implications for Pakistan’s debt situation in future. As it stands today, Pakistanis are likely to find their enthusiasm about CPEC turn into an economic nightmare.

Time to Leverage the Strategic Potential of Andaman & Nicobar Islands

In recent years, India has adopted a proactive policy aimed at transforming the Andaman and Nicobar Islands, a tri-services command, as an economic hub and one of the key centres of its defence and security strategy. A focused development plan for the Islands is expected to greatly enhance the country’s geopolitical leverage in the Indian Ocean Region.

Until now, the balance between environmental preservation, tribal welfare, national security and economic development was skewed in favour of isolating the Islands due to strategic considerations. The economic potential of the A&N Islands had largely remained untapped.

As the Islands provide India a commanding geostrategic presence in the Bay of Bengal and access to South and

Southeast Asia, a focused development plan for the Islands is expected to greatly enhance the country's geopolitical leverage in the Indian Ocean Region (IOR).

The A&N Islands have played a key role in enhancing India's regional engagement with the Bay of Bengal littorals.

This policy brief recommends the opening up of the A&N Islands to other navies such as the United States (US), Japan, Australia, and France, among others, in order to promote greater naval cooperation.

Strategic Context

Strategically located, the A&N Islands, larger than several island countries in themselves, are an asset in India's defence and strategic calculus.

The Islands straddle Duncan's Passage and the Ten Degree Channel. The Preparis Channel and Six Degree Channel are located to the north and south of the Island chain.

All these passages are important trade routes for any shipping destined for Southeast and East Asia. The 572 islands, out of which only 38 are inhabited, comprise 30 per cent of India's Exclusive Economic Zone (EEZ).

The Six Degree and Ten Degree Channels in the Andaman Sea which lead to the Malacca Strait are vital to the sea lanes of communication (SLOCs) along which flows global commerce, including energy trade, between Asia, Africa and the Pacific.

The A&N Islands are at the intersection of the Indian Ocean and the South China Sea, and further to the Pacific Ocean, an important fulcrum of the strategic concept of the Indo-Pacific.

Access to Andaman and Nicobar Command

The Tri-Services Andaman and Nicobar Command (ANC) has progressively emerged as a lynchpin of India's regional maritime engagement in the Bay of Bengal and the Andaman Sea. Various multilateral and bilateral maritime engagements viz. the Bay of Bengal Initiative for Multi-

Sectoral Technical and Economic Cooperation (BIMSTEC), the MILAN series of exercises, coordinated patrols, and bilateral exercises with littoral states in the Bay of Bengal and the Andaman Sea have contributed to this purpose.

While regional navies of Southeast Asian countries have been making regular port calls to Port Blair, other major navies viz. the US, Australian, Japanese and French have shown interest in visiting the Andaman Islands for port calls and exercises.

There have been some suggestions for coordinated surveillance of Malacca, Sunda, Lombok, and Ombai Wetar Straits through the collaborative use of the A&N Islands and Australia's Keeling (Cocos) Islands.

Similarly, there have also been some recommendations about collaborative anti-submarine warfare (ASW) efforts in the Indian Ocean in which the A&N Islands could play a critical role.

Institutional Reluctance

Notwithstanding episodic visits by other navies, there exists some traditional institutional reluctance towards allowing port visits to the A&N Islands by foreign navies in general and the US Navy in particular. The origins of such a stand may lie in the past when the geopolitical situation was completely different.

The broader arguments against opening the A&N Islands to other major navies could have been based on considerations such as:

- (a) If naval vessels and military aircraft of other major navies become regular visitors to the A&N Islands it could accentuate China's 'Malacca Dilemma'. Given the complexity of India-China bilateral relations, these strategic interactions at the A&N Islands may rile China and lead to further antagonism between the two countries.
- (b) Enhancing interaction through visits by warships and military aircraft could be a 'slippery slope' which could progressively lead to more complex demands for strategic collaboration through the joint deployment of naval and

military assets for other contingencies beyond the scope of India's direct strategic interests.

(c) India may be seen as part of a collaborative framework against China in which other countries are already in a declared military alliance, for example, US-Australia, US-Japan, etc.

