NEWS IMPULSE

NOVEMBER 2020

EDEN IAS - Educational Development & Enrichment Network

THE 13th URBAN MOBILITY INDIA (UMI) CONFERENCE

GS PAPER – 3

Context:- The 13th Urban Mobility India (UMI) Conference will be organized by the Ministry of Housing and Urban Affairs on November 9, 2020.

Highlights

- Theme for conference: "Emerging Trends in Urban Mobility".

- The event would focus on the innovative measures taken at national and international level so as to address the challenges posed by Covid-19 pandemic.

- It also seeks to provide accessible and convenient transport to the people.

- The Ministry organizes an annual international Conference-cum-Exhibition on Urban Mobility India which is also known as UMI, under the National Urban Transport Policy (NUTP), 2006.

- The objective of the conference is to provide information about the latest and best urban transport practices being followed globally to the officials of the cities.

- About the National urban transport policy (NUTP) 2006:

- The Ministry of Housing and Urban Affairs, Government of India had issued the National Urban Transport Policy (NUTP), 2006.

- The main objective of the policy is to ensure safe, affordable, comfortable, quick, reliable and sustainable access to jobs, education, recreation and such other needs within the cities of the residents.

The objective of the policy will be achieved through -

- By incorporating urban transportation at the urban planning stage.

- By encouraging integrated land use and transport planning in all cities in order to minimize the travel distances.
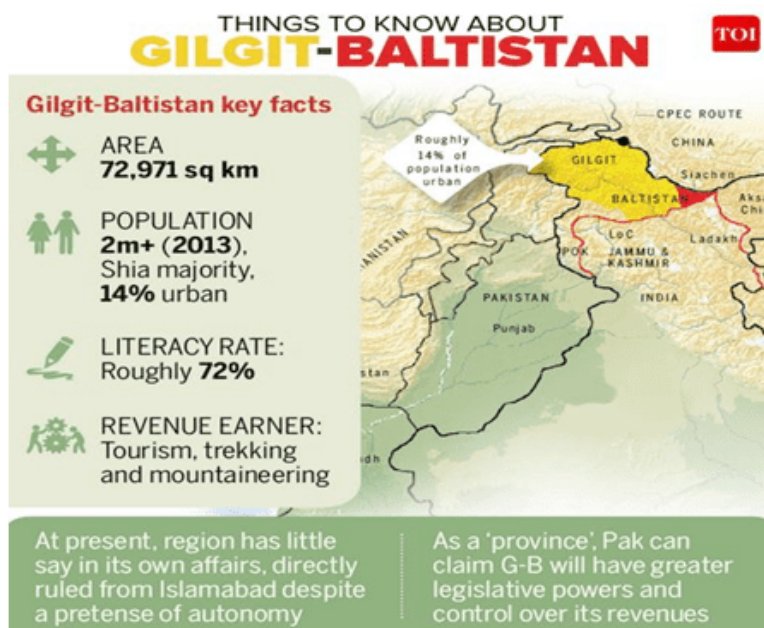
- By providing the access to livelihoods and education especially to the marginal segments of the urban population.

- By improving access of business to markets and other factors of production.

- By bringing a more equitable allocation of road space with people, rather than vehicles.

Source – The hindu

GILGIT BALTISTAN REGION

GS PAPER - 2

Context:- Pakistan has recently announced to give it "Provisional Provincial Status". After finalization it will 6th state of Pakistan.

THINGS TO KNOW ABOUT
GILGIT-BALTISTAN

Gilgit-Baltistan key facts

- **AREA** 72,971 sq km
- **POPULATION** 2m+ (2013), Shia majority, **14%** urban
- **LITERACY RATE:** Roughly **72%**
- **REVENUE EARNER:** Tourism, trekking and mountaineering

At present, region has little say in its own affairs, directly ruled from Islamabad despite a pretense of autonomy

As a 'province', Pak can claim G-B will have greater legislative powers and control over its revenues

Why separate status?

On November 1 1947, after J&K ruler Hari Singh had signed the Instrument of Accession with India, and the Indian Army had landed in the Valley to drive out tribal invaders from Pakistan, there was a rebellion against Hari Singh in Gilgit.

Gilgit had been leased to the British by Hari Singh in 1935. The British returned it in August 1947.

Hari Singh sent his representative, Brigadier Ghansar Singh, as Governor, and Major William AlexanderBrown to take charge of the Gilgit Scouts.

After taking protective custody of the Governor on November 1, Brown would raise the Pakistani flag at his headquarters. Later the Gilgit Scouts managed to bring Baltistan under their control.

Pakistan did not accept G-B's accession although it took administrative control of the territory.

After India went to the UN and a series of resolutions were passedPakistan believed that neither G-B nor PoK should be annexed to Pakistan, as this could undermine the international case for a plebiscite in Kashmir.

It also reckons that in the event a plebiscite ever takes place in Kashmir, votes in G-B will be important too.This is why it is only being called "provisional" provincial status.

Current Status

Pakistan, links G-B's fate to that of Kashmir, but its administrative arrangements are different from those in PoK.While PoK has its own Constitution that sets out its powers and their limits vis-à-vis Pakistan, G-B has been ruled mostly by executive fiat.

Until 2009, the region was simply called Northern Areas. It got its present name only with the Gilgit-Baltistan (Empowerment and Self-Governance) Order, 2009, which replaced the Northern Areas Legislative Council with the Legislative Assembly

In 2018, the then PML(N) government passed an order centralising even the limited powers granted to the Assembly, a move linked to the need for greater control over land and other resources for the infrastructure projects then being planned under CPEC. The order was challenged, and in 2019, the Pakistan Supreme Court repealed it and asked the Imran Khan government to replace it with governance reforms. This was not done. Meanwhile, the Supreme Court extended it jurisdiction to G-B, and made arrangements for a caretaker government until the next Legislative Assembly elections.

Conclusion

The plan to grant G-B provincial status gathered speed over the last one year. While some commentary links it to CPEC and Chinese interest, others in Pakistan say the push might have well come from India's reassertion of its claims after the August 5, 2019 reorgansiation of Jammu & Kashmir.

Source: Indian Express

GS PAPER - 2

Context:- Bangladesh and US launch joint naval exercise CARAT Bangladesh 2020

About

- According to a press release issued by the US embassy in Dhaka on Wednesday, the exercise demonstrates U.S.'s continuing commitment to work with the Bangladesh military to address shared maritime security concerns in the region and strengthen partnership to ensure a free and open Indo-Pacific region.

- Historically, the CARAT exercises involve people to people interactions and a variety of professional exchanges. These will take place online this year due to the COVID 19 pandemic.

- The sea-phase of the exercise will take place in the Bay of Bengal with ships from both countries. The events are designed to enhance interoperability between the two navies. U.S. and Bangladesh will work through coordinated deployment of surface ships, to include tactical maneuvers among other activities.

- The press release asserted that CARAT 2020 underscores the shared vision of US and Bangladesh for a free, open, inclusive, peaceful and secure Indo-Pacific region.

Source - PIB

GS PAPER – 3

Context:- Recently enhanced PINAKA rocket, developed by Defence Research and Development Organization (DRDO) has been successfully flight tested from Integrated Test Range, Chandipur off the coast of Odisha .

EDEN IAS - Educational Development & Enrichment Network

About

- The design and development has been carried out by Pune based DRDO laboratories, namely Armament Research and Development Establishment, ARDE and High Energy Materials Research Laboratory, HEMRL

- All the flight articles were tracked by Range instruments such as telemetry, radar and Electro Optical Tracking Systems which confirmed the flight performance

- Multi-barrel rocket system (MBRL) system, can fire a salvo of 12 rockets over a period of 44 seconds

- The launchers have to 'shoot and scoot' to ensure they themselves do not become the targets, especially due to its back blast.

- The Mark-I version of Pinaka has a range of around 40 kilometres and the Mark-II version can fire up to 75 kilometres.

- Guided missile system by integrating it with the navigation, control and guidance system to improve the end accuracy and increase the range.

- The navigation system of the missile is linked with the Indian Regional Navigation Satellite System.

With its upgrades, the Pinaka Mark-II can be a key element in the "network centric warfare". The rocket system can operate various modes and can carry different types of warheads

SOURCE - PIB

CONTEMT OF COURT

GS PAPER 2

CONTEXT:- Attorney-General K.K. Venugopal declined consent to initiate contempt proceedings against Andhra Pradesh Chief Minister Jagan Mohan Reddy and his Principal Adviser Ajeya Kallam.

What is contempt of court ?

Contempt of court is an offence of disobedience or disrespect towards a court of law and its officers in the form of conduct that opposes or challenges the authority, justice and dignity of the court. Contempt of Court is a constitutional power vested with the Supreme Court of India.

Article 129 - "The Supreme Court of India shall be a court of record and shall have all the powers of such a court including the power to punish for contempt of itself". Superior courts of record have the powers to punish contempts relating to the judges of those courts and the proceedings therein. The principal aim of the jurisdiction is to protect the dignity of the court and the due administration of justice.

TYPES OF CONTEMPT

Contempt can be civil as well as criminal in nature.

- The act defines **civil contempt** as "willful disobedience to any judgment, decree, direction, order, writ or other processes of a court or wilful breach of an undertaking given to a court"

- **Criminal contempt** as "the publication (whether by words, spoken or written, or by signs, or by visible representation, or otherwise) of any matter or the doing of any other act whatsoever which

SAFFRON BOWL OF INDIA EXTENDS TO THE NORTH-EAST

GS PAPER – 1 and 3

Context:- Plants from seeds transported from Kashmir to Sikkim and acclimatized there are now flowering in Yangyang in the Southern part of the North-East state.

Saffron Production in India

- Saffron production has long been restricted to a limited geographical area in the Union territory of Jammu & Kashmir. Pampore region, in India, commonly known as Saffron bowl of Kashmir, it is the main contributor to saffron production, followed by Budgam, Srinagar, and Kishtiwar districts.

- Saffron has traditionally been associated with the famous Kashmiri cuisine.

- It's its medicinal values were considered as part of the rich cultural heritage of Kashmir.

- As saffron growing was confined to very specific areas in Kashmir, its production remained limited.

- Though the National Mission on Saffron focused on several measures to improve its farming, the measures were still limited to the specified areas of Kashmir.

- North East Centre For Technology Application and Reach (NECTAR), an autonomous body under the Department of Science & Technology, Government of India supported a pilot project to explore the feasibility of growing saffron in North East region of India, with the same quality and higher quantity.

Source – The Hindu

GO ELECTRIC CAMPAIGN

GS PAPER – 3

CONTEXT:- In a major push to electric mobility sector, the government has decided to establish 400 charging stations across the State in the first phase. The government plans to attract investments to the sector by stepping up efforts to set up electric vehicle infrastructure, and the move to establish the charging stations is a step in that direction.

Key highlights

- The plan is to provide electric two-wheelers to the ward and village secretariat staff

- Establish testing facility for auto components ,Vehicles and intelligence testing tracks for e-vehicles

- The campaign is launched by the Bureau of Energy Efficiency, in coordination with the APSECM and the Non-Conventional and Renewable Energy Development Corporation of Andhra Pradesh (NREDCAP), the State nodal agency for establishment of the charging stations.

- Charging infrastructure would be established at every 25 km along the national highways, and moving forward, more charging stations would be installed.

BENEFITS

- "Installation of charging stations will boost the confidence of the users of electric vehicles, and this will also encourage companies to launch new brands of e-vehicles.

- This would help the State take the lead in the emerging e-vehicle sector, increase energy security, control air pollution, and improve air quality.

- 460 chargers would be installed in 83 locations across the State under the Union government-sponsored Faster Adoption and Manufacturing of (Hybrid) Electric Vehicles (FAME-II) scheme.

SOURCE – THE HINDU

PLASMA THERAPY

GS PAPER - 3

Why in news ?

- Recently published findings on convalescent plasma therapy on Covid-19 patients have triggered a debate over its efficacy.

