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JANUARY 2021

NEWS IMPUSE



INDIAN SARS-COV-2 GENOMIC • CONSORTIA (INSACOG)

WHY IN NEWS?

The government has launched the Indian SARS-CoV-2 Genomic Consortia (INSACOG), comprising 10 labs namely DBT-NIBMG Kalyani, DBT-ILS Bhubaneswar, ICMR-NIV Pune, DBT-NCCS Pune, CSIR-CCMB Hyderabad, DBT-CDFD Hyderabad, DBT-InSTEM/ NCBS Bengaluru, NIMHANS Bengaluru, CSIR-IGIB Delhi, and NCDC Delhi.

SIGNIFICANCE OF CONSORTIA

AIM:The overall aim of the Indian SARS-CoV-2 Genomics Consortium is to monitor the genomic variations in the SARS-CoV-2 on a regular basis through a multi-laboratory network,

- o The consortium will assist in developing potential vaccines in the future.
- o The consortium will ascertain the status of new variant of SARS-CoV-2 in the country.
- o It will establish a sentinel surveillance for early detection of genomic variants with public health implication, and determine the genomic variants in the unusual events/trends (super-spreader events, high mortality/morbidity trend areas

ARGENTINA'S LEGALISATION OF ABORTION

WHY IN NEWS?

Argentina's Congress legalised abortions up to the 14th week of pregnancy this week, in what was a ground-breaking decision in a country that has some of the world's most restrictive abortion laws.

WHY IS IT A LANDMARK BILL?

- Prior to the passing of the bill, abortions were only permitted in cases of rape or when the woman's health was at serious risk.
- Prior to this, girls and women were forced to turn to illegal and unsafe procedures because abortion was against the law in Argentina. For girls and women from socio-economically disadvantaged backgrounds, the scope of access to safe medical procedures for abortion was even narrower.

- The Catholic Church and the evangelical community wield immense power and influence in Argentina and had strongly opposed the passing of this bill.
- In 2006, the family of a 25-year-old survivor of rape with severe physical and mental disabilities petitioned the court for judicial authorisation for abortion. Although the court granted permission, the procedure was blocked by a Catholic organisation that had sought an injunction.
- The law widens women's rights and guarantees public health.

IMPACT OF THE BILL IN LATIN AMERICA

- Activists are hopeful that the passage of this law will have an impact in other countries in Latin America. At present, abortions are illegal in Nicaragua, El Salvador and the Dominican Republic.
- Women's rights activists have acknowledged that despite the new law in Argentina, the fight is far from over in the region.
- Anti-abortion groups and their religious and political backers have attempted to stall any progress in the process. Most recently, in Brazil's conservative president Jair Bolsonaro had vowed to veto any proabortion bills in the country.

Source: Indian Express

DIBRU-SAIKHOWA NATIONAL PARK

Syllabus section: Environment and Ecology

Why in News?

Assam CM sets Jan. 31 deadline to rehabilitate Dibru-Saikhowa National Park dwellers.

About the National Park:

- It is situated in the south bank of the river Brahmaputra in Assam.
- It is the largest swamp forest in north-eastern India.
- It is an identified Important Bird Area (IBA), notified by the Birdlife International.
- It is most famous for the rare white-winged wood ducks as well as feral horses.
- The forest type comprises semi-evergreen forests, deciduous forests, littoral and swamp forests and patches of wet evergreen forests.
- Maguri Motapung wetland is a part of the Reserve.

Source - The Hindu

AKASH MISSILE

Syllabus Section: science and technology

Why in News?

Cabinet gives approval for Akash missile export.

About:

- This is surface to air anti-aircraft missile with a strike range of 25 km and capability to carry warhead of 60 kilogram.
- It can reach an altitude of 18 km and can be fired from both tracked and wheeled platforms.
- The missile is guided by a phased array fire control radar called 'Rajendra' which is termed as Battery Level Radar (BLR) with a tracking range of about 60 km.
- The Akash-MK-1S is capable of striking down enemy fighter jets and drones very effectively and accurately.
- The Akash surface-to-air missile was designed to intercept enemy aircraft and missiles from a distance of 18 to 30 km.

Source: Indian express

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HOW SYSTEMATIC CHANGES LED TO RECORD GST MOP-UP

Syllabus Section- Indian Economy

Why in News?

Goods and Services Tax (GST) collections in December (for sales in November) rose 11.6 per cent year-on-year to Rs 1,15,174 crore, the highest level since the July 2017 rollout of the indirect tax regime.

The Finance Ministry said that it has been the highest growth in monthly revenues in the last 21 monthsdue to the combined effect of the rapid economic recovery post-pandemic and the nationwide drive against GST evaders and fake bills along with many systemic changes introduced recently, which have led to improved compliance.

The Trend So Far

- Following the outbreak of Covid-19 pandemic, GST revenue collections had been posting a contraction and was at a lower level than the previous year. The GST revenue collections remained in negative territory for the first five months of this financial year, with a record low collection of Rs 32,172 crore in April, following the lockdown in the country in the wake of the Covid-19 pandemic.
- With the opening up of the economy and resumption of economic activities, GST revenues started to pick up since September. December marked the fourth month in which GST revenue collections have posted a year-on-year growth. The increase in percentage terms is also aided partly by a low base effect.

The Reasons for The Uptick

- GST collections in December (for sales in November) gained support from higher festive season sales on account of Diwali in November along with the rollout of new technological systems of e-invoicing and action against tax evaders.
- Tax experts noted that the government should provide a breakup of the GST revenues collected through the filing of returns and through recovery drives by the GST authorities to help in assessing the true picture of the extent of economic recovery.

- The proposed extension of electronic invoicing to all businesses will further prevent leakages in GST revenues.
- Under GST laws, e-invoice for B2B transactions has been made mandatory for companies with turnover of over Rs 500 crore from October 1 last year. It was notified to be extended to businesses with over Rs 100 crore turnover from January 1 this year and is likely to be extended for all businesses beginning April 1.
- E-invoicing system is connected to a central portal that receives and validates invoices in real-time and over time will eventually replace the e-way bill system. It has been seen as a major game-changer to curb tax evasion and plug leakages, which in turn, may not even necessitate an urgent rollout of the proposed new GST return-filing system that may have resulted in a fresh start for tax assesses under the indirect tax regime.

Source- Indian Express

SOLARWINDS CYBERATTACK

Syllabus Section- Science and Technology

Why in News

As part of its ongoing investigations in the SolarWinds cyberattack, Microsoft has revealed that its internal source code was likely accessed by the attackers. The company had earlier confirmed that it too was compromised is what is being seen as one of the world's largest cyberattack, that primarily targeted the United States (US) government and several other private organisations. The SolarWinds cyberattack was first revealed in December by cyber-security firm FireEye.

What has Microsoft revealed in its new investigations?

According to an official blog post by the company, Microsoft's internal security research team has found evidence that the attackers accessed some internal source code in the company's systems. The 'Solorigate incident' as Microsoft has termed it in the blog, showed there were "attempted activities beyond just the presence of malicious SolarWinds code in our environment."

- "We detected unusual activity with a small number of internal accounts and upon review, we discovered one account had been used to view source code in a number of source code repositories." According to the post, the account did not have required permissions to access the code, to modify it, nor was it authorised to access the engineering systems.
- The company says so far the investigation confirmed no changes were made to this source code. "These accounts were investigated and remediated," adds the company.

What does this mean?

- Microsoft has not confirmed what source code was accessed by the hackers. However, the fact that the hackers got in so deep is quite worrying, given source code is crucial to how any piece of software works. Source code is the key to how a software product is built and if compromised could leave it open to new, unknown risks. Hackers could use this information to exploit any potential weakness in the programmes.
- Microsoft says "this activity has not put at risk the security of our services or any customer data," but adds they believe this attack was carried out by "a very sophisticated nation-state actor." The company says that there's no evidence that its systems were used to attack others.

What else has Microsoft revealed?

- Microsoft says they rely on "open-source software development best practices" and "an open source-like culture" for development of software. Typically, source code is viewable by teams within Microsoft, according to the blog. The company also notes that its threat models "assume that attackers have knowledge of source code." Microsoft is downplaying the risk saying just viewing the source code should not cause any new elevated risks.
- Microsoft says it has plenty of defence protections in place to stop attackers if and when they do gain access. It says there is evidence the activities of the hackers were "thwarted" by the company's existing protections.

What else has been revealed in this SolarWinds hack?

- The problem with this cyberattacks is that it has been going on for so long that the full scale remains unknown. In fact, the attack may have started earlier than last spring as previously believed. Democratic Senator Mark Warner of Virginia, who serves as Vice-Chair of the Senate Intelligence Committee, told Reuters in an interview that the attack likely started much earlier. He also said that at the moment the US government does not have hard evidence that classified government secrets were compromised by the hackers, according to the Reuters report.
- The sheer scale of the attack also remains unknown, according to most reports. Meanwhile, FireEye, which discovered the attack, has revealed new details about the Sunburst malware. The malware exploited the SolarWinds Orion software, which is used by thousands of companies, including several US government agencies.
- According to FireEye, Sunburst a malicious version of a digitally signed SolarWinds Orion plugin— contains a backdoor that communicates via HTTP to third-party servers. It appears that the plugin remains "dormant period of up to two weeks," after which it starts executing commands and carrying out tasks such as "transfer of files, execute files, profile the system, reboot the system, and disable system services."
- It also appears that the malware "performs numerous checks to ensure no analysis tools are present," according to FireEye. This cautious approach is what helped the malware "evade detection by antivirus software and forensic investigators for seven months after its introduction to the SolarWinds Orion supply chain," according to the cyber-security firm.

Source- Indian Express

DIGITAL PAYMENT INDEX

Syllabus Section: Economy

WHY IN NEWS?

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

ABOUT RBI- DIGITAL PAYMENTS INDEX

- The RBI-DPI comprises of 5 broad parameters that enable measurement of deepening and penetration of digital payments in the country over different time periods.
- These parameters are (i) Payment Enablers (weight 25%), (ii) Payment Infrastructure Demand-side factors (10%), (iii) Payment Infrastructure Supply-side factors (15%), (iv) Payment Performance (45%) and (v) Consumer Centricity (5%)
- Each of these parameters have subparameters which, in turn, consist of various measurable indicators.
- The index has been constructed with March 2018 as the base period, with a DPI score for of 100. The DPI for March 2019 and March 2020 work out to 153.47 and 207.84, respectively, indicating appreciable growth.
- RBI-DPI shall be published on RBI's website on a semi-annual basis from March 2021 onwards with a lag of four months.

Source: The Financial Express

SAHAYAK-NG: INDIA'S FIRST INDIGENOUS AIR DROPPED CONTAINER

Syllabus section: Science and technology

Why in News?

The SAHAYAK-NG, an air droppable container was tested successfully by the Defence Ministry. It is the first indigenously developed air droppable container.

About:

- It is a GPS aided air dropped container with the capacity to carry a payload of up to 50 kg and can be dropped from a heavy aircraft.
- It is an advanced version of SHAYAK Mk I.
- The SAHAYAK-NG containers are completely water tight.
- They are designed to withstand water entry shocks.
- The rate of descent of SAHAYAK-NG container is controlled by a parachute system
- It reduces the requirement of ships to come close to the coast to collect spares and stores

Designed by: The SHAYAK-NG was designed by Defence Research Development Organization (DRDO) and Avantel, a private company. The other entities involved in the development of SAHAYAK-NG are NTSL, Visakhapatnam and ARDE, Agra.

How will SAHAYAK-NG benefit Indian Navy?

- **The SAHAYAK-NG** will help to provide critical engineering stores to ships that are deployed more than two thousand kilo metres from the coast.
- It reduces the requirement of ships to come close to the coast to collect spares and stores.

Source: Economic Times

ASIAN DEVELOPMENT BANK AND GOI SIGN \$10 MILLION LOAN TO EXPAND HORTICULTURE IN HIMACHAL PRADESH

Syllabus Section: Agriculture

Why in News?

The Asian Development Bank (ADB) and the Government of India signed a \$10 million project readiness financing (PRF) to help finance piloting activities, and design and capacity building for an ensuing project that aims to expand horticulture production and farm household income in the hill state of Himachal Pradesh.

About:

- PRF project will support advance actions to achieve high level of project readiness through detailed design activities, capacity building of state level agencies, and creating an enabling environment for subtropical horticulture development in the state.
- It aims to ensure implementation readiness with prior testing of new production technologies and marketing systems so that the project is cost-effective and gets completed in a timely manner.
- The project will support development of subtropical horticulture, including cultivation of fruits and vegetables, in the state's southern region which is currently lagging due to limited access to perennial water sources, crops losses due to wild animal encroachment and limited access to high value markets.

- The PRF also supports establishment of water user association (WUAs) on completed irrigation schemes and enhancing women's participation.
- These pilot activities will then be scaled up under the ensuing project to be implemented in 7 districts of Himachal Pradesh. The PRF also supports establishment of water user association (WUAs) on completed irrigation schemes and enhancing women's participation

Source: PIB

INDIA APPROVED TWO COVID-19 VACCINES FOR EMERGENCY USE

Syllabus section: Science and technology

Why in News?

The Drug Controller General of India recently announced that it has authorised two COVID-19 vaccines for restricted Emergency Use in India

What is COVAXIN?

The COVAXIN is the COVID-19 vaccine developed by Bharat Biotech and ICMR (Indian council of Medical Research). It was the first indigenous COVID-19 vaccine to be developed in the country.

Once the vaccine is injected into a human, it has no potential to infect or replicate, since it is a killed virus. It just serves to the immune system as a dead virus and mounts an antibody response towards the virus

What is COVISHIELD?

The COVISHIELD vaccine was developed by Oxford University and Astra Zeneca, the pharmaceutical company

How the vaccines have been developed?

Covishield uses a replication-deficient chimpanzee viral vector based on a weakened version of a common cold virus (adenovirus) that causes infections in chimpanzees and contains the genetic material of the SARS-CoV-2 virus spike protein. After vaccination, the surface spike protein is produced, priming the immune system to attack the SARS-CoV-2 virus if it later infects the body.

Covaxin is an inactivated vaccine. An inactivated vaccine is one which is developed by inactivating (killing) the live microorganisms that cause the disease. This destroys the pathogen's ability to replicate, but keeps it intact so that the immune system can still recognise it and produce an immune response. There are many inactivated vaccines against Hepatitis A, Influenza, Polio, Rabies, which offer "excellent protection

ANTI-CONVERSION LAWS

Syllabus Section- Indian Polity and Constitution

Why in news?

The Madhya Pradesh government is set to follow two other BJP-ruled states Uttar Pradesh and Himachal Pradesh in passing an anti-conversion law that outlaws religious conversion solely for the purpose of marriage. The MP Cabinet has approved the Freedom to Religion Bill, 2020 as an Ordinance.

Common features in the laws of all three states-While a common feature of all three laws is the declaration of such marriages as "null and void" and the penalising of conversions done without the prior approval of the state, they differ in the quantum of punishment prescribed, and in attributing the burden of proof that a conversion is lawful.

Other different features-

Prior notice-

MP- 60-day prior "declaration of the intention to convert" to the District Magistrate for conversion to be valid.

UP-In UP too, it requires a 60-day notice but also requires the Magistrate to conduct a police inquiry to ascertain the real intention behind the conversion.

HP- In HP, itrequires a 30-day prior "declaration of intention to convert".

Who can investigate?

MP- In MP the law states that there cannot be an investigation by a police officer except on the written complaint of the person converted or the person's parents/siblings and no police officer below the rank of a sub-inspector can investigate an offence under the law.

HP- The prosecution cannot be initiated without the prior sanction of an officer not below the rank of a sub-divisional magistrate.

UP- The UP law allows the same people as allowed by the MP law to file a complaint.

· Burden of proof

MP-The MP law places on the person converted the burden of proving that the conversion was done without any coercion or illegality.

HP- The Himachal law has a similar provision.

UP- law goes further, placing this burden of proof on people who "caused" or "facilitated" the conversion and not on the individual.