(d) In case India takes a liberal approach towards visits by other major powers, there should be a substantive quid pro quo particularly in relation to the US and Australia.

Analysis of Considerations

The entire approach to the question of allowing the naval assets of other major powers – including friendly powers and partners – appears to be predicated on its conjectured impact on India-China dynamics. This appears to be the central reservation.

The China-centric approach to India's decision-making appears flawed for the following reasons:

(a) India has complete sovereignty, territorial control and rights over its own territory. It is entirely for India to decide whether and which foreign navies can pay a visit to the A&N Islands. The Malacca Strait is an international waterway. Hundreds of nations ply their naval and merchant ships through those waters, including Japan, the Republic of Korea (ROK) and others. It is not used exclusively by China, nor does China have a lien on defining its strategic importance. Simply because it is a potential choke-point does not mean that there is any intention on the part of India or any foreign naval vessel that India permits to visit the A&N Islands, to threaten China's trade and energy flows through that waterway. In any case, foreign navies are regularly traversing the Malacca Strait and the international waters off the A&N Islands.

(b) On its part, China does not show any concern for India's sensitivities in its deployments in the Indian Ocean, not even when visiting its immediate vicinity. This is not analogous to foreign navies being permitted by India, on a case-by-case basis, to access the A&N Islands. Such action is not taking place in China's immediate vicinity. India needs to delink visits by friendly navies to the A&N Islands from the so-called China factor (China's "Malacca Dilemma").

(c) Allowing foreign naval vessels to visit the A&N Islands on a case-by-case basis does not tantamount to a "slippery slope". It is entirely up to India to assess any future requests by foreign navies and decide whether to accede to requests for a strategic collaboration – including proposals for joint exercises – on a case-by-case basis. India retains the right to decline any activity that goes beyond its strategic interests or areas of operation.

(d) Ship visits are a normal and natural part of naval cooperation between friendly nations. This has no bearing on whether the visiting naval power has a defence partnership or alliance with third countries. China has held joint exercises with Pakistan in the Indian Ocean, and recently with Iran and Russia in the Persian Gulf and also with South Africa and Russia in the western Indian Ocean. India's concerns have not been a factor for China.

(e) If India allows the US Navy or any other navy to visit the A&N Islands, indeed, there should be a well-considered quid pro quo.

Need for Collaborative Strategic ASW

The access to the Indian Ocean from the Pacific Ocean and vice-versa is limited through defined chokepoints which include Malacca, Sunda, Lombok, and Ombai Wetar Straits. Surveillance around these chokepoints is necessary for monitoring the movement of foreign naval vessels, particularly Chinese warships and submarines.

Given China's growing economic and strategic interests, Chinese naval presence in the IOR is expected to increase, including regular forays by Chinese nuclear submarines.

The US and Japan have a robust collaboration in strategic ASW in the Pacific through a combination of a sound surveillance sensor (SOSUS) chain and long-range maritime patrol (LRMP) aircraft. A similar approach for strategic ASW surveillance has been suggested in the Indian Ocean through collaboration between India, Japan, Australia, and the US. In addition, there are suggestions that India and Australia could consider a collaborative deployment of their LRMP aircraft from India's Andaman Island and Australia's Keeling (Cocos) Islands.

Yojana

Nurturing Self-Reliance

The world is facing an unprecedented turmoil. Pandemics have come and gone over the centuries, but it has never made the people and resources around the world struggle collectively with crumbling economies and a grim job which we are seeing lately.

The action plan for a Self-Reliant India hence is envisioned at a pertinent time. The five pillars of Aatmanirbhar Bharat — Economy, Infrastructure, System, Demography and Demand are aimed with a bird-eye-view on all the sectors and sections of society alike. Infrastructure, as an identity of the country; System, to bring-in technology driven solutions: Vibrant Demography; and, Demand, tapping the demand-supply chain through optimum utilisation of resources.

The initiatives and schemes undertaken in last few years have already paved the way for this journey towards making India Self-Reliant. Be it JAM Trinity of taking the benefits to the last mile, Start-Up India for creating ecosystem for young entrepreneurs, the push for Make in India.