- After the country's largest such trial, known by the acronym PLACID, found that convalescent plasma was ineffective in arresting Covid-19, the Indian Council of Medical Research (ICMR) has been considering dropping this option from the national guidelines

What is Plasma ?

- Plasma is the liquid part of the blood. Plasma is the often forgotten part of blood. White blood cells, red blood cells, and platelets are important to body function. But plasma also plays a key role. This fluid carries the blood components throughout the body Convalescent plasma, extracted from the blood of patients recovering from an infection, is a source of antibodies against the infection.

- The Plasma therapy involves using their plasma to help others recover. For Covid-19, this has been one of the treatment options. The donor would have to be a documented case of Covid-19 and healthy for 28 days since the last symptoms.

EDEN IAS - Educational Development & Enrichment Network

RADIO BURST IN MILKY WAY

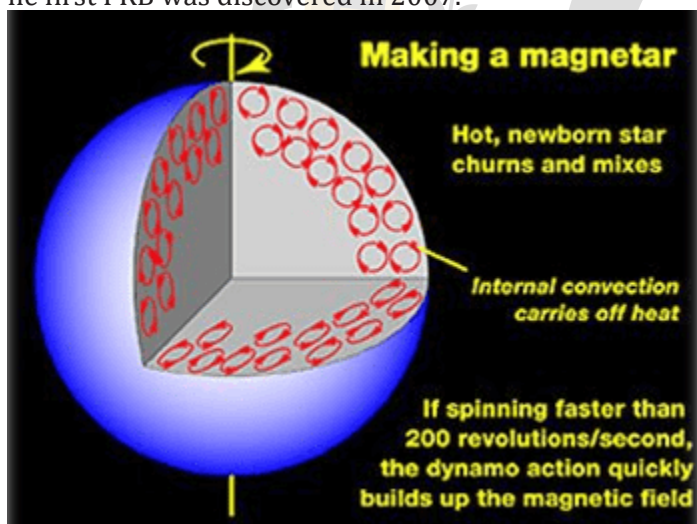**What is a radio burst, spotted by NASA for the first time in Milky Way?**

Why in news?

NASA has observed in this April, a mix of X-ray and radio signals never observed before in the Milky Way. Significantly, the flare-up it observed included the first fast radio burst (FRB) seen within the galaxy.

What is fast Radio Burst?

FRBs are bright bursts of radio waves (radio waves can be produced by astronomical objects with changing magnetic fields) whose durations lie in the millisecond-scale, because of which it is difficult to detect them and determine their position in the sky.

he first FRB was discovered in 2007.

What is the origin of the FRB detected in April?

The source of the FRB detected in April in the Milky Way is a very powerful magnetic neutron star, referred to as a magnetar, called SGR 1935+2154 or SGR 1935, which is located in the constellation Vulpecula and is estimated to be between 14,000-41,000 light-years away.

The FRB was part of one of **the magnetar's** most prolific flare-ups, with the X-ray bursts lasting less than a second. The radio burst, on the other hand, lasted for a thousandth of a second and was thousands of times brighter than any other radio emissions from magnetars seen in the Milky Way previously. It is possible that the FRB-as-sociated burst was exceptional because it likely occurred at or close to the magnetar's magnetic pole.

Neutron Star:
It is formed when the core of a massive star undergoesgravitational collapse when it reaches the end of its life
This results in the matter being so tightly packed that even a sugar-cube sized amount of material taken from such a star weighs more than 1 billion tons

What is a magnetar?

As per NASA, a magnetar is a neutron star, "the crushed, city-size remains of a star many times more massive than our Sun." The magnetic field of such a star is very powerful, which can be over 10 trillion times stronger than a refrigerator magnet and up to a thousand times stronger than a typical neutron star's.

Magnetars are a subclass of these neutrons and occasionally release flares with more energy in a fraction of a second than the Sun is capable of emitting in tens of thousands of years

TRIPURA HAS ISSUED WARNING AGAINST THE HUNTING OF AMUR FALCONS

Context:- As the winter has onset, migratory birds including the Amur falcons are being observed around the lakes and water bodies in massive numbers. But, despite several restrictions, many birds are poached yearly. In that line, the State of Tripura has issued warning against the hunting of Amur Falcons.

Highlights

- The Forest division has issued an order so as to tell the general public that the migratory birds along with the Amur falcons are lined below the Wildlife Protection Act,1972.

- The order was issued in the light of hunting of the number of Amur falcons in the Mon district.

- Nagaland had also notified the order against the wasting of the birds.

- It stated hunting, trapping, killing and promoting of the hen might result in three years of imprisonment and a high-quality of ₹25,000.

About Amur falcons

Amur falcons are the longest travelling raptors of the World. They start travelling as the winters onset. The raptors breed in southeastern Siberia and northern China and fly 1000's of miles to India and then over the Indian Ocean to southern Africa before making their return journey to Mongolia and Siberia. In total, the birds travel a distance of 22,000-kilometres which is one of the longest amongst all avian species. The birds have got their name from the Amur River. The Amur River forms the border between Russia and China.

Falcon Sites in India

These migratory birds stop over the Doyang Lake in Nagaland during their annual migration. Thus, Nagaland is also called as the Falcon Capital of the World.

IUCN status

The birds have been given the "least concern" status under the International Union for Conservation of Nature (IUCN) Red List. The species has been protected under the Indian Wildlife Protection Act, 1972 and the Convention on Migratory Species.

ISRO TO LAUNCH ALL-WEATHER EARTH OBSERVATION SATELLITE

GS PAPER 2, 3

CONTEXT:- India's latest all-weather earth observation satellite EOS-01 will be launched by the Indian Space Research Organisation (ISRO), using the workhorse rocket PSLV-C49.

ABOUT

- The earth observation satellite EOS-01 is equipped with the synthetic aperture radar that has an enviable resolution

- The satellite is to work along with RISAT-2B and RISAT-2BR1.

- With EOS-01, ISRO is moving to a new naming system for its earth observation satellites which till now have been named thematically, according to the purpose they are meant for

- It can produce high-quality images in all conditions and at all times.

Application

- Depending on the wavelength of the electromagnetic radiation used by the radar, different properties on land can be captured in the image.

- For example, a low wavelength signal can capture tree cover or vegetation, while a higher wavelength signal can penetrate even dense tree cover to look at the contours of land beneath

- According to ISRO, EOS-01 is intended for applications in agriculture, forestry and disaster management support. The radar images are also considered to be immensely useful for military requirements.

NATIONAL PHARMACEUTICAL PRICING AUTHORITY (NPPA)

GS PAPER – 3

CONTEXT:- NPPA plays crucial role in making Cancer Drugs affordable ,Following NPPA's price rationalisation initiated in February 2019, 526 brands of 42 anti-cancer drugs showed price reduction up to 90% , Saving of about 1000 crore annually to Cancer Patients

ABOUT NPPA

- NPPA regulates the prices of all Drugs as per the Drug Price Control Order (DPCO) 2013.

- It fixes the Ceiling Price of scheduled formulations as per the list of medicines specified in the National List of Essential Medicines (NLEM) which are included in the First Schedule of Drug Pricing Control Order (DPCO), 2013

- By regulating prices of Scheduled Drugs, NPPA roughly covers only 16-17% of the Pharma sector universe.

- First Schedule of DPCO, 2013 also includes select drugs used for the treatment of cancer.

EDEN IAS - Educational Development & Enrichment Network

- However, there has been a long standing felt need to further regulate the Non Scheduled segment also where high markups have led to arbitrary pricing practices.

Need for Price Regulation

The financial burden associated with cancer can force patients and households to acute misery, destitution, and even insolvency. Therefore cancer drugs need to be affordable so that whenever required the treatment can be provided at the earliest in the early stages when the cancer is curable. Availability and affordability of cancer drugs will give impetus to treatment outcomes bringing down the cost of treatment.

Source - PIB

SOFTWARE TECHNOLOGY PARKS OF INDIA (STPI)

GS PAPER – 3

CONTEXT:- The Software Technology Parks of India (STPI) is investing up to ₹400 crore in setting up office and connectivity infrastructure across several cities, offering small technology firms a 'plug-and-play' facility

ABOUT

- Software Technology Parks of India was set up in 1991 as an autonomous society under the Ministry of Electronics and Information Technology (MeitY).

- STPI's main objective has been the promotion of software exports from the country.

- STPI acts as 'single-window in providing services to the software exporters.

Expanding in - Darbhanga, Bhagalpur, Deoghar, Koraput, Kohima, Thiruvananthapuram and Kochi

Role of STPI

- The services rendered by STPI for the software exporting community have been statutory services, data communications services, incubation facilities, training and value added services.

- STPI has played a key developmental role in the promotion of software exports with a special focus on SMEs and startup units.

- STPI has been implementing the Software Technology Park (STP) scheme and the Electronics Hardware Technology Park (EHTP) scheme for the promotion of IT/ITES industry.

SOURCE – THE HINDU

HURRICANE ETA

GS PAPER - 1

CONTEXT:- The death toll from the calamitous storm Eta in Central America leapt on Friday as the Guatemalan military reached a remote mountain village where torrential rains caused mudslides that killed an estimated 100 people.

CATASTROPHIC FLOODING'

- One of the fiercest storms to hit Central America in years, Eta on Friday dumped more torrential rain across swathes of Central America and the U.S. National Hurricane Center (NHC) warned "catastrophic flooding" in the region would continue.

- Eta has wrought chaos since plowing into Nicaragua as a Category 4 hurricane on Tuesday with winds of 150 miles per hour (241 kph).

- It weakened to a tropical depression inland but unleashed torrents of rain on regions of Honduras and Guatemala.

REGIONAL IMPACT

- High winds and heavy rain have damaged thousands of homes in Nicaragua, Honduras, Guatemala and Costa Rica, forcing people to take cover in shelters.

- Flash flooding was also possible across Jamaica, southeast Mexico, the Cayman Islands and Cuba.

SOURCE – INDIAN EXPRESS

EDEN IAS - Educational Development & Enrichment Network

AIM–SIRIUS INNOVATION PROGRAMME 3.0

GS PAPER – 3

CONTEXT:- Atal Innovation Mission (AIM) and Sirius, Russia, launched 'AIM–Sirius Innovation Programme 3.0'– a 14-day virtual programme for Indian and Russian schoolchildren

Highlights Of The Programme

- The first Indo-Russian bilateral youth innovation initiative

- The AIM–Sirius programme seeks to develop technological solutions (both web- and mobile-based) for the two countries.

- Over a two-week programme, , 48 students and 16 educators and mentors will create 8 virtual products and mobile applications addressing global challenges–– across a range of areas such as culture, distance education, applied cognitive science, health and well-being, sports, fitness, and games training, chemistry, artificial intelligence, and digital financial assets––in the wake of the covid-19 pandemic.

Benefits of the programme

- It will foster collaboration and innovations in science, technology and design projects.

- Innovations developed by the student teams will leverage 21st-century technologies such as app development, artificial intelligence, blockchain, machine learning, data analytics and visualization, UI/UX, virtual reality, augmented reality, gamification, 3D design, and rapid prototyping, among others.

It is impossible to imagine modern science without international cooperation. Discoveries are often made by teams of scientists speaking different languages, but united by one task. Sirius' international programmes help create such opportunities.

Source - PIB

TARBALLS

GS PAPER- 1

CONTEXT:- Nearly 28 per cent of particles collected from the air samples from a research station in the Himalaya-Tibetan Plateau were tarballs, a recent study has found.

What are Tarballs ?

- Tarballs are small light-absorbing, carbonaceous particles formed due to burning of biomass or fossil fuels that deposit on snow and ice.

- The percentage of the tarballs increased on days of higher levels of pollution and could contribute to hastening of glacial melt and global warming,

- Tarballs are formed from brown carbon, emitted during the burning of fossil fuels

What does data reveals ?

The data revealed that a dense array of active fire spots — corresponding to large-scale wheat-residue burning on the Indo-Gangetic Plain — occurred along the pathways of air masses that reached the Himalayan research station during sampling.The black carbon from the Indo-Gangetic Plain can reach the Himalaya region and influence glacial melting and climatic change.