Quantum of Punishment

• Maintenance & inheritance

MP-Under Section 9, the woman whose marriage has been declared null and void under this legislation, and her children, will have a right to maintenance. The law does not, however, provide a recourse for ensuring the marriage can be protected subsequently.

HP and UP- Neither the UP nor the Himachal law has such provisions.

Source- Indian Express

JAIL TERMS, AS PRESCRIBED					
	Mass Conversion	Conversion of a minor/SC/ST	Any other conversion		
Uttar Pradesh	3-10 years	2-10 years	1-5 years		
Madhya Pradesh	5-10 years	-	1-5 years*		
Himachal Pradesh	-	2-7 years	1-5 years		

^{*} MP bill also prescribes 3-10 years jail for using "misrepresentation" or "impersonation" for religious conversion

SCIENCE, TECHNOLOGY AND INNOVATION (STI) POLICY

Syllabus Section: Science and technology Why in News?

Recently The draft Science, Technology and Innovation Policy was released contains radical and progressive proposals that could be gamechangers for not just the scientific research community.

Philosophy:

- National STI policy (STIP) follows core principles of being decentralised, evidenceinformed, bottom-up, experts-driven, and inclusive.
- It aims to be dynamic, with a robust policy governance mechanism that includes periodic review, evaluation, feedback, adaptation and, most importantly, a timely exit strategy for policy instruments

Objective:

 The STIP will be guided by the vision of positioning India among the top three scientific superpowers in the decade to come.

- To attract, nurture, strengthen, and retain critical human capital through a people-centric STI ecosystem
- To double the number of full-time equivalent (FTE) researchers, gross domestic expenditure on R&D (GERD) and private-sector contribution to GERD every five years.
- To build individual and institutional excellence in STI with the aim of reaching the highest levels of global recognition and awards in the coming decade.

It has made recommendations such as:

- Mandatory positions for excluded groups in academics; 30% representation of women in selection/evaluation committees and decision-making groups.
- Addressing issues related to career breaks for women by considering academic age rather than biological/physical age.
- A dual recruitment policy for couples; and institutionalisation of equity and inclusion by establishing an Office of Equity and Inclusion, etc.

Need for a New Science, Technology and Innovation Policy

- Many important changes such as the positive changes in scientific temper, increasing technological outreach and the necessity of solving the problem quickly and progress in education and innovative thinking of the Indian society in the past decade have necessitated a new and updated STI Policy.
- Formulation of the new policy with massive changes will give a new outlook and strategy for Science, Technology, and Innovation (STI).
- The latest and fifth S&T policy of India is being formulated at a crucial time when India and the world are facing the COVID-19 pandemic and finding ways to tackle it.
- The COVID-19 pandemic has wreaked havoc on the global economy and has presented unprecedented challenges on social, healthcare and business fronts.
- It can integrate the lessons of the pandemic including the building of an Atma nirbhar Bharat by anchoring India's strengths in R&D, design, science and technology workforce and institutions, huge markets, demographic dividend, diversity and data.
- As the crisis changes the whole world, the new policy with its decentralized manner of formation will redirect and reorient STI in terms of priorities, sectoral focus, the way research is done, and how technologies are developed and deployed for larger socio-economic welfare of a highly populous country like India.

Source: Indian Express

AI BASED SURVEY OF AFRICAN ELEPHANTS

Syllabus Section: Environment and Ecology

Why in News?

An International Team of researchers led by University of Oxford have developed a new approach to survey African Elephants using satellite images and Artificial Intelligence.

About New Approach:

• A new approach for surveying African elephants using satellite imagery and artificial intelligence (AI) could help in solving some of the present challenges in the conservation of the species.

- The method uses satellite orbiting in space that is capable of capturing more than five thousand square kilometres of images. The captured images is then processed through deep learning model that will detect elephants eliminated other objects.
- The International team used a customised dataset to cover more than thousand elephants in South Africa.
- The method eliminates the risk of double counting. Also, it makes it possible to conduct repeat surveys in short intervals.
- The method is capable of identifying calves separately.

Advantages:

- Machines are less prone to error.
- False negatives and false positives in deep learning algorithms
- Can be rectified by systematically improving models.
- Elephants can be detected in satellite imagery with accuracy as high as human detection capabilities.
- Satellite monitoring is an unobtrusive technique requiring no ground presence thus eliminating the risk of disturbing species, or of concern for human safety during data collection.

Further, the remote detection method makes it possible to monitor cross-border areas without terrestrial permits. These areas are usually important to conservation planning

Source: The Hindu

OMKARESHWAR: THE WORLD'S LARGEST FLOATING SOLAR ENERGY PROJECT

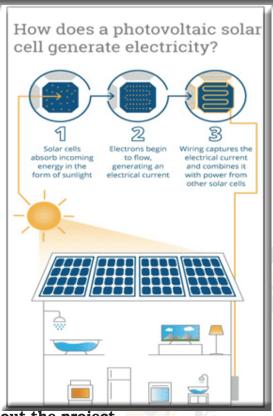
Syllabus Section- Science and Technology

Why in news?

The world's largest floating 600 MW solar energy project to be constructed at Omkareshwar dam on Narmada river in Khandwa district of Madhya Pradesh will begin power generation by year 2022-23.

Investment and Funding

- The estimated investment in this project stands at Rs 3,000 crore.
- The International Finance Corporation, World Bank and Power Grid have granted in-principle consent for providing aid for the said project development.
- The primary feasibility study of the project has been completed in collaboration with the World Bank.



About the project

- The project is likely to begin power generation by year 2022-23.
- Tender for the study of environmental and social impact of the project area is also being issued.
- The project will have floating solar panels of 600 MW power generation capacity in the backwaters of Omkareshwar dam. It is estimated that in 2 years, the project will start providing cheap and good quality power.

- Electricity will be produced in about 2000-hectare water area by installing solar panels in the dam.
- Solar panels will float on the surface of the water in the reservoir.
- When the water level of the dam is low, it will automatically adjust upwards and downwards. Strong waves and floods will have no effect on them. The sun's rays will continue to produce electricity.

Source- The Hindu

REWARI-MADAR SECTION OF WESTERN DEDICATED FREIGHT CORRIDOR

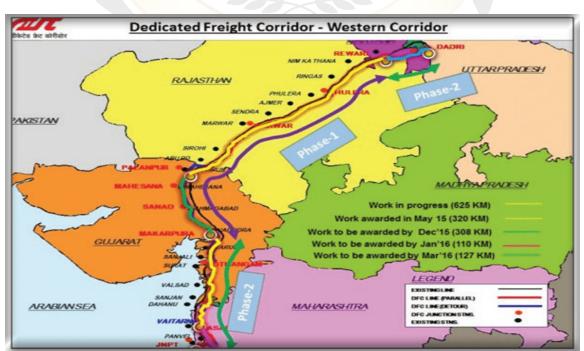
Syllabus Section- Indian Economy

Why in News?

Prime Minister Narendra Modi recently Rewari-Madar inaugurated section Western Dedicated Freight Corridor via video conferencing.

About: Rewari-Madar section of WDFC

- The Rewari-Madar section is situated Haryana, approximately 79km in Mahendragarh and Rewari districts and Rajasthan approximately 227km, Jaipur, Ajmer, Sikar, Nagaur and Alwar districts.
- It consists of nine newly-built DFC stations in which six are crossing stations of New Dabla, New Bhagega, New Sri Madhopur, New PacharMalikpur, New Sakun and New Kishangarh while the other three are in Rewari, New Ateli and New Phulera are junction stations.



Importance DFCs

- The opening of this stretch will benefit various industries in Rewari, Manesar, Narnaul, Phulera and Kishangarh areas of Rajasthan and Haryana and will also enable better usage of the container depot of CONCOR at Kathuwas.
- This section will also ensure seamless connectivity with the western ports of Kandla, Pipavav, Mundhra, and Dahej in Gujarat.
- Currently, freight trains do not get priority over passenger trains. Once completed, at least 70% of the freight trains will be transferred on the DFCCIL network which will help in timely movement of cargo.
- Also, this may lead to the introduction of more passenger trains in future.

What is Dedicated freight corridor (DFC)?

- Dedicated freight corridor (DFC), as the name suggests, is meant to create a safe and efficient freight transportation system in the country. Currently, the Western DFC connecting Haryana and Maharashtra and the Eastern DFC connecting Punjab and West Bengal are under construction.
- The combined length of the Western and Eastern DFCs is approximately 2,843km. North-South (Delhi-Tamil Nadu), East-West (West Bengal-Maharashtra), East-South (West Bengal-Andhra Pradesh) and South-South (Tamil Nadu-Goa) DFCs are being planned.

Source: The Hindu

RASHTRIYA KAMDHENU AAYOG

Syllabus Section- Environment & Ecology Why in News

Recently, Cabinet approves establishment of Rashtriya Kamdhenu Aayog for Conservation protection and development of cows and their progeny.

Background

- The creation of Rashtriya Kamdhenu Aayog for the conservation, protection and development of cows and their progeny will provide the policy framework and direction to the cow conservation and development programmes in the country and for ensuring proper implementation of laws with respect to the welfare of cows.
- It is in pursuance of the announcement of setting up of the Aayog in the Union Budget 2019-20.

About

- RashtriyaKamdhenuAayog (RKA) has been constituted by the Government of India for the conservation, preservation, protection and development of cows and their progenies and for giving directions for the cattle development programmes.
- RKA is a high-powered permanent body to formulate policies and to provide directions for the implementation of schemes related to cattle so as to lay more emphasis on livelihood generation for small & marginal farmers, women and youth entrepreneurs.
- RKA has been successful in delivering the message across the country that the cow is not just a milk-giving animalbut its Environmental, Health and Economic benefits are immense if used properly.
- Its so-called waste products like cowdung and cow-urine, which are cheap and abundantly available, are bio-degradable and environmentally friendly.
- Hence, these can be gainfully used by cow entrepreneurs to make the cow-rearing sustainable, which in turn can contribute towards economic growth of the country.
- A few campaigns of RKA this year, namely, GaumayaGanesha Campaign, KamdhenuDeepawali Campaign, Kamdhenu DevDeepawali and a series of seminars and webinars have carried the message of other uses of cow dung and cow urine very effectively.

Why we need

- Livestock economy sustains nearly 73 million households in rural areas.
- Even though, the country is the largest producer of milk, the average milk yield in India is only 50% of the world average.
- The low productivity is largely due to deterioration in genetic stock, poor nutrition and unscientific management.

Importance and Impact

- The setting up of Rashtriya Kamdhenu Aayog will lead to conservation, protection and development of cattle population in the country including development and conservation of indigenous breeds.
- It will result in increased growth of livestock sector which is more inclusive, benefitting women, and small and marginal farmers.

• The Rashtriya Kamdhenu Aayog will work in collaboration with Veterinary, Animal Sciences or Agriculture University or departments or organizations of the Central/State Government engaged in the task of research in the field of breeding and rearing of cow, organic manure, biogas etc.

Source-PIB

SAGARMALA SEAPLANE SERVICES PROJECT

Syllabus Section: Economy

Why in News?

The Government of India is to initiate the project of Sagarmala Seaplane Services on selected routes. The project execution and implementation would be through Sagarmala Development Company Ltd (SDCL), which is under the administrative control of the Ministry.

Objectives:

- The project aims to provide air connectivity to numerous tourist, religious, remote and unexplored locations near water bodies.
- This is to make the journey easier and simulate tourism on these new locations.
- Ultimately the project will contribute to boost the GDP of the country in the long run.

Advantages:

- Apart from providing air connectivity to various remote religious/tourist places, it will boost tourism for domestic and international holidaymakers.
- It will save travel time and stimulate localised short distance travelling especially in the hilly regions or across the rivers and lakes.

- In addition to the infrastructural enhancements at the places of operations, it will enormously boost tourism and business activities.
- It will generate employment opportunities and stimulate tourism on these new locations, which will consequently contribute to the country's GDP in the long run.

Investment Model and routes:

- The proposed Origin-Destination pairs under Hub and Spoke model include various islands of Andaman & Nicobar and Lakshadweep, Guwahati Riverfront & Umranso Reservoir in Assam, Yamuna Riverfront / Delhi (as Hub) to Ayodhaya etc.
- One such Seaplane Service is already in operation between Kevadia and Sabarmati Riverfront in Ahmedabad, which was inaugurated by Prime Minister on 31st October 2020.
- To run more such services in the coastal areas or proximity to water bodies, SDCL is keen to associate with the interested scheduled / non-scheduled airline operators.

Source: PIB

ON NILE, A GRAND DAM DIVIDES AFRICAN NATIONS

WHY IN NEWS?

Ethiopia, Sudan and Egypt agreed on Sunday to resume negotiations to resolve their decade-long complex dispute over the Grand Renaissance Dam hydropower project in the Horn of Africa. The latest round of talks comes six weeks after Sudan had boycotted the ongoing negotiations.



Background:

- The building of the dam was initiated in 2011 on the Blue Nile tributary of the river that runs throughout one a part of Ethiopia.
- The Nile is an essential water supply within the area and Egypt has constantly objected to the dam's building, saying it'll influence water circulation
- The dam's location on the Blue Nile tributary, it could doubtlessly enable Ethiopia to realize management of the circulation of the river's waters. Egypt lies additional downstream and is anxious that Ethiopia's management over the water may end in decrease water ranges inside its personal borders.
- When Ethiopia had introduced in 2019 that it deliberate on producing energy utilizing two generators, Egypt had strongly objected. In addition, Egypt proposed a longer timeline for the venture over issues that the water degree of the Nile may dramatically drop because the reservoir fills with water within the preliminary levels.
- Sudan's location between Egypt up north and Ethiopia down south has brought about it to turn into an inadvertent celebration to this dispute. But that isn't all; Sudan too is anxious that if Ethiopia had been to realize management over the river, it could have an effect on the water ranges Sudan receives.

Why does Ethiopia need this dam?

- Ethiopia's aim is to safe electrical energy for its inhabitants and to maintain and develop its rising manufacturing business.
- Addis Ababa anticipates that this dam will generate roughly 6,000 megawatts of electrical energy when it's accomplished, that may be distributed for the wants of its inhabitants and industries.
- Ethiopia could also be hoping to promote surplus electrical energy to neighbouring nations like Kenya, Sudan, Eritrea and South Sudan, that additionally endure from electrical energy shortages, to generate some income.

Present Situation:

• Egypt and Sudan are involved in regards to the filling and the operation of the dam.

- Ethiopia continues to insist that the dam is required to fulfill the wants of its inhabitants and has mentioned that downstream water provides won't be adversely affected.
- Sudan believes that the dam will scale back flooding, however anxious in regards to the path ahead if the negotiations finish at stalemate.

SOURCE - INDIAN EXPRESS

INDIAN SCIENTIFIC EXPEDITION TO ANTARCTICA (ISEA)

Syllabus Section: Geography

Why in news?

The 40th Indian Scientific Expedition to Antarctica (ISEA) departed for the South Pole from Marmagao Port, Goa with 43 members on board recently. India has two stations on the polar continent of Antarctica — Maitri and Bharati — which are being operated under the National Centre for Polar and Ocean Research (NCPOR), Union Ministry of Earth Sciences.

Objective:

The focus of the 40th Scientific Expedition to the white continent will be to support the ongoing scientific projects on geology, climate change, electric and magnetic flux measurements, ocean observations, environmental monitoring. It also aims at resupplying the of fuel, food, and to accomplish the return of the winter crew.

India in Antarctica:

- India began its Antarctic expeditions in 1981 and the first team to the continent comprised of a team of 21 scientists.
- The Antarctic Program of India has known to have built 3 permanent research base stations in the continent- Maitri, Dakshin Gangotri, and Bharati.
- India, as of today, has two operational stations in Antarctica names Bharati and Maitri.
- The National Centre for Polar and Ocean Research-NCPOR in Goa manages the entire Indian Antarctic Program.
- The 39th expedition to the continent was launched in 2019 and after completing its mission, it returned to India in May 2020.