Self-reliant India

A self-reliant India will be built by self-reliant citizens. India is a family of 130 crore Indians. If each one of the family members gainfully contributes to the economy and thereby Rashtra Nirman, then our population becomes our collective strength and not a weakness. A person becomes independent if s/he has skills and can earn their own livelihood.

Inclusive Growth Through Employment

A Self-reliant economy has to mean self-reliance for each and every member of our population. So the most important objective of a development strategy that focuses on self-reliance is inclusive growth.

Employment generation is central to inclusive growth. When one person in a family gets a job in the formal sector, the entire family gets uplifted economically and socially. Moreover, such formal sector employment for one member of the family contributes to mobility of futures generations as the kids are likely to get better education and healthcare facilities and thereby uplift themselves. Leaving large fractions of the labour force unutilised is extremely inefficient for the economy as the output they can contribute remains untapped.

Wealth and Skill through private enterprise and government

Self-reliance means recognising the complementary roles of the private sector and the government. Self-reliance cannot be achieved without recognising that market forces and private enterprise can take care of our needs during normal times.

Therefore, promoting private enterprise has to be an important component of self-reliance. The very idea of “Shubh-Laabh” (Prosperity & Profit) is that profit is not pariah but at the core of human endeavour and that social-prosperity and business-profit cannot exist in isolation from each other.

Specifically, the Government to build self-reliance must support the development of Riddhi and Siddhi in the following ways:

1. Our citizens learn skill, which is Siddhi.
2. We must support our MSMEs and SMEs by providing them skilled labour. The Siddhi of workers will create Riddhi for both MSMEs and workers.
3. We must invest in R&D and innovation like Digital Economy, Medical Research.
4. We must endeavour to reach new technological heights by using earth's resources meaningfully.
5. We should aim to help the rest of the world through both Riddhi and Siddhi.

Produce for the bottom of the Pyramid

Self-reliance means that Indian firms focus on producing goods and services that cater to the needs of our huge population.

The business models that Indian firms generate in catering to the needs of the poor can enable them to tap into markets in many under-developed economies in Asia.

By creating development models that cater to the needs of the poor consumers, a self-reliant India can help others and thereby occupy its rightful place as a global economic power.

Importance of Agriculture for A Self-reliant India

Agriculture is crucial to India's economic transformation. Increasing productivity and output in the agricultural sector would, beyond improving food security and the balance of payments (through reduced food imports and increased exports), sustain agro-processing, the manufacturing of agricultural inputs, and a host of services upstream and downstream from farms, creating employment and boosting incomes across the economy. There are opportunities for increasing exports of agricultural goods; the transformation should entail identifying high-value-added crops for which there is a demand elsewhere.

Moreover, agriculture can be very advanced technologically, serving as a basis of learning, with some of the skills having applicability to other areas.

Successful agricultural transformation will reduce the pressure arising from urban migration and the dilemmas it posed.

Self-reliance is not doing everything yourself

Whether it is an individual or a nation, self-reliance does not imply doing everything yourself. Similarly, building a self-reliant economy does not mean building an economy in isolation.

Self-reliance implies recognising that when we depend on others for help, there will be times when such help will not be forthcoming.

Thus, self-reliance does not imply complacent self-sufficiency, where India cuts itself off from the rest of the world and thereby avoids competing with the best in the world and benchmarking itself against them. Instead, self-reliance requires delineating sectors that are strategically critical to the nation and investing in these sectors so that our dependence during vulnerable times is minimised.

JAM (Jan Dhan-Aadhaar-Mobile) Trinity

The Government has been actively promoting the use of digital technology and establishing nationwide online platforms to boost policy implementation, essential operations and transparency during COVID-19 crisis. Technology as a tool of governance had already transformed many areas in the delivery of public good in India even before the COVID-19 pandemic.

Two main pillars of the use of digital technology in the pandemic— monitoring, and delivery of public goods. Monitoring has been made possible by the Aarogya Setu mobile app which has broken records of swift volume downloads of an app globally.