Conclusion

The researchers concluded that tarballs from long-range transport can be an important factor in the climatic effect and would correspond to a substantial influence on glacial melting in the Himalaya region.They suggested future climate models to consider the long-range transport of tarballs to the Himalayas to arrest climate change developments.

Source – Down to Earth

EDEN IAS - Educational Development & Enrichment Network

ONE RANK ONE PENSION SCHEME

GS PAPER – 2

CONTEXT:- The central government has disbursed more than Rs 42,700 crore to 20.6 lakh retired defence personnel under the One Rank One Pension (OROP) scheme, which was notified five years ago, the Defence Ministry .

About the scheme

The One Rank One Pension scheme is aimed at ensuring uniform pensions for veterans retiring in the same rank with the same length of service irrespective of when they retire. One Rank One Pension scheme for armed forces veterans was a historic step to ensure the well-being of our soldiers, as he greeted them on the fifth anniversary of his government's decision to implement OROP

Advantages

- One rank one pension benefit many retired soldiers and to wives of martyred.

- Equal payment issued to soldiers irrespective of their retirement date. Earlier if a sepoy retired in 1996 was receiving 82% lower pension than the sepoy who retired in 2006.

- It has created equity among the pensions of military personnel to that of civilian.

Disadvantages

- The total cost of one rank one pension had put enormous pressure on the government treasury.

- Since the pension is on the basis of rank, higher rank will be paid higher pension than the other ranks even though the cost of living is same.

- More significance is given to rank, not to the number of years of service. It is not fair to those soldiers who rendered more service to the nation.

- One rank one pension will put burden on government in near future as there might a chance government will pay more to pensioners than to the serving.

SOURCE – THE HINDU

NATIONAL WATER AWARDS 2019

GS PAPER – 2 and 3

CONTEXT:- Tamil Nadu has bagged the first place under the 'Best State' category under the National Water Awards (NWAs) 2019, presented by the Union Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation.

Highlights

- Tamil Nadu was followed by Maharashtra and Rajasthan as the best states under the normal category.

- Tamil Nadu also bagged awards under the Best District category in the South. Vellore and Karur districts were awarded first and second spots respectively under the 'Revival of River' sub-category.

- Perambalur district came second in the 'Water Conservation' category.

- Madurai Municipal Corporation was awarded the first place in the 'Best Urban Local Body' category.

- Indira Gandhi Government High School, Katterikuppam, Puducherry was awarded the first place in the 'Best School' category.

SOURCE – THE HINDU

SHIPPING MINISTRY TO BE RENAMED

GS PAPER- 3

CONTEXT:- Prime Minister NarendraModi has said the Ministry Of Shipping will be renamed to Ministry of Ports, Shipping and Waterways to bring more "clarity" in the work it does.

About

- He was speaking at the inauguration of the RoPax ferry service between Hazira in Surat and Ghogha in Bhavnagar district on Sunday.

- He credited his government for realising the potential of sea routes and resources in the country and emphasising on "vocal for local" as the mantra for celebrating Diwali with local products.

EDEN IAS - Educational Development & Enrichment Network

- He aslo said that to become 'Aatmanirbhar Bharat' (Self-reliant India), it was important to boost the "blue economy" and strengthen sea-based logistics because in our economy, the maximum burden of expenditure is on logistics. With water transport, cost of logistics can be substantially reduced.

SOURCE – INDIAN EXPRESS

STATE SPONSORS OF TERRORISM LIST

GS PAPER – 3

CONTEXT:- India welcomed the removal of Sudan from the U.S. list of state sponsors of terrorism as well as the normalisation of relations between the African nation and Israel.

Key Highlights

- The Ministry of External Affairs (MEA), also welcomed signing of the Juba peace agreement, hoping that it will usher in democratic changes and contribute to enhancing Sudan's development, peace and security.

- Sudan became the third country in recent weeks to announce normalising relations with Israel under a deal brokered by the U.S.

India – Sudan Relation

India's relations with Sudan are historic and special, and forged on the basis of shared values and close people-to-people contacts. Over the years, India has developed close ties with Sudan and in recent years warmed up to the Government of South Sudan as well. The Sudanese cherish the support extended by the Indian Government on various occasions in the past.

Juba Peace Agreement

- The members of the Security Council welcomed the signing of the Juba Peace Agreement in Juba by the Government of Sudan, the Sudan Revolutionary Front (SRF), and the Sudan Liberation Movement-Minni Minawi.

- It represents a significant opportunity for comprehensive and sustainable peace in Sudan and an important milestone of the transition period towards a peaceful, stable, democratic and prosperous future for Sudan.

- The members of the Security Council encouraged the signatories of the peace agreement to begin swiftly the process of implementation, particularly of key provisions of the agreement pertaining to security arrangements and addressing the root causes of conflict in Darfur and the Two Areas.

Source – The Hindu

ANTI-SATELLITE (A-SAT) MISSILE

GS PAPER – 3

CONTEXT:- A model of Anti Satellite (A-SAT) Missile installed inside the DRDO Bhawan premises was unveiled

ABOUT ASAT

- India tested an anti-satellite weapon during an operation code-named Mission Shakti

- The ASAT test utilized a modified anti-ballistic missile interceptor code-named Prithvi Defence Vehicle Mark-II which was developed under Project XSV-1.

- India is developing a multi-layered and multi-phased missile defence system to defend against hostile ballistic and cruise missiles.

- The missile system was developed by the Defence Research and Development Organisation (DRDO)—a research wing of the Indian defence services.

- It had an advanced terminal guidance system on board, including a non-gimballed imaging infrared seeker and an inertial navigation system that used ring-laser gyroscopes, which detected and tracked the Microsat-R satellite in Low Earth orbit

SOURCE – PIB

FASTAG

GS PAPER – 3

CONTEXT:- FASTags mandatory for all four-wheelers including old vehicles from January 1, 2020. The Ministry of Road Transport and Highways (MoRTH) has issued a notification for promotion of digital and IT based payment of fees through FASTags.

HIGHLIGHTS

- It had further been mandated that the renewal of fitness certificate will be done only after the fitment of FASTag for the transport vehicles.

EDEN IAS - Educational Development & Enrichment Network

- The government also said that a valid FASTag is mandatory while getting a new third party insurance through an amendment in FORM 51 (certificate of Insurance), wherein the details of FASTag ID shall be captured.

- The steps for ensuring the availablity of FASTag at multiple channels are being made through physical locations and also through online mechanism

- The National Electronic Toll Collection (NETC) programme, the flagship initiative of the MoRTH, has been implemented on a pan-India basis in order to remove bottlenecks and ensure seamless movement of traffic and collection of user fee as per the notified rates, using passive radio frequency identification (RFID) technology.

What Is Fastag ?

- FASTag is a prepaid tag that enables automatic deduction of toll charges and lets the vehicle pass through the toll plaza without stopping for the cash transaction.

- The radio-frequency identification (RFID)-based FASTag is affixed on the windscreen of the vehicle.

- It allows for direct payment of fee from the prepaid or savings account linked to it and enables vehicles to drive through without stopping for transactions.

SOURCE – THE HINDU

DATA BREACH BIG BASKET

SYLLABUS SECTION – SCIENCE AND TECH

India's top online grocer BigBasket has suffered a potential data breach resulting in personal information of over 20 million customers being allegedly sold on the dark web. This incident follows a series of data breaches that have impacted Indian companies.

When did the Bigbasket breach happen?

According to cybersecurity firm Cyble, which first made the details of the potential breach public, the alleged breach occurred on October 14. The firm said that it first detected the breach on October 30 and after validating the breach, it disclosed the breach to the Bigbasket management on November 1. The cybersecurity firm made the details of the breach public on November 7.

What BigBasket information has been leaked?

Cyble has claimed that personal information of as many as 20 million users such as full names, email IDs, password hashes (potentially hashed OTPs), pin, contact numbers (mobile and phone), full addresses, date of birth, location, and IP addresses of where users have logged in from have been put up for sale on the dark web for $40,000.

What have been the previous cases of data breaches in India?

If one only goes by the information released by Cyble, there have been six cases of cyber breaches in India in the last one month alone. These include incidents at snacks manufacturer Haldiram Snacks Pvt Ltd, Indian wedding planning website Wedmegood, Indian Prime Minister's personal website narendramodi.in, online matrimonial service Bharat Matrimony and Indian Railways' online ticketing portal IRCTC. In addition to this, late last month, pharmaceutical major Dr Reddy's Laboratorieswitnessed a cyberattack. Cyble, had, in August also reported a data breach at e-commercecompany Paytm Mall.

Source – The hindu

MEGA TRADE BLOC RCEP TAKES OFF ON THE SIDELINES OF 37th ASEAN SUMMIT

Syllabus section: International Relations, Economy (Multilateral Fora)

Context:- The Regional Comprehensive Economic Partnership (RCEP), a mega trade bloc comprising 15 countries came into existence on 15th November, on the sidelines of the 37th ASEAN Summit held virtually under the chair of Vietnam. (As on date India is not a part of the RCEP agreement)

- Prime Minister Narendra Modi addressed the ASEAN Summit on November 12 and highlighted the necessity for peace and stability in the region but maintained silence regarding RCEP.

- On November 4th 2019 India walked out of RCEP agreement as the negotiations failed to address India's concerns and issues and perceived to be against its interests.

- India will have to re-apply for membership negotiation to enter in to the agreement now

EDEN IAS - Educational Development & Enrichment Network

Highlights:

- The Mega trade block RCEP consists of the 10 ASEAN members and Australia, China, Japan, South Korea and New Zealand.

- Three largest economies in the pact, china, Japan, South Korea, are a part of free trade agreement for the first time.

- The RCEP trade block is expected to represent at least 30% of the global GDP and will emerge as one of the largest free trade agreement in the world.

- The mega trade bloc is a landmark trade initiative which is expected to boost commerce among the member-countries spread across the Asia-Pacific region.

- The RCEP includes provisions on trade in goods and services, intellectual property, e-commerce, Tele communications, small and medium enterprises etc..

About ASEAN:

- The Association of Southeast Asian Nations is a regional organization which was established to promote political and social stability amid rising tensions among the Asia-Pacific's post-colonial states.

- The motto of ASEAN is "One Vision, One Identity, One Community" and 8th August is observed as ASEAN Day.

- ASEAN Secretariat is located at Indonesia, Jakarta.

- 10 Member Nations of ASEAN are Indonesia, Malaysia, Philippines, Singapore, Thailand, Brunei, Vietnam, Laos, Myanmar and Cambodia.

Source: The Hindu

IISC RESEARCHERS DISCOVER FIVE NEW SPECIES OF VINE SNAKES IN PENINSULAR INDIA

Syllabus Section: Environment, Ecology and Biodiversity.

Context:- A team of researchers from the Centre for Ecological Sciences (CES) of the Indian Institute of Science (IISC) recently discovered five new species of vine snakes during their study in various parts of peninsular India.

- The newly discovered species from the Western Ghats include the Northern Western Ghats vine snake (Ahaetulla borealis), Farnsworth's vine snake (Ahaetulla farnsworthi), Malabar vine snake (Ahaetulla malabarica) and Wall's vine snake (Ahaetulla Isabellina) in the Western Ghats rainforests alone.

Highlights:

- The study has been published in the journal Zootaxa and was carried out in collaboration with researchers from IISC.

- According to the Institute, the team carried out field visits across India to collect morphological data, tissue samples and specimens to understand the patterns of distribution and diversification of vine snakes.

- The team discovered that the common green vine snake (Ahaetulla nasuta) in India was a complex of several species.

- While four distinct small-bodied and short-nosed species were found in the rainforests of the Western Ghats.

- Another morphologically distinct and much larger species was found across the lowlands and drier parts of peninsular India

About IISC:

- Indian Institute of Science (IISc) also known as the Tata Institute is a public university for scientific research and higher education located in Bangalore, India.