Source: Down to earth

ANUBHAVA MANTAPA': FIRST PARLIAMENT OF THE WORLD

Syllabus Section- Art and Culture

Why in news?

Recently, while laying foundation for the new Parliament Building in Delhi, the Prime Minister in his speech, said that the Parliament system had come into existence in 12th century itself with BhagwanBasavanna establishing the Anubhava Mantapam.

Note: In November 2015, the Prime Minister of India Narendra Modi inaugurated the statue of Basaveshwara along the bank of the river Thames at Lambeth in London.

About Anubhava Mantapa

- Anubhava Mantapa whose literal meaning is "experience center" was an academy of mystics, saints and philosophers of the 'Veerashaiva' faith in the 12th century.
- It was the fountainhead of all religious and philosophical thought pertaining to the Human Values, Ethics.
- It was presided over by the mystic AllamaPrabhu and numerous Sharanas from all over Karnataka and other parts of India were participants.
- Prabhudeva, a great Yogi of extraordinary achievement, was the president and Lord Basava acted as the prime minister. Chennabasava can be compared to the speaker while at the same time working as the editor, and compiler of Vachana literature.
- The only difference between the present day parliament and AnubhavaMantapa is that the members were not elected by the people, but were picked up or nominated by the higher authorities of the Mantapa; the necessary qualification expected being spiritual attainment.
- The problems tackled were of a various nature covering social, religious, spiritual, yogic psychological, economic and literary spheres.
- Members of the Mantapa and followers of the religion were given full freedom of thought, speech and action. They were allowed to put any questions or doubts to get them cleared in front of the congregation and a systematic program was launched to record and to preserve the dialogues that were going on in the House.

• Anubhava Mantapa criticized sharply the meaningless differentiation of human beings as high or low either on their birth or on their occupation.

Basavanna and Sharana movement:

- 1. The Sharana movement he presided over attracted people from all castes, and like most strands of the Bhakti movement, produced a corpus of literature, the vachanas, that unveiled the spiritual universe of the Veerashaiva saints.
- 2. The egalitarianism of Basavanna's Sharana movement was too radical for its times.
- 3. He set up the Anubhava Mandapa, where the Sharanas, drawn from different castes and communities, gathered and engaged in learning and discussions.
- 4. Sharanas challenged the final bastion of the caste order: they organised a wedding where the bridegroom was from a lower caste, and the bride a Brahmin.

Source- The Hindu

"SOLIDARITY AND STABILITY" DEAL

Syllabus Section- Current Affairs/ International Events

Why in news

Gulf leaders have signed a "solidarity and stability" deal after leaders of Saudi Arabia and Qatar publicly embraced, bringing Doha back into the regional fold after a three-year-long rift.



Why was Rift: Background

- Tensions between the two neighbours spilt into the open in mid-2017, when Saudi Arabia cut diplomatic, trade, and travel ties with Qatar.
- The United Arab Emirates, Bahrain and Egypt also joined the blockade.
- The four countries accused Doha of backing radical Islamist movements and cozying up to Saudi Arabia's arch-rival Iran.
- The bloc also set out 13 demands for Qatar, including closing the Al Jazeera news network and downgrading links with Iran.
- Another request was that Qatar close a Turkish military base on its territory
- Doha has flatly denied the requests, triggering the standoff. Qatar's leaders had said the boycott aimed to undermine the country's national sovereignty.

Significance of the region

- Qatar is the world's biggest supplier of LNG and Egypt and UAE are key recipients.
- India depends on Qatar for 90% of its natural gas requirements.
- Qatar's Sovereign Wealth Fund and other state-owned entities, as well as Qatari private investors, are looking at investment options in infrastructure in India.
- Any kind of instability in the Middle East tends to send up oil prices, and the longer prices stay high, the more likely it is that it will cost more to fill up your tank.

Qatar

- Qatar is a small but strategically crucial country located on a peninsula bordering the Persian Gulf. It is the home to the largest US military base in the region.
- The rich nation has some 2.3 million inhabitants, the overwhelming majority of whom are expats, and shares its only land border with the much larger Saudi Arabia.

NEW INDUSTRIAL DEVELOPMENT SCHEME FOR J&K

Syllabus section: Economy

Why in News?

Jammu and Kashmir lieutenant governor ManojSinha announced a Rs 28,400-crore industrialdevelopment scheme on Thursday that he said would usher in socio-economic development of the Union Territory.

Objectives:

- To generate employment beyond government jobs in both manufacturing and service sectors which directly leads to the socioeconomic development of the region.
- To boost domestic manufacturing in the region and help J&K in becoming AatmaNirbhar (self-reliant.

Features of the scheme:

- The scheme will encourage new investment, substantial expansion and also nurture the existing industries in the Union territory.
- The scheme will optimise utilisation of the local strengths of Jammu and Kashmir.
- The present scheme is being implemented with the vision that industry and service-led the development of J&K needs to be given a fresh thrust with emphasis on job creation, skill development and sustainable development by attracting new investment and nurturing the existing ones.

The following incentives would be available under the scheme:

- Capital Investment Incentive at the rate of 30% in Zone A and 50% in Zone B on investment made in Plant & Machinery (in manufacturing) or construction of building and other durable physical assets(in service sector) is available.
- Capital Interest subvention: At the annual rate of 6% for maximum 7 years on loan amount up to Rs. 500 crore for investment in plant and machinery (in manufacturing) or construction of building and all other durable physical assets(in service sector).

Source- Indian Express

- GST Linked Incentive: 300% of the eligible value of actual investment made in plant and machinery (in manufacturing) or construction in building and all other durable physical assets(in service sector) for 10 years. The amount of incentive in a financial year will not exceed one-tenth of the total eligible amount of incentive.
- Working Capital Interest Incentive: All existing units at the annual rate of 5% for maximum 5 years. Maximum limit of incentive is Rs 1 crore.

Source: Economic Times
SPECTRUM AUCTIONS

Syllabus section: Economy

Why in News?

The Department of Telecommunications (DoT) said on Wednesday that auctions for 4G spectrum in the 700, 800, 900, 1,800, 2,100, 2,300, and 2,500 MHz bands will begin from March 1. Licence holders have until February 5 to submit their application.

What are spectrum auctions?

What's up for sale?

2,250 MHz of airwaves across 700 MHz, 800 MHz, 900 MHz, 1800 MHz, 2100 MHz, 2300 MHz and 2500 MHz bands

Who needs to buy urgently?

Jio, since a bulk of spectrum it owns and shares with RCom in the 800 MHz band expires starting July 2021

How much could the auction fetch the govt?

Analysts say given the sector health, auction will fetch ₹40,000-50.000 cr

What can be the telecom companies' bills?

Jio ₹20,000-30,000 cr

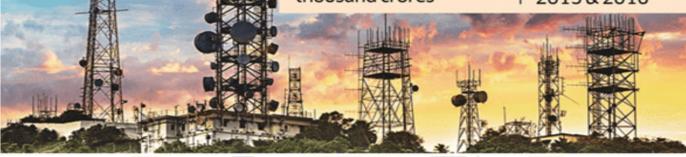
Airtel ₹10,000-15000 cr

Vodafone Idea A few thousand crores

Last date to queue up for auction is Feb 5

Previous shopping bills

Telcos have so far spent nearly ₹3.7 lakh cr over 6 auctions – in CY 2010, 2012, 2013, 2014, 2015 & 2016



- Devices such as cellphones and wireline telephones require signals to connect from one end to another.
- These signals are carried on airwaves, which must be sent at designated frequencies to avoid any kind of interference.
- With the expansion in the number of cellphone, wireline telephone and internet users, the need to provide more space for the signals arises from time to time.
- To sell these assets to companies willing to set up the required infrastructure to transport these waves from one end to another, the central government through the DoT auctions these airwaves from time to time.

- These airwaves are called spectrum, which is subdivided into bands which have varying frequencies.
- All these airwaves are sold for a certain period of time, after which their validity lapses, which is generally set at 20 years.

Source: Indian Express

ASIAN WATERBIRD CENSUS-2020

Syllabus Section- Environment and Ecology Why in news?

The two-day Asian Waterbird Census-2020 commenced in Andhra Pradesh on Tuesday under the aegis of experts from the Bombay Natural History Society (BNHS), covering at least two dozen sites, including Coringa Wildlife Sanctuary, Kolleru Lake and Krishna Sanctuary.

About

- Every January, thousands of volunteers across Asia and Australasia visit wetlands in their country and count waterbirds. This citizen science programme is the Asian Waterbird Census (AWC).
- The AWC is an integral part of the global waterbird monitoring programme, the International Waterbird Census (IWC), coordinated by Wetlands International.
- The IWC is a monitoring programme operating in 143 countries to collect information on the numbers of waterbirds at wetland sites.
- Wetlands International is a global notfor-profit organisation dedicated to the conservation and restoration of wetlands.
- It runs in parallel with other regional programmes of the International Waterbird Census in Africa, Europe, West Asia, the Neotropics and the Caribbean.

India& AWC:

- The AWC is jointly coordinated by the Bombay Natural History Society (BNHS) and Wetlands International.
- BNHS is a pan-India wildlife research organization, which has been promoting the cause of nature conservation since 1883.
- A reference list of internationally important AWC sites and wetland IBAs in India has been prepared.
- India has 42 Ramsar sites, the latest one included is Tso Kar Wetland Complex of Ladakh.
- Ten new species were added to CMS Appendices at COP13. Seven species were added to Appendix I (provides the strictest protection) including the Asian Elephant, Jaguar, Great Indian Bustard, Bengal Florican, etc.
- India submitted its Sixth National Report (NR6) to the Convention on Biological Diversity (CBD) in December 2018.
- BirdLife's Important Bird and Biodiversity Area (IBA) Programme identifies, monitors and protects a global network of priority sites for the conservation of birds and other wildlife. India has more than 450 sites.
- The 13th Meeting of the Conference of the Parties to the Convention on the Conservation of Migratory Species of Wild Animals (CMS COP13) concluded in Gandhinagar, Gujarat in February 2020.

Source- Indian Express

NAVAL INNOVATION AND INDIGENISATION ORGANISATION (NIIO

Syllabus section: Defence technology

Why in News?

Raksha Mantri launched the Naval Innovation and Indigenisation Organisation (NIIO) through an online webinar.

About:

- The NIIO puts in place dedicated structures for the end users to interact with academia and industry towards fostering innovation and indigenisation for self-reliance in defence in keeping with the vision of Atmanirbhar Bharat.
- The NIIO is a three-tiered organisation.
- Naval Technology Acceleration Council (N-TAC) will bring together the twin aspects of innovation and indigenisation and provide apex level directives.
- A working group under the N-TAC will implement the projects.
- A Technology Development Acceleration Cell (TDAC) has also been created for induction of emerging disruptive technology in an accelerated time frame.
- The Draft Defence Acquisition Policy 2020 (DAP 20) envisages Service Headquarters establishing an Innovation & Indigenisation Organisation within existing resources.
- Indian Navy already has a functional Directorate of Indigenisation (DoI) and the new structures created will build upon the ongoing indigenisation initiatives, as well as focus on innovation.

Source: PIB

CENTRAL VISTA PROJECT

WHY IN NEWS?

The Supreme Court allowed the government to go ahead with the 'central vista project', which aims to redevelop the Parliament area and government area and government offices around it.



ABOUT CENTRAL VISTA PROJECT:

- Central Vista project proposes to renovate and redevelop 86 acres of land in Lutyens' Delhi, which has landmark structures including Parliament House, Rashtrapati Bhavan, India Gate, North Block and South Block, Shastri Bhavan, India Gate and Udyog Bhavan.
- **Objective:** The project envisages constructing a new triangular Parliament building, a common secretariat for central government offices, along with the Prime Minister's office and residence, Special Protection Group building and Vice-President Enclave. Revamping of the three-km-long Rajpath, from Rashtrapati Bhavan to India Gate, is also part of the project.
- It is targeted to be constructed by August 2022, when the country will be celebrating its 75th Independence Day
- **Design:** Ahmedabad-based firm HCP Design, Planning and Management Pvt Ltd. has won the consultancy bid to revamp Central Vista.

- Buildings to be demolished: The Nirman Bhawan and Vigyan Bhawan are among those buildings which would be demolished.
- The new Parliament building will be earthquake resistant.



What is Central Vista?

Central Vista of New Delhi houses Rashtrapati Bhawan, Parliament House, North and South Block, India Gate, among others. These iconic buildings were constructed before the inaugural of new capital in the year 1931.

The Central Vista was designed by:

- 1- Parliament House: The Parliament House was designed by Edwin Lutyens and Herbert Baker.
- 2- Rashtrapati Bhavan: The Rashtrapati Bhavan was designed by Edwin Lutyens.
- 3- North and South Block: The North and South blocks were designed by Herbert Baker.

Source: TOI

KOCHI - MANGALURU NATURAL GAS PIPELINE

Syllabus Section- Indian Economy/
Infrastructure

Why in news

Recently, Prime Minister Narendra Modidedicated the Kochi - Mangaluru Natural Gas Pipeline to the nation via video conferencing.

The pipeline is expected to bring a big boost to the gas economy providing cheaper and cleaner fuel to industrial and residential consumers.

About the GAIL pipeline

- The 450 km long pipeline, built by GAIL (India) Ltd, has the capacity to transport 12 Million Metric Standard Cubic Metres of natural gas per day from the Liquefied Natural Gas (LNG) Regasification Terminal at Kochi to Mangaluru.
- The pipeline passes through Ernakulum, Thrissur, Palakkad, Malappuram, Kozhikode, Kannur and Kasaragod districts and ends at Mangaluru in Dakshina Kannada district of Karnataka.
- The project was launched in 2009 at an estimated cost of □2,915 crore and was expected to be completed in 2014. However, resistance from the public raising safety concerns and high land price posed challenges.
- The first phase of the project was commissioned in August 2013 in Kochi city and Indian Oil -Adani Gas Ltd started industrial and domestic supplies in 2016.
- The pipeline supplies 4 million cubic metres of natural gas per day to industrial and domestic consumers in Kochi.
- With the commissioning of the pipeline, the demand for natural gas is expected to go up in the state. The LNG terminal at Kochi, which was established at an investment of 4,700crore has a capacity of 5 million tonnes and the plant is expecting a 40% increase in demand with the opening of the Gail pipeline.

Significance

- The pipeline will offer clean industrial fuel and provide an opportunity for multiple gas-based industries to emerge, creating direct and indirect job opportunities.
- The pipeline project itself created over 12 lakh man-days of employment during the construction, he said.
- Layingacross-countryNaturalGaspipeline in an urbanized and densely populated state like Kerala was an engineering challenge because it encountered tough terrains ranging from waterlogged plain lands, wetlands, rocky areas, hillocks and waterbodies. At some places, construction was carried out in very narrow stretch under the Right of Use (RoU) agreement.

PRAVASIBHARATIYA DIVAS CONVENTION

Syllabus Section: Current Events related to International Affairs

Why in news?

PM Modi inaugurated the 16th PravasiBharatiya Divas Convention organized in a virtual format on January 9, 2021. It is a flagship event of the Ministry of External Affairs which also provides a significant platform to engage and connect with overseas citizens.

About

- PBD convention is the flagship event of the Ministry of External Affairs (MEA) and provides an important platform to engage and connect with overseas Indians.
- India has one of the largest diaspora populations of nearly 30 million, residing in every corner of the world today.
- President Ram Nath Kovind will also be delivering the valedictory address to mark the occasion. As per the release, in view of the sentiments of India's vibrant diaspora community, the 16th PravasiBharatiya Divas Convention is organized on January 9, despite the ongoing pandemic.
- The theme of the event is 'Contributing to Aatmanirbhar Bharat'. The event will also feature the keynote address by the Chief Guest President of Suriname, ChandrikapersadSantokhi.