The use of the JAM trinity (Jan Dhan bank account for the underprivileged-Aadhaar number- Mobile telephony), to embrace technology in governance at a mass scale has also now gone through its toughest test yet. The promise of easy identification and transfer of government benefits and funds has been tested against the need for rapid delivery during the pandemic.

Why JAM Trinity is so powerful?

India has more than 3B crore (380 million) Jan Dhan bank accounts which have been used to transfer government benefits.

More than 1 billion Aadhaar numbers have been issued covering more than 99% of all Indians. In 2019, the number

of smartphone users in India crossed 500 million. The JAM trinity is also the 'enabler' for the country's Direct Benefit Transfer programme (DBT) which uses an electronic method to streamline delivery of cash transfers under government welfare schemes.

With the lockdown placing immense strain on the household budgets of several sections of society, the JAM trinity is acting as a safety net and helping millions who need immediate monetary aid.

Key benefits that highlight JAM as an imperative in the current times:

1. The JAM trinity has given a boost to the DBT programme and expanded its coverage from partial to ubiquitous. Aadhaar has facilitated legitimate databases while Jan-Dhan has offered bank accounts for all.
2. By eliminating the need for middlemen, JAM has helped minimise avenues of corruption, irregularities, wrongdoings and pilferages. It has also therefore, promoted the ease of doing business.
3. Given the need for physical distancing to curtail the spread of COVID-19, JAM is promoting online transactions among the beneficiaries, use of ATMs and payment cards instead of physical visits to the banks.
4. In the longer run, DBT schemes like JAM will make the rural population get acquainted with the concept of 'saving' thus contributing to the GDP of the country as a whole.

Digital Technology in Governance

The government has been actively promoting the use of digital technology and establishing nationwide online platforms to boost policy implementation, essential operations and transparency.

Social media and online platforms have emerged during this crisis as key mediums that connect citizens with governments and allow all users to access the most credible information.

More importantly, technology is not only fueling healthcare and emergency medical services but also alleviating the pressures placed on the supply chains and public distribution networks.

The use of technology to monitor the COVID- 19 has been rolled out not only across the country through Aarogya Setu (available in 11 languages) but also at the state level through a host of apps including in Punjab (Cova Punjab), in Himachal Pradesh (Corona Mukht Himachal), Uttarakhand (Uttarakhand Covid- 19 Tracking System), Chhattisgarh (Raksha Sarv; in collaboration with the start-up Mobcoder), Gujarat (SMC Covid-19 Tracker), Maharashtra (Mahakavach), Goa (Test Yourself Goa; with Innovaccer; and COVID Locator), Odisha (Odisha Covid Dashboard), Puducherry (Test Yourself Puducherry), Tamil Nadu (COVID-19 Quarantine Monitor), Karnataka (Corona Watch), Kerala (GoK Direct-Kerala).

Other uses of technology include the 1921 telephone service of the National Informatics Centre to run surveys on the prevalence of disease, the Department of Personnel and Training's iGOT for training frontline workers against COVID-19 on the Ministry of Human Resource Development's DIKSHA platform, and live broadcast of lessons for central-government-run Kendriya Vidyalaya schools using the SWAYAM platform.

Relief and Reforms to Fight COVID-19

- A robust digital payments infrastructure has enabled cash transfer of Rs. 28,256 crore to more than 31 crore beneficiaries under the financial assistance scheme Pradhan Mantri Garib Kalyan Yojana (PMGKY).
- 6.93 crore farmers were benefited through the Pradhan Mantri Kisan Samman Nidhi (PM-KISAN).
- 19.86 crore women Jan Dhan account holders received Rs.500 each in their account.
- Rs.1400 crore disbursed to about 2.82 crore old age person, widow and disabled people under the National Social Assistance Programme (NSAP).
- 2.16 crore construction workers received financial support from the Building and Construction Workers' Fund managed by state governments.

Conclusion

Not just the deployment but even the adoption of the digital technology as a counter to the Novel Coronavirus in India has been at record levels—the Aarogya Setu app, for instance, reached 100 million users.

This infrastructure has helped government tremendously in transferring money directly and immediately to the poor and needy, benefiting crores of families, during the COVID-19 situation.