- It was established in 1909 with support from Jam shed Ji Tata and the Maharaja of Mysore.

Source: The Indian Express.

EDEN IAS - Educational Development & Enrichment Network

INDIA AMONG 6COUNTRIES WITH HIGHEST TALLY OF INFANTS WHO DIDN'T GET MEASLES VACCINE REPORT

Syllabus Section- Social Issues(health) and Current events

Context:- A total of 1.2 million children did not receive the first dose of measles-containing-vaccine (MCV1) in 2019 in India, accounting for nearly half of the world's total along with the remaining five countries.

India was among six countries with the highest number of infants who had not received the vaccine against measles — while the contagious viral disease surged worldwide in 2019 reaching the highest number of reported cases in 23 years — last year, according to a new report of the World Health Organisation and US Centers for Disease Control and Prevention.

Report Findings

- A total of 1.2 million children did not receive the first dose of measles-containing-vaccine (MCV1) in 2019 in India, accounting for nearly half of the world's total along with the remaining five countries — Nigeria (3.3 million), Ethiopia (1.5 million), Democratic Republic of the Congo (DRC) (1.4 million), Pakistan (1.4 million), and Philippines (0.7 million).

- The report, titled 'Progress Towards Regional Measles Elimination Worldwide 2000-2019', states that cases across the world increased to 8,69,770 in 2019, the highest number reported since 1996 with a rise in all WHO regions. Global measles deaths climbed nearly 50 per cent since 2016, claiming an estimated 2,07,500 lives in 2019 alone, it said.

- Comparing 2019 data with the historic low in reported measles cases in 2016, authors of the report cite a failure to vaccinate children on time with two doses of MCV1 and MCV2 as the main driver of these increases in cases and deaths.

- To control measles and prevent outbreaks and deaths, vaccination coverage rates with the required MCV1 and MCV2 must reach 95 per cent and be maintained at national and subnational levels.

- MCV1 coverage has been stagnant globally for over a decade at between 84 and 85 per cent. MCV2 coverage has been steadily increasing but is at 71 per cent now. Vaccination coverage against measles remains well below the 95 per cent or higher needed with both doses to control measles and prevent outbreaks.

About Measles

A viral infection that's serious for small children but is easily preventable by a vaccine.The disease spreads through the air by respiratory droplets produced from coughing or sneezing.Measles symptoms don't appear until 10 to 14 days after exposure. They include cough, runny nose, inflamed eyes, sore throat, fever and a red, blotchy skin rash.There's no treatment to get rid of an established measles infection, but over-the-counter fever reducers or vitamin A may help with symptoms.

Source- Indian Express

ARIEL SPACE MISSION

Syllabus Section: Science and Technology

Context:- The European Space Agency (ESA) has formally adopted Ariel, the explorer that will study the nature, formation and evolution of exoplanets.

Do You Know?

- *Proxima Centauri b* is the closest exoplanet to Earth and is four light-years away and inhabits the "habitable zone" of its star, which means that it could possibly have liquid water on its surface.

- Dimming of a star is an indirect method to find the exoplanets. NASA's Kepler Space telescope uses this method to spot thousands of planets.

What is the Ariel Space Mission?

- Ariel (Atmospheric Remote-sensing Infrared Exoplanet Large-survey), which scientists are planning to launch in 2029.

- It will perform a large-scale survey of over a thousand exoplanets over a period of four years.

- It will help into compiling a list of exoplanets compositions and properties thereby providing insights about how planetary systems form and evolve.

- Ariel is the first mission of its kind dedicated to measuring the chemical composition and thermal structures of hundreds of exoplanets

- A large number of exoplanets have already been discovered, there is no clear link between the presence, size or orbital parameters of the planet and the nature of their parent stars. Therefore, a large-scale survey that Ariel will perform is required to know more about exoplanets and exoplanetary systems.

What are Exoplanets?

- Planets that lie outside of the Solar System and orbit around stars other than the Sun are called exoplanets or extrasolar planets. Exoplanets are not easy to detect since they are much less brighter than the stars they orbit and hence it is difficult to see them directly using telescopes.

SOURCE – INDIAN EXPRESS

DIPAM SIGNS AN AGREEMENT WITH WORLD BANK

Section of the syllabus– Economy

Context - DIPAM signs an agreement with World Bank for advisory services on Asset Monetization

Highlights of the agreement

Under the agreement, World Bank is to provide advisory services to DIPAM for asset monetization.

It would facilitate and accelerate the non-core asset monetization process and help unlock the value of these un-used/ marginally used assets which has the potential to substantially augment financial resources for further investments and growth.

DIPAM- DIPAM is mandated with facilitating monetization of non-core assets of government CPSEs under strategic disinvestment or closure and enemy property of value of INR 100 crores and above. DIPAM has a framework for monetizing non-core assets.

WORLD BANK - The World Bank advisory project, is aimed at analyzing public asset monetization in India and benchmarking its institutional and business models against international best practices as well as supporting development of operational guidelines and capacity building for their implementation.

Source – PIB

TRISTAN DA CUNHA

Section of the syllabus – Environment And Ecology

Context:- The isolated UK Overseas Territory of Tristan da Cunha, which is home to the world's most remote human settlement, declared the largest fully protected marine reserves in the Atlantic Ocean at 687,000 square kilometres

About Tristan da cunha

- Tristan da Cunha, which is inhabited by less than 300 humans is a small chain of islands over 6,000 miles from London in the South Atlantic and the water around the islands are considered to be the richest in the world.

- The island group is also home to the World Heritage Site of Gough and Inaccessible Islands, which is one of the most important seabird islands in the world.

- It is located about 2,000 km from the nearest land and as per the RSPB, it takes longer to sail to Tristan da Cunha from Cape Town than it took Apollo 11 to reach the Moon.

What does the announcement mean for the island group?

- After joining the UK's Blue Belt Programme, it will become the largest no-take zone in the Atlantic and the fourth largest on the planet. This means fishing, mining and any such activities will not be allowed.

- It will safeguard the future of sevengill sharks, yellow-nosed albatrosses and rockhopper penguins

Source – Indian Express

EDEN IAS - Educational Development & Enrichment Network

SEX RATIO ARUNACHAL RECORDS BEST SEX RATIO MANIPUR THE WORST

Section of Syllabus- Economy and Social development

Context:- Arunachal Pradesh recorded the best sex ratio in the country while Manipur recorded the worst sex ratio, according to the 2018 report on "vital statistics of India based on the Civil Registration System".

Report Details

Arunachal Pradesh recorded 1,084 females born per thousand males, followed by Nagaland (965) Mizoram (964), Kerala (963) and Karnataka (957).

The worst was reported in Manipur (757), Lakshadweep (839) and Daman & Diu (877), Punjab (896) and Gujarat (896).

Delhi recorded a sex ratio of 929, Haryana 914 and Jammu and Kashmir 952.

The level of registration of births has increased to 89.3% in 2018 from 81.3% in 2009,

The prescribed time limit for registration of birth or death is 21 days. Some States, however, register the births and deaths even after a year.

The birth or death certificate is issued free of charge by the Registrar concerned if reported within 21 days. If reported within 21-30 days, it can be registered on payment of the prescribed fee.

If the duration is more than 30 days but within a year, it can be registered with the written permission of the prescribed authority and on the production of an affidavit made before a notary public or any other officer authorised by the State government and on payment of a fee.

Source- The Hindu

SPACE X MISSION CREW

Syllabus Section: Science and Technology

Context:- SpaceX launched four astronauts into the space under Mission Crew 1 On November 16, 2020. The Crew Dragon capsule becomes the first spacecraft to be certified by NASA after 40 years. Being the first in a series, there will be regular flights by the SpaceX to the International Space Station.

Highlights

- The SpaceX Falcon 9 rocket was used to launch the spacecraft and is reusable.

- The SpaceX has scheduled to launch two more crewed flights in 2021.

- The mission was initially planned to be launched in July 2020. However, it was postponed due to covid-19 pandemic.

Crew1 mission

- Crew 1 is the first operational mission under the Commercial Crew Programme of NASA.

- Under the programme, NASA aims to carry crews to and from International Space Station and Low Earth orbit.

- It was launched in 2010 with NASA investing about 50 million USD. Later in 2016, the SpaceX and Boeing joined the programme.

About SpaceX

- SpaceX is a private American aerospace manufacturer and space transportation services company headquartered in Hawthorne, California.

- It designs manufactures and launches advanced rockets and spacecraft.

- The company was founded in 2002 to revolutionize space technology, with the ultimate goal of enabling people to live on other planets.

- SpaceX has gained worldwide attention for a series of historic milestones

Other successful launches of SpaceX

- Falcon 1
- Falcon 9
- SpaceX's Dragon mission
- The Dragon resupply mission

Source: The Hindu

What is mRNA vaccine

Syllabus Section: Science and Technology

Context:- The Moderna and Pfizer both announced results of human trials of the vaccines it has developed with US National Institutes of Health related to Corona virus.The Moderna and Pfizer vaccines use the same technology, based on messenger RNA, or mRNA.

What is mRNA?

Messenger ribonucleic acids (mRNAs) transfer the information from DNA to the cell machinery that makes proteins.Ribosomes read the mRNA and translate the message into functional proteins in a process called translation. In other words messenger RNA molecules tell the body's cells what proteins to build.

mRNA-1273 is a

novellipid nanoparticle (LNP)-encapsulated mRNA-based vaccinethat encodes for a full-length, prefusion stabilized spike (S) protein of SARS-CoV-2.

Benefits:

Ø A coronavirus vaccine based on mRNA, once injected into the body, will instruct the body's cells to create copies of the spike protein. In turn, this is expected to prompt the immune cells to create antibodies to fight it.

Ø These antibodies will remain in the blood and fight the real virus if and when it infects the human body.
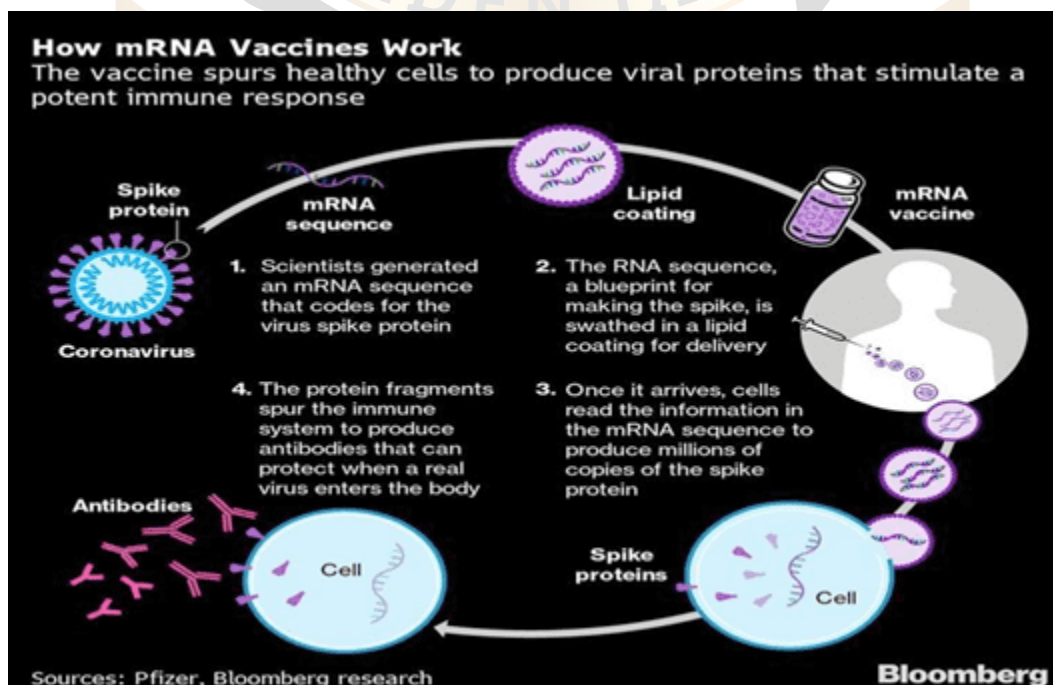
Risks Associated:

Ø These are completely new and revolutionary vaccines, it will know virtually nothing about their long-term effects.