Background

- The day marks Mahatma Gandhi's return from South Africa on 9th January 1915.
- Pravasi conventions have been held since 2003. Since 2015, the format has been changed and now it is held once every two years.
- The inaugural session was followed by the two plenary sessions:
- The first plenary on the Role of Diaspora in Aatmanirbhar Bharat was addressed by External Affairs Minister and Commerce and Industry Minister.
- The second plenary on Facing Post Covid Challenges-Scenario in Health, Economy, Social and International Relations was addressed by the Minister of Health and Minister of State for External Affairs.
- The names of the PravasiBharatiya Samman Awardees for 2020-21 were also announced.

- These awards are conferred to select Indian diaspora members to recognize their achievements and honour their contributions to various fields, both in India and abroad.
- These are the highest honour conferred on a Non-resident Indian (NRI), Persons of Indian Origin (PIO), or an organisation or institution established or run by NRIs or PIOs.

Source- The Hindu

TO CHAIR 3 KEY UNSC COMMITTEES

Syllabus Section- International Events, Current Affairs

Why in News

The Permanent Representative of India to the UN, TS Tirumurti has announced that India has been asked to chair three important committees of the UN Security Council (UNSC), during its tenure as a non-permanent member of the powerful 15-nation UN body.

About

The three highly significant committees include:

- 1. Taliban Sanctions Committee
- 2. Counter-Terrorism Committee
- 3. Libyan Sanctions Committee

Among these, India will chair the Counter-Terrorism Committee of UNSC in 2022, which coincides with the 75th anniversary of India's independence. India began its two-year term at UNSC from January 01, 2021. It is the eighth time that the country has joined UNSC as the non-permanent member. In 2021, along with India, Norway, Kenya, Ireland and Mexico joined as non-permanent members in the Council.

Significance

- The panels are: Counter-Terrorism Committee, Taliban Sanctions Committee, and Libya Sanctions committee.
- Chairing of Counter-Terrorism committee
 has a special resonance for India which
 has not only been at the forefront of
 fighting terrorism especially cross border
 terrorism but has also been one of its
 biggest victims.
- Taliban Sanctions Committee has always been a high priority for India keeping in mind its strong interest and commitment to peace, security, development, and progress of Afghanistan.

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

About UNSC

- The United Nations Security Council (UNSC) is one of the organs of the United Nations and is charged with the maintenance of international peace and security.
- Its powers include the establishment of peacekeeping operations, the establishment of international sanctions, and the authorization of military action through Security Council resolutions; it is the only UN body with the authority to issue binding resolutions to member states.
- Members: The Security Council consists
 of fifteen members. Russia, the United
 Kingdom, France, China, and the United
 States—serve as the body's five permanent
 members.
- These permanent members can veto any substantive Security Council resolution, including those on the admission of new member states or candidates for Secretary-General.
- The Security Council also has 10 nonpermanent members, elected on a regional basis to serve two-year terms. The body's presidency rotates monthly among its members.

Source: Newsonair

SCIENCE AND TECHNOLOGY CLUSTER LAUNCHED IN HYDERABAD

Syllabus Section: Science and Technology

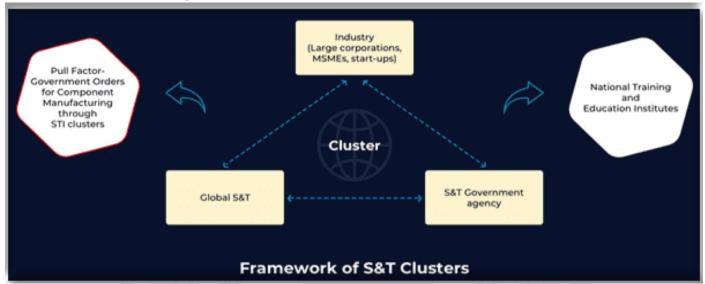
Why in News?

Hyderabad, a hub of innovation, has been selected for setting up a Science and Technology Cluster, an initiative of the Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC).

Background:

• The establishment of Science & Technology (S&T) Clusters is a major initiative under the Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC).

- Four cities that have strong organisations, institutions, and industries focused on science and technology Hyderabad, Bengaluru, Delhi-National Capital Region, and Pune, has been chosen for establishment of mega S&T cluster.
- The S&T Cluster programwill align and integrate with the ongoing PM-STIAC missions, national initiatives, and missions of the Government of India, such as the recently approved National Education Policy 2020, the Institutes of Excellence, and so on.



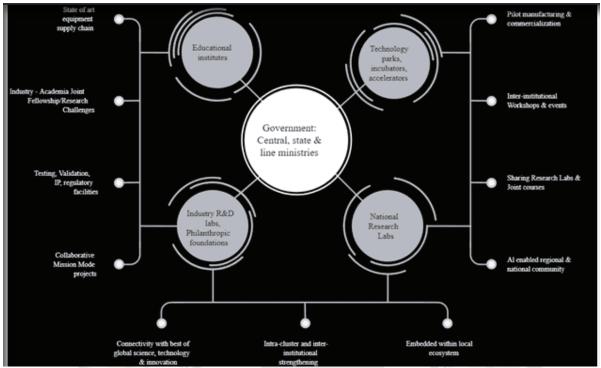
- The goal is to build capability and capacity to reduce our dependency on imports, across sectors, and create an end-to-end supply chain to become self-sufficient and export capable, for technology-enabled products, in partnership with the industry, civil society, and foundations.
- The clusters will also enable the creation of global quality standards for Indian products to enable the internationalization of indigenous technologies.

Enabling Atmanirbhar Bharat with Clusters Economy Infrastructure Inclusive of MSMEs, Startups, Deep technology, World class, Import substitution Made in india System Demography Digital Backbone, Data and Build capacity and capability Technology, MIS driven for the 21st century Demand Re-inventing supply chain, meet local & global demand

MANDATE OF S&T CLUSTERS:

- Creation of the S&T clusters aims to solve complex local challenges by creating networks between diverse stakeholders ranging from national research and academic institutions, industries, associations, startups, civil society entities, state governments, and central ministries, by providing innovative solutions that transform lives.
- The S&T Cluster Apex Committee will have the autonomy to propose newer focus areas and more activities with time, based on the feedback received from four clusters.
- The clusters will operate on an innovative and self-sustainable business model, ensuring financial participation by all stakeholders. The clusters will aim to achieve financial sustainability within 5 years. The initial seed funding will be provided by the Government, and subsequently clusters will engage with external partners such as industry, philanthropy and other stakeholders for additional funding.
- All existing institutions (academic and laboratories) or existing clusters supported by Government of India in the city/ region will become a part of the S&T Cluster.

- entity, which will be supported by a legal entity, which will act as a central pivot and oversee the cluster's development. The cluster can be formed as a Section 8 organization, trust, or society. Existing societies that have been set up by any participating institution can also be leveraged for this purpose. The cluster will act as an umbrella organization and will include members from all institutions in the cluster.
- Each cluster will be headed by a full time dynamic CEO, who shall be selected in consultation with the S&T cluster Apex Committee. The cluster CEO will directly report to the S&T cluster Apex Committee.
- The clusters will have a culture of experimentation coupled with acceptance of failure.



Source: PIB

BIRD FLU

Syllabus section: environment and ecology

Why in News?

After bird flu (avian influenza) was confirmed in Kerala, Rajasthan, Madhya Pradesh, Haryana, and Himachal Pradesh, high alert has been sounded in Maharashtra. Several states, which have been reporting deaths of birds, including crows and migratory species, are scrambling to have samples tested for the virus.

About Bird flu:

- Bird flu or avian influenza is the name used to describe a viral infection that is reported mostly in birds, but has the potential to affect humans and other animals.
- The most common strain of the virus that causes severe respiratory disease in birds is H5N1; various other strains like H7, H8 too, cause infection.

Causes:

- Although there are several types of bird flu, H5N1 was the first avian influenza virus to infect humans. The first infection occurred in Hong Kong in 1997. The outbreak was linked to handling infected poultry.
- H5N1 occurs naturally in wild waterfowl, but it can spread easily to domestic poultry.
- The disease is transmitted to humans through contact with infected bird feces, nasal secretions, or secretions from the mouth or eyes.
- Consuming properly cooked poultry or eggs from infected birds doesn't transmit the bird flu, but eggs should never be served runny.
- Meat is considered safe if it has been cooked to an internal temperature of 165°F (73.9°C).

Human transmission

- The H5N1 virus can jump species and infect humans from the infected bird.
- The first case of H5N1 infection in humans was reported in Hong Kong in 1997, when a poultry farm worker caught the infection from infected birds.
- In its present form, human-to-human infection is not known human infections have been reported only among people who have handled infected birds or carcasses.

Source: Indian Express

VANADIUM

Syllabus section: Geography

Why in News?

The Geological Survey of India has found promising concentrations of Vanadium in the Tamang and Depo areas of Arunachal Pradesh.

What is Vanadium?

- Vanadium is a by-product obtained from the processing of Vanadiferous magnetite ores.
- In its pure form, Vanadium is soft, ductile and grey in colour.
- Vanadium alloys are durable in extreme environments.
- They are corrosion resistant.
- They improve tensile strength of steel and reinforce steel bars used for tunnels, buildings and bridges.
- The Vanadium Pentoxide is used as a catalyst in the production of Sulphuric acid
- 85% of the Vanadium produced in the world are used as steel additive.
- Vanadium steel is used in gears, bicycle frames, axles and other critical components.
- Vanadium Dioxide is used in production of glass coatings that blocks infrared radiation.

Vanadium in Arunachal pradesh

- Vanadium mineralisation in Arunachal Pradesh is geologically similar to the "stone coal" vanadium deposits of China hosted in carbonaceous shale. This high vanadium content is associated with graphite with fixed carbon content of up to 16%.
- Geologists discovered two bands of about 7-metre thick carbonaceous phyllite for a length of more than 6 km in the Depo area.

- The expected grade of vanadium mineralisation in Arunachal Pradesh is comparable to the important vanadium deposits of the world.
- The largest deposits are in China, followed by Russia and South Africa,

Source: The Hindu

NATURAL CAPITAL ACCOUNTING AND VALUATION OF THE ECOSYSTEM SERVICES (NCAVES)

Syllabus Section- Environment and Ecology

Why in news?

NCAVES India Forum 2021 is being organised by the Ministry of Statistics and Programme Implementation (MoSPI).

About

- The Natural Capital Accounting and Valuation of Ecosystem Services (NCAVES) project seeks to advance the theory and practice of environmental and ecosystem accounting in member countries.
- NCAVES India Forum 2021 is being organised in a virtual format, with live sessions focusing on:

Efforts made by the international agencies in the domain of natural capital accounting and valuation of ecosystem services

Policy Demand for NCA in India

Achievements in natural capital accounting and valuation of ecosystem services and prospects of natural capital accounting in India

- A web portal www.ncavesindiaforum.
 in has been designed for the purpose of registration, participation and to function as a repository for the environment related information.
- Funded by: The NCAVES Project, funded by EU, has been jointly implemented by the United Nations Statistics Division (UNSD), the United Nations Environment Programme (UNEP) and the Secretariat of the Convention of Biological Diversity (CBD).
- **Members:** India is one of the five countries taking part in this project the other countries being Brazil, China, South Africa and Mexico.

• Implementation:In India, the NCAVES project is being implemented by the MoSPI in close collaboration with the Ministry of Environment, Forest and Climate Change (MoEF&CC) and the National Remote Sensing Centre (NRSC). MoSPI has coordinated with all the stakeholders through a consultative process by setting in place a mechanism for linking the diverse stakeholders concerned – namely producers and the policymakers using the environmental accounts.

Significance

- The participation in the project has helped MOSPI commence the compilation of the Environment Accounts as per the UN-SEEA framework and release environmental accounts in its publication "EnviStats India" on an annual basis since 2018.
- Several of these accounts are closely related to the social and economic attributes, making them a useful tool for the Policy.
- Another feather to the cap under the NCAVES project is the development of the India-EVL Tool which is essentially a look-up tool giving a snapshot of the values of various ecosystem services in the different States of the country, based on about 80 studies conducted across the country.
- An additional benefit of this tool is that it provides a critical view on the literature that is available and the applicability of estimates spatially across India according to bio-geographical areas.
- The Forum targets showcasing some of the important researches/work related to the environment through the online exhibition and the twitter poster session platform.

Source: PIB

INDIA'S EIGHT POINT ACTION PLAN TO UNSC TO COMBAT TERRORISM

Syllabus section: international relation

Why in News?

Describing terrorism as the greatest threatto mankind, foreign minister S Jaishankar proposed an eight-point action plan at the UNSC to ensure effective action against the menace of terrorism.

Eight-point action agenda:

- All the member nations should fulfil their obligations in international counterterrorism conventions and instruments.
- Do not countenance double standards in this battle of terrorism.
- Reform the working methods of the committees dealing with sanctions and counter-terrorism.
- Firmly discourage exclusivist thinking that divides the world and harms our social fabric. Such approaches facilitate radicalisation and recruitment by breeding fear, mistrust, and hatred among different communities.
- Enlisting and delisting individuals and entities under the UN sanctions regimes must be done objectively, not for political or religious considerations.
- Linkages between terrorism and transnational organised crime must be fully recognized and addressed vigorously.
- The Financial Action Task Force (FATF) should continue to identify and remedy weaknesses in anti-money laundering and counter-terror financing frameworks. Enhanced UN coordination with FATF can make a huge difference.
- Adequate funding to UN Counter-Terrorism bodies from the UN regular budget requires immediate attention.

About UNSC:

- The United Nations Security Council (UNSC) is one of the six principal organs of the United Nations (UN), charged with ensuring international peace and security, recommending the admission of new UN members to the General Assembly, and approving any changes to the UN Charter.
- Its powers include establishing peacekeeping operations, enacting international sanctions, and authorizing military action.
- The UNSC is the only UN body with the authority to issue binding resolutions on member states.

Source: The times of India

NEW FOREIGN TRADE POLICY

Syllabus section: Economy

Why in News?

Union Ministry of Commerce and Industry said that India"s new Foreign Trade Policy 2021-2026, under formulation, will come into effect from April 1, 2021.

About New foreign Trade Policy:

- District Export Hubs Initiative will form an important component of the new FTP.
- It will strive to make India a leader in the area of international trade and channelize the synergies gained through merchandise and services exports for growth and employment with a goal to make India a USD 5 Trillion economy.
- It would be boosting exports, both merchandise and services.
- It will bring improvements in the operations of domestic manufacturing and services sector through infrastructure support.
- The policy will bring changes to regulatory and operational framework and lower transactional costs.

How it can be implemented?

This has to be done through systematically addressing domestic and overseas constraints related to the policy, regulatory and operational framework for lowering transaction costs and enhancing the ease of doing business, and creating a low-cost operating environment through efficient logistical and utility infrastructure.

Source: Business Standard

HENLEY PASSPORT INDEX

Syllabus section: International Relation

Why in News?

Japan tops the list of being the most powerful passport in the world for the year 2021, according to the latest report by the Henley Passport Index.

About:

- Pakistan (rank 107) and Nepal (rank 104) continue to be in the 'worst passports to hold' category.
- According to the report, Japanese citizens can travel to as many as 191 countries visa-free or visa-on-arrival access to 191 destinations around the world.
- Singapore is in second place and South Korea ties with Germany in third place.

- Countries such as UK, USA, New Zealand and Switzerland were at the seventh position. They are considered as the most powerful passports in the world. Their score was 185
- India ranks 85th in the most powerful passport report with a visa-free score of 58.

What is Passport Index?

The Passport Index is an online tool. It provides insights about visa-free travel option. The Passport Index includes World Openness score, Visa-free scores and Global mobility scores.

Source: livemint

LEGAL ENTITY IDENTIFIER (LEI) INTRODUCED

Syllabus section: Economy

Why in News?

The Reserve Bank of India (RBI) has decided to introduce the Legal Entity Identifier (LEI) system for all payment transactions of value 50 crore and above undertaken by entities (non-individuals) using the Reserve Bank-run Centralised Payment Systems.

Objective: To improve the quality and accuracy of financial data systems for better risk management post the Global Financial Crisis.