Rural Development

Science & technology has played a critical role in the development of the nation. For the rural populace, in particular, it has been far more impactful. The advent of science and technology in the rural sector, particularly in agriculture, has seen enormous change and thus, scientific awareness among the farmers.

Whether it is soil science, entomology, agronomy, economics, animal husbandry, or pathology, name any branch of agricultural sciences, research & development news from the labs reaches the farmers quite quickly.

Bringing in better healthcare facilities to the rural areas has reduced the mortality rate, and healthier lifestyles can thus be seen emerging in the country.

The creation of new job opportunities and new business avenues within the rural domain has been the hallmark of science & technology's positive intervention in rural development.

Accurate weather forecasting has played a significant role in improving lives of our rural populace. Gone are the days, when natural disasters used to leave behind a trail of mass destruction especially in the rural areas. Advanced information helps Ministry of Rural Development to work in close association with various S&T ministries to evolve strategies to mitigate risks emanating from these natural disasters.

Social media is yet another powerful medium to aide S&T development's outreach in the rural domain. Vigyan Prasar has a dedicated group that manages science & technology updates and gets them to the rural populace timely and effectively.

Resilient Health Systems

India has exhibited consistent progress in ensuring strengthened health systems and infrastructure over the years. It is committed to building effective and efficient health delivery systems and attaining the highest possible level of health and well-being for all, at all ages, through a preventive and promotive health care orientation in all developmental policies, and universal access to good quality health care services without anyone having to face financial hardship as a consequence.

The COVID-19 pandemic has forcefully pushed the importance of investment in resilient health systems across the globe. Nations have been reminded again about the critical importance of health forming the formidable foundation of any prosperous and productive nation.

India has exhibited consistent progress in ensuring strengthened health systems and infrastructure over the years.

1. The National Health Mission launched in 2005.
2. Mission Indradhanush launched in 2014.
3. In 2016, vaccines pertaining to Japanese Encephalitis, Rubella, Inactivated Polio Vaccine (IPV) and Rotavirus were added.
4. 2017 saw the addition of Pneumococcal Conjugate Vaccine (PCV), to address the pneumonia.
5. Pentavalent vaccine with five antigens (Diphtheria, Pertussis, Tetanus, Haemophilus influenzae type.b [Hib] and Hepatitis B) was expanded to all the states.

In various phases of the mission, it also saw the implementation of Gram Swaraj Abhiyan and Extended

Gram Swaraj. This assured increased community participation and individual engagement with the flagship mission. While the Accredited Social Health Activists (ASHAs) played the most important role of mobilising the beneficiaries, the motivated Auxiliary Nurse Midwife (ANMs) administered vaccines to approximately 37.6 million children and 9.46 million pregnant women in the past six years across seven phases.

While the Government of India led the initiative, international agencies such as WHO, UNICEF, Bill & Melinda Gates Foundation, Rotary International etc., were roped in to augment the efforts in robust planning, capacity building of the frontline workers, accelerated behavior change communications and monitoring, and evaluation of the programme.

eVIN

To enhance the quality of vaccines and supply, the Government of India effectively introduced the indigenously developed eVIN (Electronic Vaccine Intelligence Network) which seeks to ensure supply of vaccines and cold chain maintenance through technological solutions.

It provides real-time information on vaccine stocks and flows, and storage temperatures (to be maintained at 2-8 degree centigrade) across all 27,000 cold chain points in the country.

Ayushman Bharat Yojana

Ayushman Bharat Pradhan Mantri Jan Arogya Yojana (AB PM-JAY) is a part of the Indian government's National Health Policy which aims to provide free health coverage at the secondary and tertiary level to its bottom 40% poor and vulnerable population. It was launched in September 2018, under the aegis of Ministry of Health and Family Welfare in India.

Key Features

1. PM-JAY is a health assurance scheme that covers 10.74 crores households across India or approx 50 crore Indians.

2. It provides a cover of 5 lakh per family per year for medical treatment in empanelled hospitals, both public and private.