Ø Risk related to bio-distribution and persistence of the induced immunogen expression; possible development of auto-reactive antibodies; and toxic effects of any non-native nucleotides and delivery system components.

Ø mRNA is so fragile, the Pfizer vaccine must be stored at negative 70 degrees Celsius. If the ideal environment is not maintained, the vaccine could "spoil" and become ineffective.

Ø It would be the worst [scenario] if people behave like they are immune but can still become infected.

Source : Indian Express

How mRNA Vaccines Work
The vaccine spurs healthy cells to produce viral proteins that stimulate a potent immune response

1. Scientists generated an mRNA sequence that codes for the virus spike protein
2. The RNA sequence, a blueprint for making the spike, is swathed in a lipid coating for delivery
3. Once it arrives, cells read the information in the mRNA sequence to produce millions of copies of the spike protein
4. The protein fragments spur the immune system to produce antibodies that can protect when a real virus enters the body

Sources: Pfizer, Bloomberg research

Bloomberg

EDEN IAS - Educational Development & Enrichment Network

LONAR LAKE AND SUR SAROVAR

SECTION OF THE SYLLABUS – ENVIRONMENT AND ECOLOGY

CONTEXT:- The Lonar lake in Maharashtra and Sur Sarovar, also known as Keetham lake, in Agra, have been added to the list of recognized Ramsar sites.

Lonar Lake

• The only crater lake of the country

• Lonar Lake is located in the Buldhana district of Maharashtra.

• This lake is a notified National Geographical Heritage monument in India.

Sur Sarovar

• Keetham lake, also known as the Sur Sarovar, is a scenic lake just outside Agra on the Agra - Delhi highway

• Keetham Lake is the Agra Bear Rescue Facility, which is a Sloth bear rescue facility dedicated to rehabilitating previously enslaved 'dancing bears.

Ramsar Convention

• The convention, signed in 1971 in the Iranian city of Ramsar, is one of the oldest inter-governmental accords for preserving the ecological character of wetlands.

• It aims to develop a global network of wetlands for conservation of biological diversity and for sustaining human life.

• Wetlands provide a wide range of important resources and ecosystem services such as food, water, fibre, groundwater recharge, water purification, flood moderation, erosion control and climate regulation.

The Montreux Record is a register of wetland sites on the List of Ramsar wetlands of international importance where changes in ecological character have occurred, are occurring, or are likely to occur as a result of technological developments, pollution or other human interference.

Source – The Hindu

ARIEL SPACE MISSION

Section of the syllabus – science and tech

Context:- The European Space Agency (ESA) has formally adopted Ariel, the explorer that will study the nature, formation and evolution of exoplanets.

What are exoplanets?

Planets that lie outside of the Solar System and orbit around stars other than the Sun are called exoplanets or extrasolar planets. Exoplanets are not easy to detect since they are much less brighter than the stars they orbit and hence it is difficult to see them directly using telescopes.

Methods to track Exoplanets

• Tracking the dimming of a star that happens when a planet passes in front of it. NASA's Kepler Space telescope uses this method to spot thousands of planets.

• Gravitational lensing

• Wobbling method

What is ARIEL MISSION?

• Ariel (Atmospheric Remote-sensing Infrared Exoplanet Large-survey), which scientists are planning to launch in 2029, will perform a large-scale survey of over a thousand exoplanets over a period of four years.

• Aim - Ariel is the first mission of its kind dedicated to measuring the chemical composition and thermal structures of hundreds of exoplanets.

• Need– A large-scale survey that Ariel will perform is required to know more about exoplanets and explanatory systems.

Ariel will help to answer one of the key questions of ESA's Cosmic Vision Plan, which is, "What are the conditions for planet formation and the emergence of life?

SOURCE – INDIAN EXPRESS

EDEN IAS - Educational Development & Enrichment Network

Section of the Syllabus- Defence Technology

Context:- In yet another flight test, the Quick Reaction Surface to Air Missile (QRSAM) System tracked the target accurately and successfully neutralised the airborne target. The flight test, second in the series was conducted today at around 1542 hrs from the Integrated Test Range, Chandipur, off the coast of Odisha. The test was carried out once again, against the high-performance Jet Unmanned Aerial Target called Banshee, which simulates an aircraft.

About the Flight Test

- The flight test was conducted in the deployment configuration of the weapon system comprising of Launcher, fully Automated Command and Control System, Surveillance System and Multi-Function Radars. The QRSAM weapon system, which can operate on the move, consists of all indigenously developed subsystems. All objectives of the test were fully met. The launch was carried out in the presence of the users from Indian Army.

- A number of range instruments like Radar, Telemetry and Electro Optical Sensors were deployed which captured the complete flight data and verified the performance of the missile.

- Teams from ARDE and R&DE(E) from Pune, LRDE Bengaluru, and IRDE Dehradun in addition to the Missile Complex Laboratories from Hyderabad and Balasore participated in the test.

- The first in the series test of QRSAM took place on 13th Nov 2020 achieving the milestone of a direct hit. Second test proved the performance parameters of warhead.

About QRSAM System

- QRSAM is a canister-based system, which means that it is stored and operated from specially designed compartments.In the canister, the inside environment is controlled, thus along with making its transport and storage easier, the shelf life of weapons also improves significantly.

- The system is capable of detecting and tracking targets on the move and engaging targets with short halts. It is a short-range surface-to-air missile (SAM) system, primarily designed and developed by DRDO to provide a protective shield to moving armoured columns of the Army from enemy aerial attacks.

- The entire weapon system has been configured on a mobile and manoeuvrable platform and is capable of providing air defence on the move.

- It has been designed for induction into the Army and has a range of 25 to 30 km.

Source- Indian Express

Syllabus Section: International Relations , Multilateral forums

Context:- On November 17, 2020, the members of Asia Pacific Economic Cooperation (APEC) held a ministerial meeting virtually. During the meeting, the members committed to pursue free and open trade and investment towards the economic recovery from the impact of covid-19 pandemic.

Highlights

- The meeting was chaired by Malaysia. This ministerial meeting comes ahead of the APEC Economic Leaders Meet that is to be held in November 20, 2020.

- This marks the first time that the APEC Ministerial Meeting (AMM) has convened virtually.

- The Bogor Goals of APEC is one of its flagship initiatives and the deadline set for the Goals was 2020.

- 2020 Malaysia priorities includes the following

1. Improve the narrative of trade and investment

EDEN IAS - Educational Development & Enrichment Network

2. Inclusive economic participation through digital economy and technology

3. Driving innovative sustainability

About APEC

- APEC is an economic group that was formed in 1989.

- The main objective of its formation was to promote free trade and sustainable development in the Pacific Rim countries.

- It also aims to increase inter-dependence of Asia-Pacific Economies.

- Collectively, APEC accounts to 50% of world trade and 57% of world GDP.

- APEC formation was supported by European Union and the now defunct North American Free Trade Area (NAFTA).

India and APEC

- India had requested for membership in APEC.

- APEC has decided not to allow India as India does not border Pacific Ocean and all the other 21 members of APEC members borders Pacific Ocean.

- However, India has gained support from Japan, USA, Australia and Papua Guinea to become a full time member. India became an observer of APEC in 2011.

- The Asia Pacific is the most economically affected region due to COVID-19 pandemic.

Source: www.apec.org

AUSTRALIA AND JAPAN SIGNED THE RECIPROCAL ACCESS AGREEMENT

Syllabus section: International relations

Context:- Japan and Australia has signed a long awaited and historic "Reciprocal Access Agreement" to counter the growing influence of China in the South China Sea and in the Pacific Island Nations on 17th November 2020.

Highlights

- The defence agreement has taken six years of negotiations. This will bring the countries closer amidst militarization in South China Sea and series of disputes over islands in East China Sea.

- The agreement will pave way to renew Japan-US Status of Forces Agreement.

- This is the first agreement of Japan to allow foreign military presence in its sovereign territory since 1960.

- Previously Japan signed the Status of Forces Agreement with the US in 1960 and with Djibouti in 2009.

India-Australia

- India and Australia signed the Mutual Logistics Support Agreement in June 2020.

- It is similar to the Reciprocal Access Agreement being signed between Japan and Australia.

- The agreement allowed reciprocal access to military bases and allowed the militaries to use each other's bases for replenishment of supplies and repair.

- India has signed similar defence agreements with US, Singapore and France.

India-Japan Recent Developments

- Japan enjoys a "Special Strategic and Global Partnership" with India.

- In October 2020, India and Japan signed Agreement on Cooperation in 5G, Artificial Intelligence.

- Both the countries also agreed to give momentum to the Supply Chain Initiative in the Indo-Pacific region.

- A Memorandum of Understanding has been signed to enhance cooperation between the countries in areas of cyberspace.

- The External Affairs Minister of India also attended QUAD ministerial meeting in the month of September 2020.

EDEN IAS - Educational Development & Enrichment Network

- India and Japan held JIMEX 2020, the military exercise in the North Arabian Sea.

- In September 2020, India and Japan signed Logistics Agreement. This agreement will allow the armed forces of the countries to coordinate closely in supplies and services.

- In September, 2020, Japan extended Rs 2,500 crores of credit to India as COVID-19 Crisis Emergency Response Support

Source: The Guardian

PRADHAN MANTRI FORMALISATION OF MICRO FOOD PROCESSING ENTERPRISES SCHEME (PM-FME SCHEME)

SECTION OF THE SYLLABUS –ECONOMY

Context:- capacity building component of the PM-FME Scheme

Capacity building component of PM FME SCHEME

- Scheme envisages imparting training to food processing entrepreneurs, various groups, viz., SHGs / FPOs / Co-operatives, workers, and other stakeholders associated with the implementation of the scheme

- Initiative to encourage the micro-entrepreneurs

- Under the capacity building component of the PM-FME scheme, training of the Master Trainers would be delivered through online mode

- The Master Trainers will train the District Level Trainers, who will train the beneficiaries.

- The assessment and certification of the training program under the capacity building will be provided by FICS

PM FME SCHEME

- Launched under the Aatmanirbhar Bharat Abhiyan

- It is a centrally sponsored scheme

- It aims to enhance the competitiveness of existing individual micro-enterprises in the unorganized segment of the food processing industry and promote formalization of the sector and provide support to Farmer Producer Organizations, Self Help Groups, and Producers Cooperatives along their entire value chain.

ONE DISTRICT ONE PRODUCT

The GIS ODOP digital map of India provides details of ODOP products of all the states and facilitate the stakeholders. The digital map also has indicators for tribal, SC, ST, and aspirational districts. It will enable stakeholders to make concerted efforts for its value chain development.

SOURCE – PIB

MAHAJAN COMMISSION REPORT

SECTION OF THE SYLLABUS- POLITY

CONTEXT:- Karnataka Chief Minister condemned comments by Maharashtra Deputy CM over the border dispute between the two states as an attempt to "incite fire".

What is the dispute ?

- The erstwhile Bombay Presidency, a multilingual province, included the present-day Karnataka districts of Vijayapura, Belagavi, Dharwad and Uttara-Kannada.

- In 1948, the Belgaum municipality requested that the district, having a predominantly Marathi-speaking population, be incorporated into the proposed Maharashtra state.

- However, the States Reorganisation Act of 1956, which divided states on linguistic and administrative lines, made Belgaum and 10 talukas of Bombay State a part of the then Mysore State (which was renamed Karnataka in 1973).

Mahajan commission

- In September 1957, the Bombay government echoed their demand and lodged a protest with the Centre, leading to the formation of the Mahajan Commission under former Chief Justice Mehr Chand Mahajan in October 1966.

EDEN IAS - Educational Development & Enrichment Network

- The Commission, which submitted its report in August 1967, recommended that 264 villages be transferred to Maharashtra (which formed in 1960) and that Belgaum and 247 villages remain with Karnataka.