About:

- The LEI is a 20-digit number used to uniquely identify parties to financial transactions worldwide.
- It was conceived as a key measure to improve the quality and accuracy of financial data systems for better risk management post the global financial crisis.
- The RBI has now decided to introduce the LEI system for all payment transactions of value Rs.50 crore and above undertaken by entities (non-individuals) using RBI-run Centralised Payment Systems viz. Real Time Gross Settlement (RTGS) and National Electronic Funds Transfer (NEFT).
- The LEI has been introduced by the RBI in a phased manner for participants in the over the counter (OTC) derivative and non-derivative markets as also for large corporate borrowers.

• In India, LEI can be obtained from Legal Entity Identifier India Ltd. (LEIL), which is also recognised as an issuer of LEI by the Reserve Bank under the Payment and Settlement Systems Act, 2007.

Source: The hindu

TSAR ICICLE

Syllabus section: Geography

Why in news?

The Tsar Icicle recently collapsed killing four tourists in Russia.

About Tsar Icicle

- The Vilyuchinsky waterfall in winter is called Tsar Icicle.
- The Vilyuchinsky waterfall lies in Kamchatka peninsula.
- It is home to more than one hundred and sixty volcanoes.
- Of these twenty-nine are still active.
- Many of these volcanoes are capped with glaciers.
- As these glaciers melt during warm weather, they form waterfalls.
- One such waterfall is the Vilyuchinsky waterfalls.

About Vilyuchinsk town

The Vilyuchinsk town is a closed town under Krai jurisdiction. The town served as a base for submarine construction.

Source: Indian express

PRADHAN MANTRI KAUSHAL VIKAS YOJANA (PMKVY 3.0

Syllabus section: society Why in news?

The third phase of Pradhan Mantri Kaushal Vikas Yojana (PMKVY 3.0) will be launched tomorrow in 600 districts across all states of India.

About:

- On the basis of the learning gained from PMKVY 1.0 and PMKVY 2.0, the Ministry has improved the newer version of the scheme to match the current policy doctrine and energize the skilling ecosystem affected due to the COVID-19 pandemic.
- Skill India Mission" has gained tremendous momentum through launch of its flagship scheme PMKVY to unlock the vision of making India the 'Skill Capital' of the world.

Pradhan Mantri Kaushal Vikas Yojana

- Launched in 2015, it is a flagship program of Ministry of Skill Development and Entrepreneurship (MSDE). National Skill Development Corporation (NSDC) implements it with the help of training partners.
- It aims to mobilize youth to take up skill training with the aim of increasing productivity and aligning the training and certification to the needs of the country.

Key Components

- Short Term Training: Training as per National Skills Qualification Framework (NSQF) is provided to those who are either school/college dropouts or unemployed.
- Recognition of Prior Learning (RPL): An individual with a certain set of skills or with prior learning experience is assessed and certified under RPL with grade according to the NSQF.
- Special Projects: This component ensures training in special areas and premises of government bodies and corporate. It aims to encourage training in vulnerable and marginalized groups of society.
- Training Partners (TPs) are mandated to organize Kaushal and Rozgar Melas every six months, thus providing placement assistance to certified ones.

Source: PIB

LIGHT COMBAT AIRCRAFTS (LCA) 'TEJAS'

Syllabus section: Defense

Why in News?

The Union Cabinet has approved procurement of 73 LCA Tejas Mk-1A fighter aircrafts and 10 LCA Tejas Mk-1 Trainer aircrafts.

About LCA Tejas

- Light Combat Aircraft Mk-1A variant is an indigenously designed, developed and manufactured state-of-the-art modern 4+ generation fighter aircraft.
- This aircraft is equipped with critical operational capabilities of Active Electronically Scanned Array (AESA) Radar, Beyond Visual Range (BVR) Missile, Electronic Warfare (EW) Suite and Air to Air Refueling (AAR) would be a potent platform to meet the operational requirements of Indian Air Force, IAF.

- It is the first "Buy (Indian-Indigenously Designed, Developed and Manufactured)" category procurement of combat aircrafts with an indigenous content of 50% which will progressively reach 60% by the end of the programme.
- Cabinet has also approved infrastructure development by IAF under the project to enable them handle repairs or servicing at their base depot so that the turnaround time would get reduced for mission critical systems and would lead to increased availability of aircraft for operational exploitation.
- This would enable IAF to sustain the fleet more efficiently and effectively due to availability of repair infrastructure at respective bases.

Source: PIB

RBI FINANCIAL STABILITY REPORT

Syllabus section: Economy

Why in News?

The Reserve Bank of India recently released to the financial stability report for December 2020. This is the 22nd issue of financial stability report of the apex bank.

Key findings:

- The Gross non-performing assets ratio of the scheduled commercial banks is to increase to 13.5% by September 2021.
- The gross non-performing asset (GNPA) ratio of private sector banks (PVBs) and foreign banks (FBs) may increase from 4.6% and 2.5% to 7.9% and 5.4%, respectively, over the same period.

About:

- The Financial Stability Reports, published by Reserve Bank of India, after approved by FSDC Subcommittee since its inception, taking inputs from financial sector regulators i.e. RBI, SEBI, PFRDA, IRDAI including Ministry of Finance, are periodic exercise for reviewing the nature, magnitude and implications of risks that may have a bearing on the macroeconomic environment, financial institutions, markets and infrastructure.
- These reports will also assess the resilience of the financial sector through stress tests.

Source: The Hindu

INDIA – UAE MOU FOR SCIENTIFIC AND TECHNICAL COOPERATION

Syllabus section: international relations

Why in News?

The Union Cabinet approved the Memorandum of Understanding on the scientific and technical cooperation between the Ministry of Earth Sciences, India and the National Centre of Meteorology, UAE.

Objective:

The Memorandum of Understanding between UAE and India will provide for the sharing of data, knowledge, and operational products for seismological, meteorological, and oceanic services such as satellite, radar, seismic, tide gauges, and meteorological stations.

Agreement to facilitate relations between India and UAE:

- Exchange of experience/visits in term of scientists, research scholars and specialists, etc. for the purpose of tropical cyclones forecasting.
- Cooperation to support the Tsunami Early Warning Centre (TEWC)
- Cooperate at the field of Seismology which includes the study of Seismic activities having the potential to generate Tsunami waves in Arabian Sea and Oman Sea.
- Cooperation in Early warnings of Sand and Dust storms through the exchange of knowledge.

Source: The Hindu

INDIA'S FIRST INDIGENOUS 9 MM MACHINE PISTOL

Syllabus section: Defence

Why in News?

In another boost to its Defence capabilities, India has now developed its first-ever indigenously made 9mm machine pistol 'ASMI'.

About:

- As per the Ministry of Defence, the weapon has been jointly developed by the Defence Research and Development Organisation (DRDO) and the Indian Army.
- It has been developed by a young officer from Infantry School Lt Col Prasad Bansod in a record time of four months.
- The weapon has the capability of firing the in-service 9 mm ammunition.

- The weapon has been named "Asmi" which means 'pride', 'Self-Respect' and 'Hard Work'.
- The machine pistol is likely to have production cost under Rs 50,000 each and has potential for exports.
- The upper receiver of ASMI is made from Aircraft grade Aluminum while the lower receiver is created from Carbon Fibre.
- The weapon has an overall empty weight of less than 2 Kg and it features an 8-inch barrel along with 33 rounds high-capacity magazine.
- The weapon has huge potential in armed forces as a personal weapon for various missions, including in counter-insurgency and counter-terrorism operations.

Source: DNA India

ONE NATION ONE RATION CARD

Syllabus section: Economy

Why in News?

Tamil Nadu has become the 11th State in the country to successfully undertake "One Nation One Ration Card system" reform stipulated by the Department of Expenditure, Ministry of Finance.

About:

- One Nation One Ration Card System is an important citizen centric reform.
- Its implementation ensures availability of ration to beneficiaries under National Food Security Act (NFSA) and other welfare schemes, especially the migrant workers and their families, at any Fair Price Shop (FPS) across the country.
- The reform especially empowers the migratory population mostly labourers, daily wagers, urban poor like rag picker, street dwellers, temporary workers in organised and unorganised sectors, domestic workers etc., who frequently change their place of dwelling to be self-reliant in food security.
- This technology driven reform enables the migrant beneficiaries to get their entitled quota of food grains from any electronic point of sale (e-PoS) enabled fair Price Shops of their choice anywhere in the country.
- The reform also enables the States in better targeting of beneficiaries, elimination of bogus/ duplicate/ineligible card holders resulting in enhanced welfare and reduced leakage.

Further, to ensure seamless inter-state portability of a ration card, Aadhar seeding of all ration cards as well as biometric authentication of beneficiaries through automation of all Fair Price Shops (FPSs) with installation of electronic point of sale (e-PoS) devices are essential.

Source: PIB

PRARAMBH: STARTUP INDIA INTERNATIONAL SUMMIT

Syllabus section: science and tech Why in News?

Indian Prime Minister will interact with startups and address 'Prarambh: Startup India International Summit'

Focus: Enhancing multilateral cooperation and engagement with countries from around the globe to collectively develop and strengthen the startup ecosystems.

About:

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

Source: PIB

INDIA HOME TO BOTH SPECIES OF RED PANDA

Syllabus section: environment and ecology

Why in News?

Scientists from the ZSI have concluded that India is home to both the (sub) species — Himalayan red panda (Ailurus fulgens) and the Chinese red panda (Ailurus styani)

About:

- The red panda was considered a monotypic species till 2020 until the scientists studied its genetic make-up with respect to the geographical distribution and described the occurrence of the two species.
- Siang River in Arunachal Pradesh splits red panda into these two phylogenetic species.
- It is considered an indicator species for ecological change, the red panda is shy, solitary and arboreal animal. It primarily feeds on bamboo and avoids human presence.
- Director of the ZSI, said the overall conservation of this ecologically sensitive species required an effort from both the national and international stakeholders and adequate awareness among the local communities.

Reason for the reduction in the population size of the Himalayan red panda is due to the geological and climatic oscillations as the landscape was exposed to heavier topographic and geological changes through repeated cycles of the wet and dry periods during the last glacial maxima and Pleistocene Era.

- The red panda (Ailurus fulgens) is a mammal species native to the eastern Himalayas and southwestern China.
- It is listed as Endangered on the IUCN Red List
- **Threats:** Habitat loss and fragmentation, poaching, and inbreeding depression.

Source: The Hindu

NATIONAL INNOVATION PORTAL (NIP)

Syllabus section: science and tech

Why in News?

The Union Minister for Science & Technology, Earth Sciences, Health & Family dedicated an Innovation Portal, developed by National Innovation Foundation (NIF) – India, an autonomous body of the Department of Science and Technology (DST)

About:

• The National Innovation Portal (NIP) is currently home to about 1.15 lakh innovations scouted from common people of the country, covering Engineering, Agriculture, Veterinary, and Human Health.

- Innovation Portal will create an eco-system where the Institutions will stand behind all those who can convert their ideas and innovations into entrepreneurship.
- The Innovation Portal in the coming days could be one of the significant contributions amongst all of our digital progress so far and would act as a bridge between people who are looking for innovative solutions and those who had been at the helm of their evolution.
- The Innovation Portal will help create local entrepreneurs out of grassroots ideas and will help bring ideas to the market.

Innovation Portal is a step towards AatmaNirbhar Bharat and an excellent resource for students, entrepreneurs, MSMEs, Technology Business Incubators (TBI's), and common people engaged in a variety of occupations.

Source: PIB

IRON ORE POLICY, 2021

Syllabus section: economy

Why in News?

The Ministry of Railways has approved a new iron-ore policy governing the allocation of rakes and transportation of iron-ore.

About:

- The provisions of the new policy will be updated in the rake allotment system module by the Centre for Railway Information Systems (CRIS).
- Scrutiny of documentation by Railways has been removed.
- As per the new policy, higher priority will be given to the movement of iron-ore traffic for domestic manufacturing activity.
- Within the domestic movement of iron-ore traffic, priority preference will be given to steel, pig iron, sponge iron, pellet, or sinter plant owning customers having their own private sidings at both the loading as well as unloading ends.
- The policy has categorized the movement of iron ore based on the availability of railway infrastructure developed by customers. Also, the nature of movement will be in such a way to maximize iron-ore movement by rail.

• Under the fresh policy, old and new plants will be treated similarly as far as allotment and loading of rakes are concerned. The priority preferences for the customers will be self-generated by the system based on the customer profile fed in the system by the concerning zone.

Iron ore is the second most important stream of traffic of Railways and along with steel accounts for nearly 17 percent (53.81 million tonnes of steel and 153.35 million tonnes of iron ore) of the total 1210 million tonne freight loading of Indian Railways in 2019-2020.

Source: Buisness Standard

SAKSHAM AWARENESS CAMPAIGN

Syllabus section: environment and ecology

Why in News?

The Ministry of Petroleum and Natural Gas recently launched the SAKSHAM awareness campaign. The campaign was launched to spread awareness about green energy.

About:

- SAKSHAM's idea is to convince consumers to switch to cleaner fuels and bring in behavioral change to use fossil fuel intelligently.
- The campaign through various pan-India activities such as cyclotron, farmer workshops, seminars, painting competition, CNG vehicle driving contest, etc will spread awareness among the masses about the advantages of using clean fuels.
- The campaign will also spread awareness about 7 key drivers:
 - 1. Moving towards a gas-based economy
 - 2. Cleaner use of fossil fuels
 - 3. Greater reliance on domestic sources to drive bio-fuels
 - 4. Achieving renewable targets with the set deadlines
 - 5. Increased use of electric vehicles to decarbonize mobility
 - 6. Increased use of cleaner fuels like Hydrogen
 - 7. Digital innovation across all energy systems.

It will help in reducing fuel consumption and adoption of energy efficiency measures which lead to better lives of the people, healthy environment, sustainability, and development of the country. SOURCE: PIB

THIRUVALLUVAR

Syllabus section: Art and culture

Why in News?

The state of Tamil Nadu celebrates Thiruvalluvar Day during Pongal celebrations. Every year, Thiruvalluvar Day is celebrated on the second day of Tamil month "thai".

About:

- Thiruvalluvar is a Tamil poet and is best known as the author of Thirukkural.
- Thirukkural is a collection of couplets on political and economic matters, ethics and love
- There are no known details about the life of Thiruvalluvar.
- Thiruvalluvar has also written "Gnana Vettiyan" and "Pancharathnam". These books contribute to tamil science, siddha medicines and literature.
- The Kural (couplet) literature has three parts. They are aram (virtue), porul (wealth), and inbam (love). The couplets aim at attaining ultimate salvation.

SOURCE: PIB

FOLLOW-ON PUBLIC OFFERS

Syllabus Section: Economy Why in News?

SEBI eases norms for follow-on public offers.

About:

- The applicability of minimum promoters' contribution norm and the subsequent lock-in requirements for the issuers making the FPO have been removed.
- Earlier, promoters were mandated to contribute 20% towards a FPO.
- Besides, in case of any issue of capital to the public, the minimum promoters' contribution was required to be locked-in for three years.
- Relaxation would be available for those companies which are frequently traded on a stock exchange for at least three years.
- Also, such firms should have redressed 95% of investor complaints.

The Securities and Exchange Board of India (SEBI)

• It is the regulator of the securities and commodity market in India owned by the Government of India.

- It was established in 1988 and given statutory status through the SEBI Act, 1992.
- SEBI is responsible to the needs of three groups:
 - o Issuers of securities
 - o Investors
 - o Market intermediaries

Source: The Hindu

SPECIAL MARRIAGE ACT

Syllabus section: Polity

Why in News?

The Allahabad High Court recently ruled that couples planning to marry under the Special Marriage Act shall choose not to publish a thirty-day notice before registering their marriage.

About:

- According to the judgment, the provisions of the act invade the fundamental rights of liberty and privacy.
- That is, putting a prior notice that provides the details of the bride and groom invades their privacy.