3. It provides cashless and paperless service to its beneficiaries at the point of service, i.e the hospital.

4. E-cards are provided to the eligible beneficiaries based on the deprivation and occupational criteria of Socio-Economic Caste Census 2011 (SECC 2011).

5. There is no restriction on family size, age or gender.

6. All previous medical conditions are covered under the scheme.

7. It covers 3 days of hospitalisation and 15 days of post hospitalisation, including diagnostic care and expenses on medicines.

8. The scheme is portable and a beneficiary can avail medical treatment at any PM-JAY empanelled hospital outside their state and anywhere in the country.

9. The Central government has decided to provide free testing and treatment of Coronavirus under the Ayushman Bharat Yojana.

Ayushman Bharat – Health and Wellness Centres

Ayushman Bharat (AB) is an attempt to move from a selective approach to health care to deliver comprehensive range of services spanning preventive, promotive, curative, rehabilitative and palliative care.

It has two components which are complementary to each other.

1. Under its first component, 1,50,000 Health & Wellness Centres (HWCs) will be created to deliver Comprehensive Primary Health Care, that is universal and free to users, with a focus on wellness and the delivery of an expanded range of services closer to the community.

2. The second component is the Pradhan Mantri Jan Arogya Yojana (PM-JAY) which provides health insurance cover of Rs. 5 lakhs per year to over 10 crore poor and vulnerable families for seeking secondary and tertiary care.

HWC are envisaged to deliver expanded range services that go beyond Maternal and child health care services to include care for non-communicable diseases, palliative and rehabilitative care, Oral, Eye and ENT care, mental health

and first level care for emergencies and trauma, including free essential drugs and diagnostic services

Reproductive Child Health (RCH)

- Improving maternal and child health has been one of the top health priorities of Government of India.
- In view of this, The Reproductive and Child Health (RCH) 1 Programme was launched throughout the country on 15th October, 1997.
- The second phase of RCH program i.e. RCH – II was launched on 1st April, 2005.
- The main objective of the program was to bring about a change in mainly three critical health indicators i.e. reducing total fertility rate, infant mortality rate and maternal mortality rate with a view to realizing the outcomes envisioned in the Millennium Development Goals.
- RMCH+A approach has been launched in 2013 and it essentially looks to address the major causes of mortality among women and children as well as the delays in accessing and utilizing health care and services.
- To add to this various programs and schemes has been launched by Government of India to achieve reproductive health goals.
- Delay in identification and service provision has been a major hurdle in achieving above goals.

Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA)

The Pradhan Mantri Surakshit Matritva Abhiyan has been launched by the Ministry of Health & Family Welfare (MoHFW).

The program aims to provide assured, comprehensive and quality antenatal care, free of cost, universally to all pregnant women on the 9th of every month.

PMSMA guarantees a minimum package of antenatal care services to women in their 2nd / 3rd trimesters of pregnancy at designated government health facilities.

Rationale for the program:

Data indicates that Maternal Mortality Ratio (MMR) in India was very high in the year 1990 with 556 women dying

during child birth per hundred thousand live births as compared to the global MMR of 385/lakh live births.

As per RGI- SRS (2011-13), MMR of India has now declined to 167/lakh live births against a global MMR of 216/lakh live births (2015). India has registered an overall decline in MMR of 70% between 1990 and 2015 in comparison to a global decline of 44%.

While India has made considerable progress in the reduction of maternal and infant mortality, every year approximately 44000 women still die due to pregnancy-related causes and approximately 6.6 lakh infants die within the first 28 days of life.

Many of these deaths are preventable and many lives can be saved if quality care is provided to pregnant women during their antenatal period and high risk factors such as severe anemia, pregnancy-induced hypertension etc are detected on time and managed well.

Goal of the PMSMA

Pradhan Mantri Surakshit Matritva Abhiyan envisages to improve the quality and coverage of Antenatal Care (ANC) including diagnostics and counselling services as part of the Reproductive Maternal Neonatal Child and Adolescent Health (RMNCH+A) Strategy.