- Maharashtra rejected the report, calling it biased and illogical, and demanded another review.

Later developments

- Maharashtra continues to claim over 814 villages along the border, as well as Belgaum city, which are currently part of Karnataka.

- In 2004, the Maharashtra government moved the Supreme Court for a settlement of the border dispute under Article 131(b) of the Constitution, demanding 814 villages from Karnataka on the basis of the theory of village being the unit of calculation, contiguity and enumerating linguistic population in each village.

SOURCE – PIB

GREEN ENERGY CONVERGENCE PROJECT

SECTION OF THE SYLLABUS – ENVIRONMENT

CONTEXT:- India's first convergence project to generate green energy for rural and agriculture consumption is set to come up in Goa.

Memorandum Of Understanding - Energy Efficiency Services Limited (EESL), a joint venture of PSUs under the Ministry of Power and Department of New & Renewable Energy (DNRE), Goa, have signed a memorandum of understanding to discuss rolling out of India's first Convergence Project in the State.

Implementation

- EESL and DNRE will carry-out the feasibility studies and subsequent implementation of decentralized solar energy projects.

- EESL shall implement the solar energy projects, establishment of 100 MW of decentralized ground mounted Solar Power projects on government lands to be used for agricultural pumping, replace approximately 6,300 agricultural pumps with BEE star rated energy efficient pumps and distribute approximately 16 Lakh LED bulbs for rural domestic households.

Benefits

- This will reduces losses in terms of expenditure on water for farm sector runs into tens of thousands crore rupees in several States.

- Incentivising saving on energy and ground water by farmers.

- It will provide clean day time electricity to farmers as well as energy efficient pump sets which would reduce the power consumption as well as T&D losses associated with transmitting power to agriculture and rural feeder networks.

- Accelerate the usage of renewable energy sources, especially for agricultural and rural power consumption in the State.

- Reduction of peak energy demand through deployment of energy efficient pumping and lighting thus contributing to overall sustainability.

SOURCE- THE HINDU

GUILLAIN BARRE SYNDROME (GBS)

Syllabus Section- Science and Technology

Context:- In a rare complication, some patients infected with Covid-19 have been found suffering from Guillain Barre Syndrome (GBS). In India, such cases have been reported since August.

A group of neurologists in Mumbai is now mapping these cases and their symptoms. So far, 24 cases have been added to the study.

What is Guillain Barre Syndrome?

It is a very rare autoimmune disorder. The immune system, in an attempt to kill the coronavirus, accidentally starts attacking the peripheral nervous system. The peripheral nervous system is a network of nerves that lead from the brain and spinal cord to different parts of the body. Attacking them can affect limb functions.

The syndrome's first symptoms are a tingling or itching sensation in the skin, followed by muscle weakness, pain and numbness. The symptoms may emerge first in feet and hands. A person then starts experiencing reflex loss and paralysis, which may be temporary, but can last for

EDEN IAS - Educational Development & Enrichment Network

6-12 months or longer. With Covid-19 a year old, it is still difficult to assess the nature of permanency GBS in such cases may present.

GBS is caused by bacteria or viral infection. In the past, patients of Middle East Respiratory Syndrome showed GBS symptoms, as did those infected with Zika, HIV, Herpes virus and Campylobacter jejuni.

Connection with Covid-19

Covid-19 is known to affect digestive, cardiac and kidney functions. It is also known that some –– not all –– patients are prone to neurological problems if they contract the virus. The virus can cause memory fog, anxiety, headache and depression if it attacks parts of the brain which form the central nervous system.

In all these cases, the virus attacks the organs or tissues directly leading to the complication. But in some cases, it can have an indirect effect. It can trigger an immune response so powerful that the body's peripheral nervous system can come under attack.

Source- Indian Express

TRACK 1.5 DIALOGUE BETWEEN INDIA AND CANADA

Section of the syllabus: International relations

Context:- • The third round of India-Canada Track 1.5 Dialogue conducted on a virtual platform. Both India and Canada discussed cooperation regarding the COVID-19 pandemic and ensured to work together on strong investment commercial relationships.

Highlights

• Both the countries discussed the role of India and Canada in the post-COVID-19 world.

• The scholars and experts discussed on various facets of the strategic partnership linking the two countries.

• The dialogue focused on the new geo-economics of the Indo-Pacific and digital cooperation, particularly in the areas of fintech and AI.

• This dialogue creates a template for a merger of government to government diplomacy, with public diplomacy.

Background

• The Track 1.5 Dialogue has been piloted since February 2018.

• It was piloted by two think tanks — India's Gateway House and Canada's Centre for International Governance Innovation (CIGI).

• Their collaboration has encouraged the governments to focus on the immediate opportunities available in investment, technology and geopolitical rearrangements.

Source: The Observer Research Foundation

DEEMED FORESTD AND WHY KARNATAKA WANTS TO DECLASSIFY SOME

Context:- The issue of deemed forests is a contentious one in Karnataka, with legislators across party lines often alleging that large amounts of agriculture and non-forest land are "unscientifically" classified as such.

What are deemed forests?

• Deemed forests has not been clearly defined in any law including the Forest Conservation Act of 1980.

• In the case of T N Godavarman Thirumalpad (1996), Supreme Court has accepted a wide definition of forests under the Act. "The word 'forest' must be understood according to its dictionary meaning. This description covers all statutorily recognised forests, whether designated as reserved, protected or otherwise for the purpose of Section 2 (1) of the Forest Conservation Act". The provisions enacted in the Forest Conservation Act 1980 for the conservation of forest and the matters connected therewith must apply clearly to all forest so understood irrespective of the ownership or classification thereof.

• Expert Committee(after Supreme Court order), in 2002 gave its view and said,"land having the characteristic of forests irrespective of the ownership, thickly wooded areas of the Revenue Department not handed over to the Forest Department; thickly wooded areas recommended to be handed over to the Forest Department; thickly wooded land distributed to grantees but not cultivated; and thickly wooded plantations of the Forest Department could all be 'deemed forests'.

EDEN IAS - Educational Development & Enrichment Network

Why does the Karnataka government want to release some lands from deemed forests?

- Some of the 'statutory forests' had been wrongly classified as 'deemed forest' by the expert committee constituted after the Supreme Court order.

- Dictionary definition was applied to identify thickly wooded areas as deemed forests, a well-defined scientific, verifiable criteria was not used, resulting in a subjective classification of areas as deemed forests. The subjective classification in turn resulted in conflicts between the Forest Department and other departments like Revenue, Irrigation, Public Works and Energy, the government argued.

- Land was randomly classified as deemed forest by officials, causing hardship to farmers in some areas.

- There is also a commercial demand for mining in some regions designated as deemed forests.

- Because of the above reasons affidavit was filed in the Supreme Court in 2019 following a Cabinet decision. The central government in power revised the amount of deemed forest land to be released from 9.94 lakh hectares to 6.64 lakh hectares.

Forest Minister's announcement and the way ahead

- Preservation of forest areas in India under the Forest Conservation Act, 1980 has been continuously monitored by the Supreme Court since the Godavarman case judgment in 1996.

- The state government must obtain clearances from the Supreme Court for affecting changes to land classified as deemed forests since the verdict, said officials of the Forest, Ecology and Environment department in Karnataka.

- In 2019, the state had filed an interim application in the Supreme Court for exclusion of 5.18 lakh hectares from the deemed forest category. The SC has not passed an order on the application.

- A fresh application showing the extent of land to be released from the deemed forest category as 6.64 lakh hectares must be filed.

Source: Indian Express

CHAPARE VIRUS

Section of the syllabus: Science & Technology

Context:- The researchers from the United States Centre for Disease Control and Prevention have discovered that the Chapare Virus is capable of human to human transmission. Bolivia is currently facing an outbreak of the virus. Just like the Ebola virus, the Chapare virus is capable of causing haemorrhagic fever.

Highlights

- The United States CDC had developed a RT-PCR test to diagnose Chapare virus in future.

- In the previous outbreaks there were no signs of human to human transmission. It is the recent 2020 outbreak that has shown that human to human transmission is possible in Chapare virus.

- The biggest outbreak of the 'Chapare virus' was reported in 2019, when three healthcare workers contracted the illness from two patients in the Bolivian capital of La Paz

- The Chapare virus was discovered first in 2004 in Bolivia. The virus then disappeared the same year (2004). However, in 2019, at least five people were again infected with Chapare virus. During the 2019 outbreak, the virus was found in samples of bodily fluids.

- Chapare virus was also detected in rodents around the home of the infected person.

- After the persons infected with Chapare virus died, the virus stayed alive for 24 hours in their bodily fluid

About Chapare virus

- The Chapare hemorrhagic fever (CHHF) is caused by the same arena virus family that is responsible for illnesses such as the Ebola virus disease (EVD).

- According to the CDC website, arena viruses like the Chapare virus are generally carried by rats and can be transmitted through direct contact with the infected rodent, its urine and droppings, or through contact with an infected person.

- The virus, which is named Chapare (A place near La Paz- Bolivia) after the province in which it was first observed, causes a hemorrhagic fever much like Ebola along with abdominal pain, vomiting, bleeding gums, skin rash and pain behind the eyes.

- Viral hemorrhagic fevers are a severe and life-threatening kind of illness that can affect multiple organs and damage the walls of blood vessels.

- There are no specific drugs to treat the disease; patients generally receive supportive care such as intravenous fluids.

Source: The Indian Express – Explained.

SAFAIMITRA SURAKSHA CHALLENGE

Syllabus Section- Government initiatives and Current Events

Context:- Shri Hardeep Singh Puri, MoS, I/C, Housing and Urban Affairs today stated that Government of India is committed to ensure that no person needs to enter a sewer or septic tank, unless absolutely unavoidable in the interest of greater public hygiene.

Launching the Safaimitra Suraksha Challenge at a webinar in New Delhi, he added that within this context we are today setting another milestone by launching the Safaimitra Suraksha Challenge which aims to ensure that no life of any sewer or septic tank cleaner is ever lost again owing to the issue of 'hazardous cleaning.

Details

The Challenge, aptly launched on the occasion of World Toilet Day, is aimed at preventing 'hazardous cleaning' of sewers and septic tanks and promote their mechanized cleaning.

The virtual event saw the Chief Secretaries, State Mission Directors and other senior State/ Union Territory and city officials coming together to take a pledge on behalf of 243 cities to mechanize all sewer and septic tank cleaning operations by 30th April 2021, and gave their commitment to work towards preventing any deaths from hazardous entry.

The Webinar was also attended by Secretaries of Ministry of Social Justice, Department of Drinking Water and Sanitation, and Department for Promotion of Industry and Internal Trade, who spoke about how their Ministries were contributing to the cause of mechanizing such cleaning practices.

The event saw the launch of a series of advisories prepared by Central Public Health and Environmental Engineering Organisation (CPHEEO), MoHUA. These included a 'Training Module for Sanitary Workers on Cleaning of Sewer and Septic Tanks', a document on 'Equipment & Workforce Norms for Managing Waterborne Sanitation in India' and Consultative Document on 'Land Application of Faecal Sludge'.

MoHUA also released a series of posters as part of a citizen centric behavior change communication campaign on the subject of hazardous cleaning of sewers and septic tanks. All documents released today are available on the Swachh Bharat Mission -Urban portal.

Source- PIB

BRICS COUNTER – TERROR STRATEGY

Syllabus Section- International Relations

Context:- China on Tuesday signed off on the BRICS counter-terrorism strategy that called upon on all countries to take steps to prevent the use of their territories for terrorist activities against other countries or their own citizens.

While Russia was the key drafting country as the host and chair of BRICS this year, China also signed off on the declaration which talked about "respect for territorial integrity" of Syria, Libya, Iraq and in the context of the UN.

About

- The BRICS counter-terrorism strategyissued, said the member countries "calls upon all nations to take appropriate measures to prevent the use of their territories for terrorist bases or the perpetration or organization of terrorist acts intended to be committed against other States or their citizens".