Special Marriage Act, 1954

It is an act that was enacted to provide a special form of marriage in certain cases. This includes validating and registering interreligious and inter-caste marriages. The three main objectives of

Special Marriage act are as follows:

- To provide registration for certain special marriages
- To provide a special form of marriage in certain cases
- To provide divorce

Conditions in Special Marriage Act, 1954

The conditions under the Special Marriage Act, 1954 are as follows:

- The marriage should be monogamous for both the partners.
- The bride should have attained the age of 18 years and the groom should be at least 21 years old.
- Both the parties should be competent in regard to their mental capacity to give consent for the marriage.

Source: The Hindu

SINGLE WINDOW CLEARANCE PORTAL

Syllabus Section: Economy

Why in News?

Ministry of Coal launched Single Window Clearance Portal, a unified platform that facilitates the grant of clearances and approvals required for starting a coal mine in India.

Background:

- Currently, about 19 major approval or clearances are required to be obtained before starting a coal mine in the country.
- Some of them include approval of Mining Plan and Mine Closure Plan, Grant of Mining Lease, Environment and Forest Clearances, Wild Life Clearance, Clearances related to Safety, Environment, Rehabilitation of project affected families, the welfare of workers, etc.
- These approvals or clearances are granted either by central or state governments.
- In the absence of a unified platform for grant of clearances/approvals for starting a coal mine, the project proponents are required to approach different administrative ministries and government departments separately to apply for the requisite clearances leading to delay in the operationalization of coal mines.

About:

- Single Window Clearance Portal is in the spirit of Minimum Government and Maximum Governance. It would be a milestone for Ease of Doing Business in the Indian Coal Sector.
- Presently, about 19 major approval or clearances are required to be obtained before starting a coal mine in the country.
- The Portal will map not only the relevant application formats but also process flow for grant of approval or clearances.

Why Single-window Clearance Portal in Coal Sector is needed?

- In the absence of a unified platform for grant of clearances, the companies were required to approach different departments and leading to delay in the operationalization of the coal mines.
- The industry experts said that the sector has long sought a single-window clearance system to help with quicker operationalization, as obtaining the requisite clearances was taking over 2-3 years for successful bidders in many cases.

- The expert added that some coal blocks auctioned as far back as 2015 has still not been operationalized due to delays in obtaining required clearances.
- The expert noted that the Parivesh mechanism for forest and environment-related clearances would likely be merged into the single window clearance mechanism to help with the operationalization of the coals blocks that are set to be auctioned in the upcoming auctions.
- The Single Window Clearance Portal is in the spirit of Minimum Government and Maximum Governance and it would be a milestone for Ease of Doing Business in the Indian Coal Sector.

Source: Indian Express

MAHANANDA SANCTUARY

Syllabus section: Environment and ecology

Why in News?

In first, a bird festival is being organized at the Mahananda wildlife sanctuary in West Bengal to provide an opportunity for enthusiasts to explore the forest and watch different birds.

About:

- Mahananda Wildlife Sanctuary is located on the foothills of the Himalayas, between the Teesta and Mahananda rivers. Situated in the Darjeeling district of West Bengal, India.
- The sanctuary sprawls over 159 km2 of reserve forest and was started as a game sanctuary in 1955.
- In 1959, it got the status of a sanctuary mainly to protect the Indian bison and royal Bengal tiger, which were facing the threat of extinction.
- The forest type in Mahananda WLS varies from riverain forests like Khayer-Sisoo to dense mixed-wet forests in the higher elevation in the Latpanchar area of Kurseong hills.
- The variation in altitude and forest types helps the existence of a large number of species of mammals, birds, and reptiles

Source: The Tribune

G7 SUMMIT

Syllabus section: international relations

Why in News?

The UK Prime Minister Boris Johnson recently invited PM Modi to attend the G7 summit.

About:

- It is an intergovernmental organization that was formed in 1975.
- The bloc meets annually to discuss issues of common interest like global economic governance, international security and energy policy
- The G7, originally G8, was set up in 1975 as an informal forum bringing together the leaders of the world's leading industrial nations.
- The major purpose of the G-7 is to discuss and deliberate on international economic issues. It sometimes acts in concert to help resolve other global problems, with a special focus on economic issues.
- The decisions taken at G7 have a huge impact globally as the members are the major economic powers. They represent 58% of global net wealth. However, the decisions taken at G7 are not legally binding but have strong political influence.
- Five of the seven members of G7, US, Italy, Japan, France, Germany have the largest proven reserves of gold.

Source: The Hindu

EX-DESERT KNIGHT 21

Syllabus section: internal security

Why in News?

India and France are to hold Ex-Desert Knight 21 exercise.

About:

- It is a bilateral air exercise to be held between Indian Air Force and the French air and Space Force.
- The Ex-Desert Knight 21 is to be held in Jodhpur, Rajasthan.
- Rafale Fighter Jets are to participate in the exercise.
- The main objective of the exercise is to provide operational exposure and share best practices.

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

- Exercise Shakti is held between the Armies of India and France
- Exercise Varuna is held between Indian Navy and French Naval Forces
- Exercise Garuda is held between the Air Forces of the two countries

Source: Financial express

INDIA INNOVATION INDEX, 2020

Syllabus section: Polity

Why in News?

NITI Aayog released the second edition of its India Innovation Index in a virtual event.

About:

- The index that ranks different states and UTs based on how they support innovation.
- The motif of the index is to showcase the government's initiative to create an innovation-driven economy.
- The India Innovation Index 2020 ranks the states and union territories based on their relative performance of supporting innovation.
- This competitive measure will empower them to improve their innovation policies by highlighting their strengths and weaknesses.
- The ranking methodology is designed in a way that states can draw lessons from the national leaders in innovation.
- This will lead to healthy competition among the states and union territories, thereby fostering competitive federalism.

India Innovation Index 2020 The framework has been updated to include globally considered parameters for measuring innovation (such as the percentage of gross domestic product spent on research and development), while also retaining the parameters specific to the Indian economy.

Source: Livemint

STARSTREAK AIR DEFENCE SYSTEM: INDIA-FRANCE SIGN AGREEMENTS

Syllabus section: Internal security

Why in News?

BDL signs pact with Thales to make STARStreak Missile Systems.

About:

- The STARStreak is a short-range surfaceto-air missile. It was earlier called as the Shorts Missile System. It travels at Mach 3 speed, that is, the speed of the missile is three times the speed of sound.
- STARStreak has been in service with the British Army since 1997.
- The minimum range of the system is 0.3 km and the maximum range is 7 km. The range of the STARStreak System II variant is more than 7 km.
- The other variants of the STARStreak system are air to air system that can be fired from helicopters.
- The Light Weight Multiple Launcher variants of the STARStreak system can be used mounting on a stationary vehicle.
- The surface to air missile installed in the STARStreak Air Defence System is currently the fastest short-range surface to air missile in the world.
- The missile is made of three LASER guided Darts.

Source: The Hindu

LAUNCHERONE

Syllabus section: science and technology Why in News?

Virgin Orbit recently launched its Launcher One rocket to orbit.

About:

- LauncherOne is a two-stage orbital launch vehicle.
- It is an air-launched rocket.
- It is capable of carrying small satellite payloads up to 300 kilograms. The LauncherOne rocket is carried to the upper atmosphere on Boeing 747 called "Cosmic Girl". During the first attempt in, LauncherOne failed to reach the space.
- During the recent second launch, the LauncherOne delivered ten CubeSats to the Low Earth Orbit.
- LauncherOne is the first all liquid-fuelled air-launched orbital rocket.
- LauncherOne places the satellites in Sun Synchronous Orbit.

Source: space.com

REGULATORY COMPLIANCE PORTAL

Syllabus Section: Economy

Why in News?

The Department for Promotion of Industry and Internal Trade (DPIIT) has launched a regulatory compliance portal that will act as a bridge between citizens, industries, and the government to minimize burdensome compliances.

About:

- It will also act as a first-of-its-kind central online repository of all central and statelevel compliances.
- All central ministries/departments and states/UTs would examine laws/ regulations/rules under their purview and implement an action plan to rationalize and simplify all the processes and remove burdensome compliances, decriminalize laws and repeal redundant acts.
- This will be assessed by concerned government authorities and suitable action would be undertaken to minimize the regulatory compliance burden.
- The department has been directed by the Cabinet Secretary to act as the nodal department for coordinating the exercise of minimizing regulatory compliance burden for citizens and businesses.

Source: Financial Express

INDIA, SINGAPORE SIGN DEAL FOR SUBMARINE RESCUE MISSIONS

Why in News?

India and Singapore signed a strategic partnership agreement under which both the countries' navies will support and cooperate with each other for submarine rescue missions.

The decision was taken during the fifth India-Singapore defence ministerial dialogue. Indian Defence Minister Rajnath Singh co-chaired the fifth India-Singapore Defence Ministers' Dialogue along with Ng Eng Hen, Minister for Defence, Singapore.

Significance:

- It is one of the major steps taken by the Indian government to strengthen ties with South East/Association of Southeast Asian Nations (ASEAN) countries.
- Defence and security engagements between India and Singapore have broadened significantly in scale and scope across all three services of the armed forces as well as in the areas of defence technology and industry.
- Both countries have also found common ground on multilateral fora and engagements.
- Full support towards the early conclusion of agreements to facilitate the conduct of live firings and to establish reciprocal arrangements for the cross-attendance of military courses was also conveyed by both the heads of the government.

ASEAN (Association of Southeast Asian Nations): The Association of Southeast Asian Nations (ASEAN) is a regional grouping that promotes economic, political, and security cooperation among its ten members: Members: Brunei. 2. Cambodia, 3. Indonesia, 4. Laos, 5. Malaysia, 6. Myanmar. the Philippines, Singapore, 9. Thailand 10. Vietnam. ESTABLISHMENT The Association of Southeast Asian Nations, or ASEAN, was

established on 8 August 1967 in Bangkok, Thailand, with the signing of the ASEAN Declaration (Bangkok Declaration) by the Founding Fathers of ASEAN, namely Indonesia, Malaysia, Philippines, Singapore and Thailand. Brunei Darussalam then joined on 7 January 1984, Viet Nam on 28 July 1995, Lao PDR and Myanmar on 23 July 1997, and Cambodia on 30 April 1999, making up what is today the ten Member

States of ASEAN

Source: PIB

RATLE HYDROPOWER PROJECT

Syllabus section: economy

Why in news?

Cabinet approves □5,282-cr investment for 850 MW Ratle project on Chenab river

About:

- The Ratle project located in Kishtwar district will be developed by a new joint venture co many between state-run NHPC Ltd and Jammu & Kashmir State Power Development Corporation Ltd (JKSPDC).
- The task is seen as strategically vital in the context of China developing the controversial China-Pakistan Economic Corridor (CPEC), part of its showpiece One Belt One Road (OBOR) infrastructure initiative.
- According to the Indus Waters Treaty, whoever builds the project first will have the first rights on the river waters.
- The Ratle Hydro Electric Project shall be commissioned within a span of 60 months.
- The project is expected to provide direct and indirect employment to more than four thousand individuals.
- The project includes 133 meters tall gravity dam and two power stations.

Background:

This comes in the backdrop of India's plan to expedite strategically important hydropower projects in the union territory post its reorganization, as the National Democratic Alliance government plans to fully utilize its share of water under the Indus Waters Treaty of 1960. Chenab flows from India into Pakistan.

Source: Livemint

SAAW: SMART ANTI-AIRFIELD WEAPON

Syllabus section: science and technology

Why in News?

HAL successfully test-fires smart anti-airfield weapon from Hawk-i aircraft.

About:

• The indigenous stand-off weapon, developed by Defence Research and Development Organisation's Research Centre Imarat (RCI), is the first smart weapon fired from an Indian Hawk-Mk132

- The telemetry and tracking systems captured all the mission events confirming the success of the trials.
- The weapon is capable of engaging ground targets with precision up to a range of hundred-kilo metres.
- SAAW is a bomb. It is designed to destroy targets such as bunkers, runways, reinforced structures and aircraft hangers.

Hawk aircraft

It is a tandem-seat aircraft developed by HAL. The aircraft has an integrated attack system and radio and an inertial navigation system. It is spin resistant.

Source: Hindustan Times

EXERCISE KAVACH

Syllabus section: defence

Why in News?

The Indian Army is to conduct a large scale joint military exercise Kavach in the Andaman Sea and Bay of Bengal.

About:

- The Joint Military Exercise Kavach will involve Indian Navy, Indian Army, Indian Air Force and Indian Coast Guard.
- During the exercise, the joint forces will execute high-density offensive and defence measures in the Andaman sea and Bay of Bengal. Also, they will carry out amphibious landing operations, helicopter-borne insertion of special forces from sea culminating in tactical follow-on operations on land.
- The exercise is to fine-tune the joint war capabilities of all the three forces of India.
- Kavach Exercise will also involve coordinated air and maritime strikes, synergized application of maritime surveillance assets, air defence and landing operations.

Along with Kavach Exercise, the Joint Intelligence Surveillance Reconnaissance (ISR) Exercise will also be held. The ISR will validate the capabilities of intelligence gathering. Also, it will validate the capabilities of information sharing from space, land, air and sea.

Source: News on Air

UNGA ADOPTS RESOLUTION TO SAFEGUARD RELIGIOUS SITES

Why in News?

- The UN General Assembly has adopted a resolution to promote a culture of peace and tolerance to safeguard religious sites.
- It invites all member states, the UN system, regional and non-governmental organizations, and other relevant stakeholders to support UN initiatives that promote tolerance, including the UN Plan of Action to Safeguard Religious Sites.

About Resolution:

- The resolution was proposed by Saudi Arabia and was co-sponsored by several other nations.
- The resolution adopted calls for strengthened international efforts to foster a global dialogue on the promotion of a culture of tolerance and peace at all levels, based on respect for human rights and for the diversity of religions and beliefs.
- It condemns all acts or threats of violence, destruction, damage or endangerment, directed against religious sites and denounces any moves to obliterate or forcibly convert any religious sites.
- The resolution calls on the UN to continue to develop strategies, educational initiatives, and global communications campaigns and tools aimed at strengthening the protection of religious sites and cultural heritage, fostering mutual respect and understanding, enhancing media awareness, and countering religious intolerance and hate speech.

What is the UN Plan of Action to Safeguard Religious Sites?

- United Nations Plan of Action to Safeguard Religious Sites was adopted in September 2019.
- United Nations Alliance of Civilizations will lead and monitor the plan.
- The UN Plan of Action provides an actionoriented framework with recommendations to support relevant stakeholders, including the Member States, religious leaders, civil society organizations, the news media, and social media platforms, in preventing attacks against places of worship and guaranteeing the safety of the faithful to worship in peace.

• The Plan supports governments in their efforts to protect religious sites and places a strong focus on prevention, exploring actions to address drivers that can result in violent attacks against holy sites and worshippers.

Source: Business Standard

MINISTRY OF TRIBAL AFFAIRS
VIRTUALLY LAUNCHES
"SHRAMSHAKTI" DIGITAL DATA
SOLUTION FOR MIGRANT WORKERS

Why in News?

- The Union Minister of Tribal Affairs launched "ShramShakti", a National Migration Support Portal at a program held at Panjim, Goa. It would effectively help in the smooth formulation of state and national level programs for migrant workers.
- He also launched a tribal migration cell, a tribal museum at Goa, and "ShramSaathi", a training manual for migrant workers.

Benefits of Shramshakti:

- Shram Shakti would be able to successfully able to address the data gap and empower migrant workers who generally migrate in search of employment and income generation.
- It would also help the government for linking the migrant population with the existing Welfare Scheme- under Atam Nirbhar Bharat.
- The various data that will be recorded via Shram Shakti include demographic profile, livelihood options, skill mapping, and migration pattern.

About Shram Saathi:

- Tribal training module help to ensure that the process of livelihood migration is safe and productive.
- After training via this module, tribal migrant workers will be able to demand and access services, rights, and entitlements related to livelihood and social security at their village before migration, as well after migration at destination towns and cities.

Source: PIB

TREATY ON PROHIBITION OF NUCLEAR GREEN TAX **WEAPONS**

Syllabus section: International Relation

Why in News?