Key Features of PMSMA

- PMSMA is based on the premise — that if every pregnant woman in India is examined by a physician and appropriately investigated at least once during the PMSMA and then appropriately followed up — the process can result in reduction in the number of maternal and neonatal deaths in our country.
- Antenatal checkup services would be provided by OBGY specialists / Radiologist/physicians with support from private sector doctors to supplement the efforts of the government sector.
- A minimum package of antenatal care services (including investigations and drugs) would be provided to the beneficiaries on the 9th day of every month at identified public health facilities (PHCs/ CHCs, DHs/ urban health

facilities etc) in both urban and rural areas in addition to the routine ANC at the health facility/ outreach.

- Using the principles of a single window system, it is envisaged that a minimum package of investigations (including one ultrasound during the 2nd trimester of pregnancy) and medicines such as IFA supplements, calcium supplements etc would be provided to all pregnant women attending the PMSMA clinics.
- While the target would reach out to all pregnant women, special efforts would be made to reach out to women who have not registered for ANC (left out/missed ANC) and also those who have registered but not availed ANC services (dropout) as well as High Risk pregnant women.
- OBGY specialists/ Radiologist/physicians from private sector would be encouraged to provide voluntary services at public health facilities where government sector practitioners are not available or inadequate.
- Pregnant women would be given Mother and Child Protection Cards and safe motherhood booklets.
- One of the critical components of the Abhiyan is identification and follow up of high risk pregnancies. A sticker indicating the condition and risk factor of the pregnant women would be added onto MCP card for each visit:
 - Green Sticker- for women with no risk factor detected
 - Red Sticker – for women with high risk pregnancy
- A National Portal for PMSMA and a Mobile application have been developed to facilitate the engagement of private/ voluntary sector.
- 'IPledgeFor9' Achievers Awards have been devised to celebrate individual and team achievements and acknowledge voluntary contributions for PMSMA in states and districts across India.

Harnessing Skills of Incoming Migrants

India's response to the COVID-19 pandemic was to introduce a lockdown, under which business closures drove hundreds of thousands of migrants to return home to Bihar.

According to recent statistics from the Bihar State Disaster Management Department (BSDMD), the state received more than 1.5 million returnees in the state's quarantine centres (BSDMD, 2020), and numbers are expected to

increase in the coming weeks as public transportation options become available.

Many of the migrants are returning with newly honed skillsets, learned in the cities they originally emigrated to earn livelihoods.

Aatmanirbhar Bharat focuses on developing infrastructure and support to the micro, small and medium enterprises (MSME). Focus on government projects with clear social development objectives such as water sanitation and hygiene, nutrition, and rural development goes a long way in developing self-reliant community.

What next?

These returning migrants would require employment opportunities in short-term and long-term.

The Government of Bihar has a two-pronged strategy to leverage this suddenly available manpower towards developing the state.

- In the short-term, the state wants to recruit manpower for waged labour for existing social development schemes.
- In the longer-term, the state wants to lay down an ecosystem that supports establishing large and decentralised industrial opportunities within the state, in part to hold on to the manpower available.

Therefore, the state's government is working on:

1. **Map skillsets of all incoming migrants:** At the district level, skill mapping is conducted for all incoming migrants to understand what supply plans exists to meet the demands, and estimate of employment needs.
2. **Develop comprehensive district employment plan:** The Government of Bihar is working on developing district employment plans which would include details of both wage employment and self-employment opportunity both under the State Rural Livelihood Mission and other development projects.

Engaging Migrants Labour in Existing Developmental Activities

- The Government of Bihar has large projects which have accrue benefits for population in the form of better hygiene, lower morbidity, availability of tap water at home, increased availability of soil moisture and an overall greener environment.
- Jal Jeevan Hariyali (JJH) with consolidated envisions a disaster-resilient Bihar by investing in environment sustainability through afforestation, to revival of water bodies, and rainwater harvesting.
- Lohiya Swachh Bihar Abhiyan (LSBA) has potential of providing opportunities for employment of skilled labourers.
- The Bihar government is also engaged change activities, under the LSBA (Swachh Bharat Mission) which is likely to sustain the toilet usage. This regular toilet use by all members of the household would encourage households to invest in keeping toilet functional and upgrade it at some point.
- The Government of Bihar is also implementing the ambitious scheme— Har Ghar Nal Ka Jal under the national umbrella of the Jal Jeevan Mission (JJM), in order to provide functional household tap connections (FHTC) to all households in the state. This requires setting up of more than one lakh mini-water supply schemes across the state. These village and town level schemes require trained plumbers and mechanics available to keep them functional. These schemes therefore provide the perfect opportunity for skilled and returning plumbers and mechanics to find jobs closer to home and potentially set up small businesses that can align their activities with JJM's goals.