- It also stressed on the need for "all States to refrain from organizing, instigating, facilitating, participating in, financing, encouraging or tolerating terrorist activities and to take appropriate practical measures to ensure that their territories are not used for terrorist bases or preparation or organization of ter-

EDEN IAS - Educational Development & Enrichment Network

rorist acts intended to be committed against other States or their citizens".

- The BRICS declaration countries also underlined the cross-border movement of terrorists. BRICS countries "recognize that acts, methods and practices of terrorism in all its forms and manifestations are activities aimed at the destruction of human rights, fundamental freedoms and democracy, threatening territorial integrity, security of States, and that the international community should take the necessary steps to enhance cooperation to prevent and combat terrorism, including cross-border movement of terrorists".

- The declaration also flagged the issue of territorial integrity in the context of the UN, Syria, Iraq and Libya. "We call the international community to celebrate the seventy-fifth anniversary of the United Nations by enhanced efforts to establish a more fair, just, inclusive, equitable and representative multipolar international system, based on sovereign equality of all States, respect for their territorial integrity and mutual respect for interests and concerns of all,".

Source- Indian Express

BRU REFUGEES AND ISSUES INVOLVED

SELECTED SYLLABUS - GOVERNANCE

CONTEXT:- Mizoram Bru refugees leaders have demanded commencement of their permanent rehabilitation in Tripura in the light of the quadripartite agreement signed in New Delhi in January this year.

DELAY IN MAKESHIFT AND REPERCUSSIONS

The government had selected 12 places including the Kanchanpur subdivision in north Tripura where the Brus have been housed in six makeshift camps since 1997. However, the decision to settle some of the refugees is facing protests from a local forum called Joint Movement.

BRU-REANG REFUGEE AGREEMENT

In January this year, agreement was signed between Union Government, Governments of Tripura and Mizoram and Bru-Reang representatives to end the 23-year old Bru-Reang refugee

Highlights of the Agreement

1. The centre has announced a package of Rs. 600 crore under this agreement.

2. Bru tribes would be given land to reside in Tripura.

3. A fixed deposit of Rs. 4 lakh will be given to each family as an amount of government aid. They will be able to withdraw this amount after two years.

4. Each of the displaced families will be given 40×30 sq ft residential plots.

5. Apart from these, each family will be given Rs. 5,000 cash per month for two years.

6. The agreement highlights that each displaced family will also be given free ration for two years and aid of Rs. 1.5 lakh to build their houses.

WHO ARE BRUS?

The Brus, also referred as the Reangs, are spread across the northeastern states of Tripura, Assam, Manipur, and Mizoram.

In Tripura, they are recognised as a Particularly Vulnerable Tribal Group. In Mizoram, they have been targeted by groups that do not consider them indigenous to the state.

This agreement will bring a permanent solution for the rehabilitation of thousands of Bru-Reang people in Tripura. They will be able to enjoy the benefits of all social-welfare schemes of governments.

SOURCE – THE HINDU

HURRICANE IOTA

SELECTED SYLLABUS - GEOGRAPHY

CONTEXT:- Hurricane Iota made landfall in Nicaragua in Central America on has developed into a category five storm.
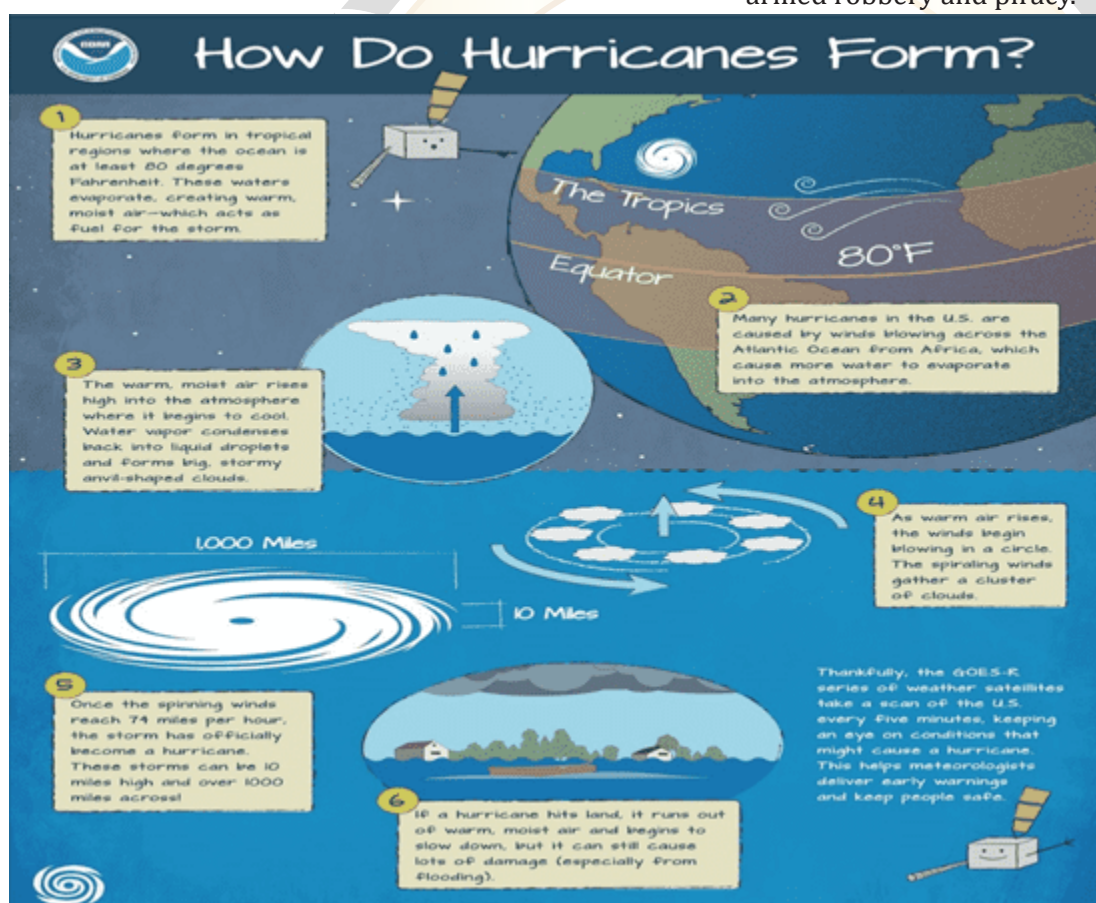
ATLANTIC HURRICANES SEASON

The Atlantic Hurricane season runs from June to November and covers the Atlantic Ocean, the Caribbean Sea and the Gulf of Mexico, while the Eastern Pacific Hurricane season runs from May 15 to November 30.

SEVERITY OF THE HURRICANE IOTA

• Hurricanes are categorized on the Saffir-Simpson Hurricane Wind Scale, which rates them on a scale of 1 to 5 based on wind speed.

• Hurricanes that reach category three or higher are called 'major hurricanes' because of their potential to cause devastating damage to life and property.

• Iota is a category five storm.

WHAT ARE HURRICANES AND HOW DO THEY FORM?

SOURCE - INDIAN EXPRESS

CORPAT NAVAL EXERCISE CONDUCTED BETWEEN INDIA & THAILAND

Section of the Syllabus: (Security and Defence + International Relations)

CONTEXT:- The 30th edition of India-Thailand Coordinated Patrol (Indo-Thai CORPAT) between the Indian Navy and the Royal Thai Navy has been conducted from 18 – 20 November 2020.

SIGNIFICANCE & HIGHLIGHTS:

• Indian Naval Ship (INS) Karmuk and Thailand Ship (HTMS) Kraburi from both the navies are participated in the CORPAT Exercise.

• The 30th Indo-Thai CORPAT will contribute towards Indian Navy's efforts to consolidate inter-operability and forge strong bonds of friendship with Royal Thai Navy.

• CORPAT exercise also facilitates institution of measures to prevent and suppress Illegal Unreported Unregulated (IUU) fishing, drug trafficking, maritime terrorism, armed robbery and piracy.

• It further enhances the operational synergy by exchange of information for prevention of smuggling, illegal immigration and for conduct of SAR operations at sea.

• India and Thailand have especially enjoyed a close and friendly relationship covering a wide spectrum of activities and interactions, which have strengthened over the years.

• As part of Government of India's vision of SAGAR (Security And Growth for All in the Region), the Indian Navy has been involved in assisting countries in the Indian Ocean Region with EEZ Surveillance, Humanitarian Assistance and Disaster Relief (HADR.

INDIA-THAILAND RELATIONS

• India and Thailand have historical and cultural roots that reach beyond our 70 years of diplomatic relations. Both the countries have been shaped and remain linked by the great forces of history and culture that span thousands of years.

• India and Thailand agreed to explore opportunities for cooperation in areas such as trade, culture, and defence industries sector and connected closely through people to people ties.

EDEN IAS - Educational Development & Enrichment Network

- Emphasis was laid to enhance connectivity between the two countries, including in the areas of physical and digital connectivity.

- Thailand 4.0 initiative of transforming Thailand into a value-based economy is complementary to India's priorities like Digital India, Skill India, Swachh Bharat Mission, Smart Cities, Jal Jeevan Mission, etc.

- In the contemporary context, India's Act East policy is complemented by Thailand's Look West policy which has made the relationship deep, robust and multifaceted.

Source: PIB

INDIA – LUXEMBURG SUMMIT

SELECTED SYLLABUS – INTERNATIONAL RELATIONS

CONTEXT:-

Why in the news?

Prime Minister of India and the Prime Minister of Luxembourg held the first-ever India-Luxembourg Virtual Summit on 19 November 2020.

About India-Luxembourg Summit

Luxembourg is a founding member of the European Union.

In this context, the two leaders exchanged views on further strengthening India EU relations including forward movement on India EU trade agreements and investment agreements.

The leaders looked forward to the 17th Joint Economic Commission between India and the Belgium-Luxembourg Economic Union to review the economic and trade relations.

Three agreements were signed coinciding with the Summit.

i. MoU between India International Exchange (India INX) and Luxembourg Stock Exchange

Provides for cooperation in the financial services industry, maintenance of orderly markets in securities respective country, ESG (environmental, social and governance) and green finance in the local market.

ii. MoU between State Bank of India and Luxembourg Stock Exchange

Provides for cooperation in financial services, industry maintenance of orderly markets in securities respective country, ESG (environmental, social and governance) and green finance in the local market.

iii. MoU between Invest India and Lux innovation

Supporting and developing mutual business cooperation between Indian and Luxembourg companies, including promotion and facilitation of inbound FDI, coming from, or proposed by Indian and Luxembourgish investors.

Source- PIB

AMENDED LIQUIDATION REGULATIONS UNDER IBC, AND THE QUESTIONS THEY RAISE

SELECTED SYLLABUS - ECONOMY

CONTEXT:- The Insolvency and Bankruptcy Board of India (IBBI) has amended the regulations for liquidation under the Insolvency and Bankruptcy Code (IBC) by which it effectively allowed the liquidator to assign or transfer a "not readily realizable asset" to any person in consultation with the stakeholders' consultation committee.

THE NEW REGULATIONS :

- To ensure quick liquidation of companies which are unable to find bidders under IBC, the liquidator can "assign or transfer a not readily realizable asset" to any person.

- The said transfer must be done in consultation with the stakeholders committee.

- The IBBI has also cleared that the definition of "a not readily realizable asset" would include any assets of the corporate debtor, which could not be sold through the available options.

- Financial creditors can, for the purpose of furnishing a record of default, submit their own book which establishes lapse of payment of debt by the corporate debtor.

- Financial creditors can also attach a copy of any court or tribunal's order which has, through an order, established that the company had defaulted on debt payments.

- Insolvency regulator has also amended the regulation to allow certain creditors, who do not want to wait for the liquidation process to be over, to exit the process by assigning or transferring the debt due to them, to other creditors of the company.