India Says It Doesn't Support Treaty On Prohibition Of Nuclear Weapons.

About:

- As the first-ever treaty to ban nuclear weapons entered into force, India said that it does not support the treaty and shall not be bound by any of the obligations that may arise from it.
- The Treaty on the Prohibition of Nuclear Weapons was approved by the United Nations General Assembly in 2017, but none of the nine countries known or believed to possess nuclear weapons supported it, and neither did the NATO alliance
- India believes that the treaty does not constitute or contribute to the development of customary international law, nor does it set any new standards or norms.
- India maintains that it will continue to provide the high priority and remain committed to the universal, nondiscriminatory, and verifiable nuclear disarmament.

Why India does not support the treaty?

- India does not support the treaty because India believes, the treaty does constitute or contribute to the development of customary international law.
- Further, the treaty does not provide for any new standards or norms.

Treaty on Prohibition of Nuclear Weapons

- The treaty is also called the Nuclear Weapon Ban Treaty. It is the first legally binding international agreement.
- It prohibits nuclear weapons and aims for the total elimination of such weapons. The treaty was adopted on July 7, 2017.
- For the member nations, the treaty prohibits the development, testing, production, stockpiling, transfer, and use of nuclear weapons.
- The recognized "Nuclear weapon States" United States, Russia, Kingdom, China, and France.
- The states that have declared possessing nuclear weapons include India, Pakistan, and North Korea while Israel is the state that indicated for possessing nuclear weapons.

Source: Times of India

Syllabus Section: Economy

Why in News?

In a bid to curb pollution and motivate people to switch to environment-friendly alternatives, the road transport ministry decided to impose additional taxes on old vehicles that are unfit for roads as 'green taxes'.

What is Green Tax?

The central government approved a proposal to levy a "Green Tax" on old vehicles that are considered polluting to the environment. As part of the proposal transport vehicles older than 8 years could be charged a tax at the rate of 10-25 percent of road tax at the time of renewal of fitness certificate.

Significance of the Move:

Green Tax has been proposed to dissuade people from using vehicles that damage the environment, motivate them to switch to newer, less polluting vehicles and to reduce overall pollution level and make the polluter pay for it.

Key highlights:

- For personal vehicles, the tax would have to be paid at the time of mandatory renewal of registration certificate after 15 years.
- Currently, all commercial vehicles need to get a fitness certificate renewed every year after the first two years.
- The tax could be as high as 50 percent of road tax in most polluted cities like Delhi-NCR while there may be a differential rate for petrol and diesel vehicles.
- Diesel vehicles that are considered more polluting than petrol may attract a higher rate.
- Revenue collected from the Green Tax to be kept in a separate account and used for tackling pollution, and for states to set up state-of-art facilities for emission monitoring,

Vehicles like strong hybrids, electric vehicles, and those running on alternate fuels like CNG, ethanol, and LPG will be exempted. Public transport vehicles, such as city buses, will be paying lower Green Tax, meanwhile, vehicles used in farming, such as tractors, harvester, tiller, etc to be exempted entirely.

Source: Buisness standard

SARAL PENSION

Syllabus section: economy

Why in News?

The Insurance Regulatory and Development Authority of India (Irdai) has asked life insurers to offer a standard immediate annuity plan named Saral Pension. The regulator has already made standard plans mandatory in categories like term, health, and travel.

About Saral pension

- Anyone between 40 and 80 years can invest in Saral Pension which will be a Single Premium plan i.e. one will have to invest a lump sum amount to get a regular pension on a Monthly, Quarterly, Half-Yearly, or Yearly basis.
- The minimum amount of pension will be Rs. 1000 per Month, Rs. 3000 per Quarter, Rs. 6000 Per half-year and Rs. 12000 per annum. The amount invested is called Purchase Price in annuity place.
- There is no Maturity Benefit under the product. In the case of a single life annuity, 100% of the Purchase price is paid on death. In the case of a joint-life annuity, after the death of the annuitant:
- If the spouse is surviving, the spouse continues to receive the same amount of annuity for life till his/her death. Subsequently, on the death of the spouse, 100% Purchase Price shall be payable to nominee / legal heirs.
- However, if the spouse has pre-deceased the annuitant, then on the death of the annuitant, the Purchase price shall be payable to the nominee /legal heirs.

With a view to having uniformity across Insurers, and to make available a product by all Life Insurers that will broadly meet the needs of an average customer, it is felt necessary to introduce a standard, individual immediate annuity product, with simple features and standard terms and conditions.

Source: Financial express

WORLD ECONOMIC OUTLOOK

Syllabus Section: Economy

Why in news?

The International Monetary Fund, in its latest World Economic Outlook report, raised the global growth forecast for this year to 5.5 percent from 5.2 percent seen in October

Key highlights:

- The report highlights that India will witness the strongest growth among the main economies.
- India's economy will expand by 11.5 percent in 2021 as opposed to the 8.8 percent growth that was predicted in October 2020.
- However, for the year 2022, the growth has been predicted to be 6.8 percent.
- The economic growth of the world is projected at 4.2 percent in 2022.
- It further estimated that there will be a 3.5 percent contraction in global growth in 2020.
- The latest forecast reflect expectations of a vaccine-powered strengthening of activity later in the year and additional policy support in a few large economies.

Further, access to medical interventions, the effectiveness of policy support, exposure to cross-country spillovers, and structural characteristics entering the crisis could lead to significant variations in the strength of the recovery across countries

World Economic Outlook (WEO)

This report is prepared by the International Monetary Fund. It analyses key parts of the IMF's surveillance of economic developments and policies. The report is usually prepared twice a year.

Source: Buisness standard

THE GREAT RESET

Why in News?

The Great Reset is an initiative by the World Economic Forum. The plan explores how countries might recover from the economic damage caused by the coronavirus pandemic.

What is the theory?

- It has been conceptualized by the founder and executive chairman of the WEF, Klaus Schwab, and has evolved over the last few years.
- It is based on the assessment that the world economy is in deep trouble and the situation has been made a lot worse by many factors, including the pandemic's devastating effects on global society, the un-folding technological revolution, and the consequences of climate change.

- Schwab demands that "the world must act jointly and swiftly to revamp all aspects of our societies and economies, from education to social contracts and working conditions. Every country, from the United States to China, must participate, and every industry, from oil and gas to tech, must be transformed. In short, we need a 'Great Reset' of capitalism.
- The agenda of The Great Reset touches on many key issues facing the world, Some of them are:
- question of reforming capitalism: It is calling for "stakeholder capitalism" that looks beyond the traditional corporate focus on maximising profit for shareholders.
- focus on the deepening climate crisis
- growing difficulty of global cooperation that Davos wants to promote.

The Controversy Involved:

The right sees the WEF arguments about restructuring the global economy as a dangerous attempt to impose 'socialism' and dismantle the traditional society, or what remains of it.

NATIONAL BASELINE GEOSCIENCE DATA GENERATION PROGRAMMES (2020-2024)

Why in News?

To expedite exploration activities in the country, Geological Survey of India (GSI), has embarked upon an ambitious scheme to complete some major National level surveys by 2024: National Geochemical Mapping (NGCM), National Geophysical Mapping (NGPM), National Aero Geophysical Mapping Program (NAGMP).

NGCM

- It is an all-India programme to cover the entire surface area of the country by geochemical sampling.
- The NGCM work will generate distribution pattern of 62 elements (samples collected at 1km x 1km grid) for use in managing and developing natural resources; for application in environmental, agricultural, human health, other social concerns and to search for hidden mineral deposits.

NGPM:

- The Program have been systematically generating basic and derived maps of Bouguer (Gravity) Anomaly and IGRF corrected magnetic total field maps of the country by conducting ground gravity and magnetic surveys.
- The anomaly maps derived from the processed gravity and magnetic data provide all stakeholders a framework to design exploration strategies.

NAGMP:

First, of its kind project in the country, its objectives are to delineate concealed, deep-seated structure/ litho-units capable of hosting mineralization, delineate the extension of the existing mineralized zone, and understating shallow crustal architecture in the context of mineral occurrence.

Significance of these Programmes:

- The collation, assimilation, and integration of the data generated from the above projects and further interpretation will lead to the identification of more areas for mineral exploration in the country.
- The increased investment in mineral exploration will build a robust pipeline of prospective mineral blocks for auction.
- This will ensure the long-term viability and continuity of mining in the country taking India towards the cherished goal of 'Atmanirbhar Bharat'.
- The data generated through this mapping activity has helped to build up the knowledge database for National Geoscientific information, which helps in boosting mineral exploration activities, and other earth science-related socioeconomic activities and programs.

GSI has also initiated its flagship initiative of National Geoscience Data Repository (NGDR) for the collation of all the geoscience data of the country involving GSI, other national organizations with geoscience as a focused activity, all the state directorate of mines and geology, the academia engaged in research and development in the domain, the CPSEs engaged in the exploration and geoscientific pursuits, and private sector agencies working in the domain.

It aims at integrating the collected data by GSI and similar organizations to build a repository on the digital medium entailing multiple user access.

RAJASTHAN BECOMES THE 5TH STATE TO COMPLETE URBAN LOCAL BODIES (ULB) REFORMS

Syllabus Section: Polity and Governance

Why in News?

 Rajasthan has become the 5thState in the country to successfully undertake Urban Local Bodies (ULB) reforms stipulated by the Department of Expenditure, Ministry of Finance.

About the News:

- Rajasthan has joined four other States namely, Andhra Pradesh, Madhya Pradesh, Manipur and Telangana, who have completed ULB reforms.
- Rajasthan has thus become eligible for additional reform linked borrowing.
- The State has been granted permission by the Department of Expenditure to mobilize additional financial resources of Rs.2,731crore through Open Market Borrowings.
- The States get permission to raise additional funds equivalent to 0.25 percent of GSDP on completion of reforms in each sector. The four citizen-centric areas identified for reforms are:
 - o Implementation of One Nation One Ration Card System
 - o Ease of doing business reform
 - o Urban Local body/ utility reforms
 - o Power Sector reforms.

Significance:

- Reforms in ULBs and the urban utility reforms are aimed at financial strengthening of ULBs in the States and to enable them to provide better public health and sanitation services to citizens.
- Economically rejuvenated ULBs will also be able to create good civic infrastructure.

Source: PIB

INDIA- IEA MOU FOR GLOBAL ENERGY SECURITY

Syllabus section: international relations

Why in news?

India inked a strategic partnership agreement with the International Energy Agency (IEA) to strengthen cooperation in global energy security, stability, and sustainability.

Key highlights:

- This partnership will lead to an extensive exchange of knowledge and would be a stepping stone towards India becoming a full member of IEA.
- Through this agreement, the Indian government endeavors to take the necessary steps to encourage and promote strategic and technical cooperation in the energy sector in the identified areas.
- The IEA Secretariat will implement the cooperative activities in India.
- IEA will also facilitate the discussion between the IEA members and India in order to develop the strategic partnership.

International Energy Agency (IEA)

IEA is a Paris-based autonomous intergovernmental organization that was established in the year 1974 in the aftermath of the 1973 oil crisis. It was established in the framework of the Organisation for Economic Co-operation and Development (OECD).

Functions of IEA

- The IEA was established with the objective of responding to physical disruptions in the supply of oil apart from serving as an information source on statistics of the international oil market.
- It now also acts as a policy adviser to its member states.
- IEA also works with non-member states like China, India, and Russia.
- The agency focuses on the "3Es" of effectual energy policy namely energy security, economic development, and environmental protection.
- It also promotes alternate energy sources such as in renewable energy, multinational energy technology co-operation, and rational energy policies

Source: Buisness standard

UN REPORT ON AGEING DAMS

Syllabus section: Geography

Why in News?

United Nations have released its report titled 'Ageing water infrastructure: An emerging global risk' on the ageing of the dams in India.

Highlights:

 most of the 58,700 large dams worldwide were constructed between 1930 and 1970 with a design life of 50 to 100 years

- some thousand large dams in India will be around 50 years old in 2025.
- The report also notes that by 2050 most people on Earth will live downstream of the thousands of dams that were built in the 20th century.
- According to the report, the world is unlikely to witness another large dambuilding revolution as in the mid-20th century, but dams constructed then will inevitably be showing their age.

India

- 1,115+ large dams in India that will be roughly 50 years old in 2025
- 4,250+ large dams in India that will be 50+ years old in 2050
- 64 large dams in India that will be 150+ years old in 2050
- 3.5 million: the approximate number of people at risk if India's Mullaperiyar Dam, built 100+ years ago, were to fail. The dam, in a seismically active area, shows significant structural flaws and its management is a contentious issue between Kerala and the Tamil Nadu States

Ageing signs

Some of the signs of ageing include:

• Increase in the cases of dam failures,

- Increasing costs of dam repair and maintenance,
- Increase in the reservoir sedimentation, and
- Loss of functionality and effectiveness of the dams "strongly interconnected" manifestations.

Mullaperiyaru Dam

It is a masonry gravity dam on the Periyar River in Kerala. It is located 881 m above mean sea level. It stands on the Cardamom Hills of the Western Ghats in Idukki District of Kerala. The dam was constructed between 1887 and 1895 by John Pennycuick. The Periyar National Park is also located around the dam's reservoir. It is built at the confluence of Mullayar and Periyar rivers. The dam is located on the river Periyar in Kerala but is operated and maintained by Tamil Nadu.

ON NILE, A GRAND DAM DIVIDES AFRICAN NATIONS

WHY IN NEWS?

Ethiopia, Sudan and Egypt agreed on Sunday to resume negotiations to resolve their decade-long complex dispute over the Grand Renaissance Dam hydropower project in the Horn of Africa. The latest round of talks comes six weeks after Sudan had boycotted the ongoing negotiations.



Background:

- The building of the dam was initiated in 2011 on the Blue Nile tributary of the river that runs throughout one part of Ethiopia.
- The Nile is an essential water supply within the area and Egypt has constantly objected to the dam's building, saying it'll influence water circulation
- The dam's location on the Blue Nile tributary, could doubtlessly enable Ethiopia to realize management of the circulation of the river's waters. Egypt lies additional downstream and is anxious that Ethiopia's management over the water may end in decrease water ranges inside its personal borders.
- When Ethiopia had introduced in 2019 that it deliberate on producing energy utilizing two generators, Egypt had strongly objected. In addition, Egypt proposed a longer timeline for the venture over issues that the water degree of the Nile may dramatically drop because the reservoir fills with water within the preliminary levels.
- Sudan's location between Egypt up north and Ethiopia down south has brought about it to turn into an inadvertent celebration to this dispute. But that isn't all; Sudan too is anxious that if Ethiopia had been to realize management over the river, it could have an effect on the water ranges Sudan receives.

Why does Ethiopia need this dam?

- Ethiopia's aim is to save electrical energy for its inhabitants and to maintain and develop its rising manufacturing business.
- Addis Ababa anticipates that this dam will generate roughly 6,000 megawatts of electrical energy when it's accomplished, which may be distributed for the wants of its inhabitants and industries.
- Ethiopia could also be hoping to promote surplus electrical energy to neighboring nations like Kenya, Sudan, Eritrea and South Sudan, that additionally endure from electrical energy shortages, to generate some income.

Present Situation:

• Egypt and Sudan are involved in regards to the filling and the operation of the dam.

- Ethiopia continues to insist that the dam is required to fulfill the wants of its inhabitants and has mentioned that downstream water provides won't be adversely affected.
- Sudan believes that the dam will scale back flooding, however anxious in regards to the path ahead if the negotiations finish at a stalemate.

OFF-BUDGET BORROWINGS

Syllabus Section: Economy

Why in news?

This year, the focus of the budget will be on offbudget borrowings so as to reduce the Fiscal Deficit.

About:

- Off-budget borrowings are loans that are taken not by the Centre directly, but by another public institution which borrows on the directions of the central government. Such borrowings are used to fulfil the government's expenditure needs.
- But since the liability of the loan is not formally on the Centre, the loan is not included in the national fiscal deficit. This helps keep the country's fiscal deficit within acceptable limits.
- Such off-budget financing is not part of the calculation of the fiscal indicators despite fiscal implications.