Progress so Far

After the migrants' skills are mapped, bridge training is organised at quarantine centres and their services are being utilised in various development initiatives.

The trainings are often focused on leveraging existing skills in the targeted participant group and connecting adapting them to be used for new purposes.

For example, trainings on poultry and goat rearing, have been initiated in Pumea Migrants who perhaps had existing experience in construction and labour work were given

hands-on training on how to do required masonry work; this has been a particular interest and an effort taken up by all.

This initiative was conducted as part of Jeevika and trained or already skilled migrants have already been deployed to support work under the Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS), for JJHM and LSBY.

Development of Industrial Clusters

As part of the 2016 policy to develop local and sustained industries, the state identified four high priority sectors with potential for significant gainful employment:

1. Food Processing
2. Leather
3. Textile
4. Information Technology, innovation Technology Enabled Services, and Electronics System Design and Manufacturing.

Conclusion

Bihar, like the rest of India, has a large proportion of youth and young adult populations—which is favourable for building a community of entrepreneurs and businesses, which in turn can increase availability of jobs in the state.

Therefore, while the State already has a mapped policy for investing in industrial development, the state can also explore the space for developing complementary policies that cater to the livelihood needs of skilled migrants coming home indefinitely.

The prospect for making Bihar more self-reliant going forward is in reach, given that all stakeholders—government, civil society organisations, private players—work together to offer migrants an enabling ecosystem that is competitively positioned.

Technology and Learning

The way technology is being used in education, a new discipline, called educational technology (ET) has emerged. Given the huge gap in access to ICT infrastructure in the country, any technology mediated solutions must first seem

to bridge the digital divide. Innovations in technology should move in this direction.

Recent Initiatives in Education

SWAYAM Prabha, which consists of a bouquet of 32 DTH educational TV channels, was launched in July 2017 in New Delhi. The purpose of this initiative was to telecast high-quality educational programs round the clock.

Of all the technological initiatives taken for school education then, SWAYAM Prabha has emerged as the most crucial initiative of the government in meeting the challenges of reaching out to a large number of students during the COVID-19 pandemic.

Access to ICT infrastructure is not adequate in the country. According to NSS 75th round, only 10.7% of the households in the country (both rural and urban combined) had computers while 23.5% of households had internet connections.

Clearly, any initiative which was dependent upon internet and computers for reaching out to students during the lockdowns has had severe limitations.

Therefore, government moved swiftly to rope in private service providers to bring in these channels (especially those related to school education, viz., those run by NCERT and NIOS) across their platform.

Technology driven Systems- Online Education during COVID

- SWAYAM PRABHA DTH channels to support and reach those who do not have access to the internet. 3 channels were already earmarked for school education; now another 12 channels to be added.
- Provision made for telecast of live interactive sessions on these channels with experts from home through Skype.
- Also tied up with private DTH operators like Tata Sky & Ariel to air educational video content to enhance the reach of these channels.

- Coordination with States of India to share air time (4 hours daily) on the SWAYAM PRABHA channels to telecast education related contents.
- DIKSHA platform has 61 crore hits since 24th March 2020.
- 200 new textbooks added to ePathshala.
- The Government's push for "One Nation, One Digital Platform for Learning" has resulted into the creation of Digital Infrastructure for Knowledge Sharing (DIKSHA). The DIKSHA app was launched in 2017.

The draft National Education Policy (NEP) 2019 identifies a few important concerns related to technology integration in education in the country. One such concern is the availability of the local expertise in resolving and maintaining hardware and software at remote locations. As such, it recommends deploying local talents for managing technological issues in schools. In this way, technology use in education has ramifications for the employment at the local level too.