How are off-budget borrowings raised?

- The government can ask an implementing agency to raise the required funds from the market through loans or by issuing bonds.
- In the Budget presentation for 2020-21, the government paid only half the amount budgeted for the food subsidy bill to the Food Corporation of India. The shortfall was met through a loan from the National Small Savings Fund.
- The borrowings can also be raised through the Public Sector Banks (PSBs) where the PSBs can be asked to fund off-budget expenses. For example, loans from PSBs were utilized for meeting the shortfall in releasing the fertilizer subsidy

Source: Indian Express

MANUFACTURED SAND

Syllabus section: science and tech

Why in news?

The Rajasthan government has brought a policy on manufactured sand (M-sand), giving industry status to the units producing it for construction work and reducing the dependence on bajri (riverbed sand).

About:

- The policy will enable the investors to set up M-sand units by utilizing the incentives offered by the State government.
- It will also help in environmental protection and generate faith among the public in the efficacy of M-sand for construction works.
- The policy would help create employment opportunities through new units and resolve the issue of huge quantities of waste generated in the mining areas.

M sand

- M-sand is a substitute of river sand for concrete construction.
- Manufactured sand is produced from hard granite stone by crushing.
- The crushed sand is of cubical shape with

- grounded edges, washed and graded to as a construction material.
- It can be dust free, the sizes of m-sand can be controlled easily so that it meets the required grading for the given construction.
- It is well graded in the required proportion.
- It does not contain organic and soluble compounds that affect the setting time and properties of cement, thus the required strength of concrete can be maintained.
- It does not have the presence of impurities such as clay, dust, and silt coatings.

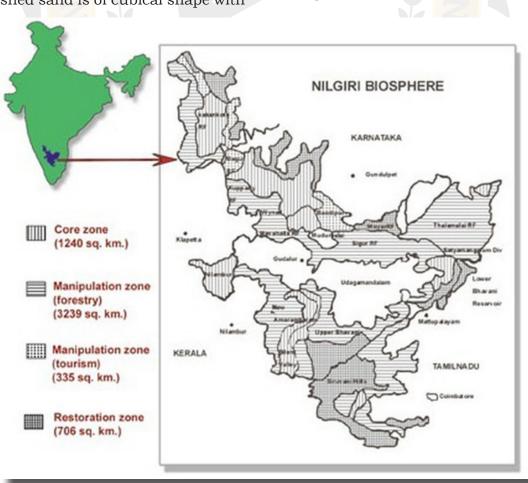
Source - The Hindu

SIGUR PLATEAU

Why in News?

• The Supreme Court-appointed conservationist Nandita Hazarika as Member of a Technical Committee constituted by it on October 14 last year to hear complaints by landowners against the action taken by the Nilgris Collector, which included "arbitrary variance in the acreage of the elephant corridor."

Background:



- On October 14, the top court upheld the Tamil Nadu government's authority to notify an 'elephant corridor' and protect the migratory path of the animals through the Nilgiri biosphere reserve.
- The reserve is the largest protected forest area in India, spanning across Tamil Nadu, Karnataka, and Kerala.
- A three-judge Bench led by CJI Bobde had said it was the State's duty to protect a "keystone species" such as elephants, immensely important to the environment.

Location:

- The corridor is situated in the ecologically fragile Sigur plateau, which connects the Western and the Eastern Ghats and sustains elephant populations and their genetic diversity.
- It has the Nilgiri Hills on its southwestern side and the Moyar River Valley on its north-eastern side.

Source: The Hindu

2021: YEAR OF INDO-FRENCH ALLIANCE TOWARDS A GREENER PLANET

Syllabus section: Environment and Ecology

Why in news?

Union Minister for Environment and French Minister for Ecological Transition launched the Indo-French Year of the Environment recently.

Objective: To strengthen Indo-French cooperation in sustainable development, increase the effectiveness of actions in favor of global environment protection and give them greater visibility.

Themes:

- (1) Environmental protection;
- (2) Climate change;
- (3) Biodiversity conservation;
- (4) Sustainable urban development;
- (5) Development of renewable energies and energy efficiency.

About:

• It is also a platform for engaging in discussions on critical areas of collaboration relating to the environment and allied areas.

- From the Indian side, it will be coordinated by the Ministry of Environment, Forest and Climate Change (MoEFCC) along with the Ministry of External Affairs, Ministry of Housing and Urban Affairs, Ministry of New and Renewable Energy, and other concerned Ministries/Departments/Organisations.
- A joint screening committee will also be set up to finalize the calendar of the events for the Indo-French Year of the Environment.

Source: PIB

FRAMEWORK FOR TELEMEDICINE USE IN INDIA

Why In News?

Recently, the Union Health Minister released the Framework on use of telemedicine for cancer, diabetes, heart diseases and stroke.

What is a Telemedicine?

Telemedicine includes the use of communication networks and digital solutions in providing health services. It allows collaboration between providers and patients across spatial boundaries, for activities linked to health promotion, prevention, diagnosis, timely referral, management and follow-up of patients

What is Telehealth?

The delivery and facilitation of health and healthrelated services, including medical care, provider and patient education, health information services, and self-care via telecommunications and digital communication technologies

Evolution of telemedicine in India

E-health solutions, which include telemedicine, are recognized as cost-effective tools to increase access to health care and to improve patient outcomes. Telemedicine in India was started with the support of the Indian Space Research Organisation (ISRO) in 2001. Multiple telemedicine projects have been initiated in different states of the country in collaboration with Ministry of Electronics and Information Technology (MEITY) and Ministry of Health and Family Welfare (MoHFW)

Telemedicine guidelines by the Ministry of Health and Family Welfare

MoHFW, Government of India released the Telemedicine Practice Guidelines' in March 2020 to give practical inputs to the doctors in realizing the full potential of the telemedicine for better healthcare delivery in the aftermath of the COVID-19 pandemic. The guidelines are focussed on the Registered Medical Practitioner (RMP) defined as a person who is enrolled in the State Medical Register or the Indian Medical Register under the Indian Medical Council (IMC) Act 195

Rationale of use of telemedicine

Patients suffering from NCDs need long term care and support. Shortage of health workers and inadequate access to hospitals and medicines are essential barriers for optimizing care.

Leveraging technologies for NCD care can have a positive impact on NCD control strategies.

Telemedicine has a role in the whole spectrum of NCD care.

It has a role in promoting healthy behaviours, prevention of risk factors, early detection of diseases, timely initiation of treatment, monitoring and follow-up support, rehabilitation and palliation.

Telemedicine can increase access to healthcare and help in maintaining the continuum of care

NATIONAL MARINE TURTLE ACTION PLAN

Syllabus section: Environment and Ecology

Why in News?

The Ministry of Environment Forest and Climate Change (MoEF&CC) has released 'Marine Mega Fauna Stranding Guidelines' and 'National Marine Turtle Action Plan' recently to create a conservation paradigm for the marine mega fauna and marine turtles.

About:

- The documents were released containing the ways and means to promote the intersectoral action for conservation.
- The documents also suggest for improving the coordination amongst the government, civil society and all relevant stakeholders so as to respond to the cases of stranding, injury or mortality of marine mammals.
- It also suggests coordinated efforts for the conservation of marine turtles.
- The documents contain the actions that are required to handle the stranded animals on shore.

- It will also look after the stranded or entangled animals in the sea or on a boat.
- It comprises of the management actions for improved coordination, rehabilitation of degraded habitats, reducing threats to marine species habitats, advance scientific research, enhancing people's participation and exchange of information on marine mammals & marine turtles.

Status of turtles in India

• Five species of Indian turtles along with their IUCN status are as follows:

Olive Ridley - Vulnerable

Green turtle - Endangered

Loggerhead - Vulnerable

Hawksbill - Critically Endangered

Leather back - Vulnerable

- They are protected in Indian Wildlife Protection Act of 1972, under Schedule I.
- They are also protected under the Biodiversity Conservation and Ganga Rejuvenation programme

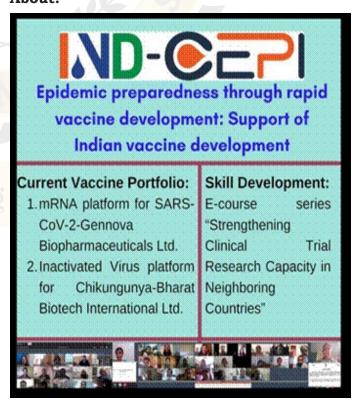
Source: News on Air

Ind-CEPI MISSION

Why in News?

The Department of Biotechnology, Ministry of Science and Technology, Government of India is supporting the implementation of the Ind-CEPI Mission.

About:



- Ind-CEPI MISSION is an India centric collaborative mission of DBT aligned to the global initiatives of CEPI (Coalition of Epidemic Preparedness Innovations).
- DBT is supporting the implementation of the Ind-CEPIs mission "Epidemic preparedness through rapid vaccine development: Support of Indian vaccine development is aligned with the global initiative of the Coalition for Epidemic Preparedness Innovations (CEPI)", at BIRAC, PSU of DBT.
- Ind-CEPI Mission initiated the eCourse Series entitled "Strengthening Clinical Trial Research Capacity in Neighbouring Countries" primarily aimed towards skill development, capacity building, and regional networking and coordination.
- A total of 4-Program 10 sessions series were conducted via an online platform with a total engagement of more than 750 participants from neighboring countries like Afghanistan, Bangladesh, Bhutan, Maldives, Mauritius, Nepal, and Srilanka.

Source: PIB

BUYER SELLER MEET(BSM) FOR CHILI AND TURMERIC

Why in News?

• 14th BSM conducted by Spices Board in FY 2020-21, covering Chili and Turmeric.

More About the News:

- India is the world's largest exporter of chili and turmeric, the exports of which have recorded steady progress, over the years.
- During the pandemic situation, the export of turmeric from India, a spice with immunity-boosting properties, has recorded an impressive growth of 42 percent in terms of volume during the first half of 2020-21.
- Spices Board stated that the export quantity of chili has almost doubled in the last decade.

What is Spices Park?

A Spices Park can be defined as an industrial park for processing and value addition of Spices and Spice products which offers the processing facilities at par with the international standards.

The Regional crop specific Spices Park is a well-conceived approach to have an integrated operation for cultivation, post-harvesting, processing for value addition, packaging, storage, and exports of spices and spice products by meeting the quality specifications of the consuming countries.

Source: PIB

MINOR FOREST PRODUCE ITEMS UNDER THE MECHANISM FOR MARKETING OF MINOR FOREST PRODUCE

Why in News?

• Inclusion of 14 New Minor Forest produces items under the Mechanism for Marketing of Minor Forest Produce through Minimum Support Price scheme.

About:

- The scheme is implemented by TRIFED in association with State Government Agencies across 21 states of the country,
- The newly included items are. Tasar Coccoon, Cashew Kernel, Elephant Apple Dry, Bamboo Shoot, Malkangani Seed. Mahul Leaves, Nagode, Gokhru, Pipla/Uchithi, Tree Moss, Shringraj, Wild Mushroom dry, etc.

About the Scheme:

- The Central government had introduced a minimum support price (MSP) for a select list of MFP through "Mechanism for Marketing of Minor Forest Produce through Minimum Support price and development of Value Chain of MFP" Scheme in 2011
- The scheme is designed as a social safety net for the improvement of the livelihood of MFP gatherers by providing them a fair price for the MFPs they collect.
- Under the scheme "Mechanism for Marketing of Minor Forest Produce through Minimum Support Price and development of Value chain for MFP" Minimum Support Price (MSP) for Minor Forest Produce (MFP) has been fixed for select MFP.
 - The Van Dhan tribal start-ups, also a component of the same scheme, further complements MSP beautifully and has emerged as a source of employment generation for tribal gatherers and forest dwellers, and the home-bound tribal artisans.

Source: PIB

START-UP INDIA SEED FUND SCHEME

Syllabus Section: Economy

Why in News?

The government has announced the launch of Start-up India Seed Fund Scheme.

About:

- The scheme was launched with the aim of providing financial assistance to start-ups for the product trials, market-entry, proof of concept, prototype development and commercialization.
- The funds under the Start-up India Seed Fund Scheme will be disbursed through the selected incubators across the country.
- The official notification on the launch of SISFS was released by the Department for Promotion of Industry and Internal Trade (DPIIT).
- The funds under SISFS can be availed by a start-up that is incorporated not before 2 years ago at the time of application.
- The start-up seeking funds under the scheme must have a suitable commercially viable business idea and it should use technology in its core product or service.
- The notification highlights that preference will be given to start-ups that create innovative solutions in sectors such as waste management, social impact, healthcare, textiles, agriculture, water management, defence, food processing, education, energy, railways, financial inclusion, mobility, space, oil, gas, and biotechnology.
- Start-ups should not have received monetary support of more than Rs 10 lakh under any other central or state government scheme.
- It should have at least 51% shareholding by Indian promoters at the time of application to the incubators in accordance with the Companies Act, 2013 and SEBI (ICDR) Regulations, 2018.

Conditions for Incubators

As per the eligibility conditions, the incubators must be legal entities. It must be operational for at least 2 years on the date of application to the scheme. Further, it should have at least five start-ups undergoing incubation physically and should have a seating capacity for at least 25 individuals. They should have a full-time CEO and a capable team.

Source: The Hindu

STARS PROJECT

Syllabus section: Governance

Why in News?

Ministry of Education, Department of Economic Affairs (DEA), and World Bank have signed an agreement for the financial support worth Rs 5718 crore towards the implementation of the Strengthening Teaching-Learning and Results for States (STARS) project.

About:

- Union Cabinet had approved the proposal of the STARS project.
- The project will cover six states including Himachal Pradesh, Rajasthan, Maharashtra, Madhya Pradesh, Kerala, and Odisha.
- The identified states will be supported for various interventions for improving the quality of education.
- The project aims at improving the overall monitoring and measurement activities in the Indian school education system through interventions in selected states.
- STARS will draw on the existing structure under Samagra Shiksha. At the state level, the project will be implemented through the integrated state Implementation Society (SIS) for Samagra Shiksha.
- The proposed World Bank support under STARS is primarily in the form of a results-based financing instrument called Program for Results (PforR). This will ensure major reforms at the state level through a set of disbursement-linked indicators (DLIs).
- A State Incentive Grant (SIG) will be used to encourage states to meet desired project outcomes.

Significance:

STARS project will be instrumental in the implementation of various recommendations of National Education Policy 2020 that is strengthening early childhood education and foundational learning, improving learning assessment system, ICT-enabled approaches in education, teachers development and vocational education, etc

Source: Indian Express

Asia-Pacific Personalized Health Index Syllabus section: society

Why in News?

India ranked 10th out of 11 Asia Pacific countries in a newly-launched health index to measure the progress towards personalized healthcare.

About:

- The Economist Intelligence Unit (EIU) report "Asia-Pacific Personalised Health Index" measures the readiness of 11 health systems across the region-Australia, China, Japan, India, Indonesia, Malaysia, Singapore, South Korea, Taiwan, Thailand, and New Zealand--in adopting personalized healthcare, enabling the right care to be tailored to the right person at the right time.
- The 'Personalised Health Index measures performance against 27 different indicators of personalized health across four categories called 'Vital Signs''.
- These include Policy Context, Health

Information, Personalised Technologies, and Health Services.

Key Findings of the report

- Report highlights that Singapore was the best performer among all the 11 health systems.
- Taiwan bagged the second position while Japan and Australia stand at the third and the fourth position of the index respectively.
- India was ranked at 10th position out of 11 health systems.
- Indonesia was ranked last at 11th.

Economist Intelligence Unit (EIU)

It is the research and analysis division of Economist Group. It provides forecasting and advisory services by doing research and analysis. It provides-five-year country economic forecasts, monthly country reports, country risk service reports, and industry reports. It has several offices across the world including two offices in China and one in Hong Kong.

Source: outlook