BENEFITS OF THE CHANGES IN LIQUIDATION NORMS:

- It provides the flexibility. Earlier, the liquidator used to have limited options for assets which could not have been readily or advantageously sold due to their peculiar nature.

- Speed up of the liquidation process.

- Liquidation norms are likely to benefit real estate companies the most.

CHALLENGES FOR THE NEW AMENDED REGULATIONS :

- Definition of "a not readily realizable asset" is contentious.

- Allowing the liquidator to distribute the un-disposed of assets among stakeholders, with the approval of the adjudicating authority.This will lead to creditors, be they financial or operational, challenging the distribution of the assets, and claiming that one or the other party has been favored by the liquidator.

Source: Indian Express

IRNSS

SECTION OF THE SYLLABUS-SCIENCE AND TECHNOLOGY

CONTEXT:- India's IRNSS is now part of World Wide Radio Navigation System

About IRNSS

- IRNSS is an independent regional navigation satellite system developed by India.

- It is designed to provide accurate position information service to assist in the navigation of ships in Indian Ocean waters.

- The Indian Space Research Organisation (ISRO) and its commercial wing ANTRIX developed the Indian

Regional Navigation Satellite System or IRNSS with its operational name of NAVIC (Navigation with Indian Constellation).

Highlight

- This will enable merchant vessels to use IRNSS for obtaining position information similar to GPS and GLONASS to assist in the navigation of ships in ocean waters within the area.

- This is a significant achievement of Ministry of Ports, Shipping and Waterways (MoPSW), Directorate General of Shipping (DGS) and Indian Space Research Organization (ISRO) towards "AatmaNirbhar Bharat".

Source – PIB

INDIA'S SULPHUR DIOXIDE (SO2) EMISSIONS

SECTION OF THE SYLLABUS- ENVIRONMENT

CONTEXT:- Toxic Sulfur Dioxide Emissions Fell Across India, Russia, and China Last Year–Dropping 6% Globally

Highlights

- India has recorded a 6% decline in emission of hazardous sulphur dioxide (SO2) in 2019 compared to 2018 - the first decline in four years.

- But by contributing 21% of global anthropogenic emissions of sulphur dioxide, India continues to be at the top in the list of big emitters for the fifth year in a row

- Emission Hotspots - The biggest emission hotspots in India are thermal power stations (or clusters of powerstations).

About Sulphur Dioxide

- Sulphur dioxide (SO2) is a colorless gas with a strong odour, similar to a just-struck match.

- It is formed when fuel containing sulphur, such as coal and oil, is burnt, creating air pollution.

- Most sulphur dioxide air pollution comes from the burning of coal and oil in power plants.

EDEN IAS - Educational Development & Enrichment Network

- It is also emitted by trains, large ships, and some diesel equipment that burns high sulphur fuel and also by volcanic eruptions.

- It is used as a food preservative for some fruits and vegetables.

- It becomes a liquid under pressure.

- Sulfur dioxide and nitrogen oxides affect the environment when they react with substances in the atmosphere to form acid rain.

Source – The Hindu

POVERTY AND SHARED PROSPERITY REPORT

Section of the syllabus - SOCIETY

Context:- The World Bank has released its biennial Poverty and Shared Prosperity Report.

Highlights

- Global extreme poverty is expected to rise in 2020 for the first time in over 20 years due to disruption ofthe COVID-19 pandemic.

- Extreme poverty defined as living on less than $1.90 a day is likely to affect between 9.1% and 9.4% of theworld's population in 2020.

- The report presents new estimates of COVID-19's impacts on global poverty and inequality.

- It shows that pandemic related job losses and deprivation worldwide are hitting already-poor and vulnerable people hard, while also partly changing the profile of global poverty by creating millions of "new poor

List of reports published by World Bank

1. Ease of Doing Business
2. World Development Report
3. Global Economic Prospect (GEP) report
4. Remittance Report
5. Ease of Living Index
6. India Development Update
7. Universal Health Coverage Index
8. The Service Trade Restriction Index

Source – World Bank website

SIMBEX 2020

Syllabus Section - Current events of national and international importance.

Context:- Indian Navy (IN) is scheduled to host the 27th edition of India - Singapore Bilateral Maritime Exercise SIMBEX-20 from 23 to 25 November 2020 in Andaman Sea.

About

The SIMBEX series of exercises between Indian Navy and Republic of Singapore Navy (RSN), being conducted annually since 1994, are aimed at enhancing mutual inter-operability and imbibing best practices from each other. The scope and complexity of these exercises has increased steadily over the past two decades to include advanced naval drills covering a wide spectrum of maritime operations.

SIMBEX 2020

- The 2020 edition of SIMBEX will witness participation by Indian Navy ships includingdestroyer Rana with integral Chetak helicopter and indigenously builtcorvettes Kamorta and Karmuk. In addition, IN submarine Sindhuraj and P8I maritimereconnaissance aircraft will also participate in the exercise.

- RSN will be represented by the 'Formidable' Class frigates 'Intrepid' and 'Steadfast' with integral S70B helicopter and 'Endurance' Class Landing Ship Tank 'Endeavour' in the exercise.

- The exercise, being conducted as a 'non-contact, at sea only' exercise in view of COVID-19 pandemic, highlights the high degree of mutual trust and confidence, synergy and cooperation in the maritime domain between the two friendly navies and maritime neighbours.

- SIMBEX-20 will witness the two friendly navies participate in advanced surface, anti-air warfare and anti-submarine warfare exercises including weapon firings, over three days of intensive joint operations at sea.

SIMBEX series of exercises exemplify the high level of co-ordination and convergence of views between India and Singapore, particularly in the maritime domain, towards enhancing the overall maritime security in the region and highlight their commitment to a rules-based international order.

SOURCE – INDIAN EXPRESS

EDEN IAS - Educational Development & Enrichment Network

MADHYA PRADESH FREEDOM OF RELIGION BILL,

Syllabus section: Polity and Governance

CONTEXT:- Recently the state government of Madhya Pradesh has proposed to table "The Dharma Swatantrya Bill 2020" in the forthcoming session of assembly. The Bill is also known as "Madhya Pradesh Freedom of Religion Bill, 2020". The bill is seen as a check against rising incidents of forced inter-faith marriages.

PROVISIONS/ KEY HIGHLIGHTS OF THE BILL

- The Bill proposes that use of inducements, seduction or fraudulent practices for marriage and religious conversions will attract heavy penalty and five years' imprisonment.

- The bill stipulates that such forced marriages are proposed to be null and void. The offence is considered as cognizable and non-bailable.

- Dharma Swatantrya Bill mandates the kin of the person to file a complaint, if forced to convert to other faith for the purpose of marriage.

- Under the Bill, those encouraging the offence would be considered as culprits just as the main accused.

- It also mandates that, those who are involved in religious conversion for marriages, they should inform the District Magistrates at least a month in advance, together with religious persons organizing the conversions.

ISSUES WITH THE BILL

- There is no legal sanction to political terms like 'love jihad'. Any legislation cannot be enacted based on an extra-legal concept.

- In any case, legislative interference in marriages involving consenting adults will be completely unconstitutional.

- Critics are saying that this proposal is a product of patriarchy and communalism.

THE CONCEPT OF LOVE JIHAD

- There is no legal definition of the concept of love jihad. However it is considered to be an Islamophobic assumption that the Hindu women are under the threat from Muslim youth seeking to win over girls for religious conversion in the name of marriage.

Source: The Indian Express

SENTINEL-6 MICHAEL FREILICH SATELLITE

Section of the syllabus – Science and tech

Why in News ?

NASA to launch satellite to track rising sea levels

About the Missile

- It will follow the effects of climate change on the world's oceans and gather data to improve weather forecasts.

- The satellite will continue NASA's three decades-long work to document rising sea levels.

- It will give scientists a more precise view of the coastlines than they've ever had from space.

- To measure sea levels, they'll beam electromagnetic signals down to the world's oceans and then measure how long it takes for them to bounce back.

Advantage : NASA scientists will be able to make higher-resolution observations much closer to shore with the new satellites, which will allow for more precise weather forecasts just before storms make landfall.

Working of the Satellites:

- As a big storm develops over the sea, the water buckles up.

- A satellite can pick up on that bubble of water rising and use that information for forecasts. The granular measurements could also be used to see how changes in sea level near coastlines might affect ship navigation and commercial fishing.

Impact of climate change

- Tides are creeping further ashore as a result of climate change.

- That's because water expands as it heats up and because the world's glaciers and ice sheets are melting.

- The encroaching water makes flooding and storm surges increasingly dangerous. It's also drowning entire islands and coastal communities.

Source –BBC News

EDEN IAS - Educational Development & Enrichment Network

DRACONIAN' KERALA ORDINANCE

WHY IN NEWS ?

Kerala Governor approved an ordinance (amendment to Kerala Police Act) promulgated by government in the state for punishing the "making, expressing, publishing or disseminating" of any "matters" which could be constructed "threatening, abusive, humiliating or defamatory

BACKGROUND:

In 2015, the Supreme Court in a landmark judgment (Shreya Singhal v. Union of India) on Section 66A of the IT Act had also struck down a similar provision of the Kerala Police Act for being violative of the right to freedom of speech and expression and for its vagueness.Section 66A would directly apply to the provision "as causing annoyance in an indecent manner suffers from the same type of vagueness and overbreadth..."

UNDER KEY PROVISIONS OF THE AMENDMENT TO THE KERALA POLICE ACT 2011

- Anyone creating or sending offensive message or that which is intended to offend or threaten another person, through any means of communication, is liable to face imprisonment of five years or fine of Rs 10,000 or both

- Police can slap criminal charges on citizens by interpreting any kind of communication through any medium as defamatory

- It finds even "injury to the mind" a reason for slapping criminal charges not just on the petition of the victim, but also anyone "in whom they have interest" or as a suo motu act by a police official.

WHY IS IT CONTROVERSIAL?

- The amendment has stretched the law to such an extent that every communication or publication has been left to the subjective interpretation of the police to slap criminal charges against anyone.

- The move comes on the heels of failed efforts by the government to control the narrative in the media, especially social media in the wake of discussions of ongoing investigations by centre agencies in the state.

Source: Times of India

Governance Part

SUSTAINABLE ALTERNATIVE TOWARDS AFFORDABLE TRANSPORTATION (SATAT) INITIATIVE

Section of the syllabus- Environment

Why in news ?

Government of India, under the SATAT initiatives envisages setting up of 5000 CBG plants by 2023-24 with production target of 15 MMT.

Benefits

- It facilitate the creation of new employment opportunities.

- Enhancing farmers' income towards further invigorating the rural economy.

- With inclusion of forest waste, Agri-waste, animal husbandry waste and marine waste, SATAT involves a multi-pronged approach

- It will contribute towards doubling farmer's income

- Reduction of GHG emission.

- Reduction in burning of agriculture residues,

SATAT Initiative

- SATAT (Sustainable Alternative Towards Affordable Transportation) initiative for boosting production and availability of CBG as an alternative and affordable clean fuel for transportation sector was launched by Government of India.

- The scheme envisages setting up of 5000 CBG plants by FY 2023-24.

- SATAT will establish an ecosystem for the production of Compressed Bio Gas from various waste and biomass sources in the country.

- The initiative is in line with the goals of AatmaNirbhar Bharat, Swachh Bharat Mission and boosting MSME sector.

Source - PIB

EDEN IAS - Educational Development & Enrichment Network

27 E-LOK ADALATS ORGANIZED IN 15 STATES BY LEGAL SERVICES AUTHORITIES

Syllabus Section- Indian Polity and Constitution

Why in news

- In the period of turbulence caused by the pandemic, Legal Services Authorities creatively adapted to the new normal and moved Lok Adalat to the virtual platform. From June, 2020 to October 2020, 27 E-Lok Adalats have been organized in 15 States wherein 4.83 lakh cases were taken up and 2.51 lakh cases disposed of resulting in settlement of Rs 1409 cr.

- Further, during November 2020, E-Lok Adalats have been organized in the States of Uttar Pradesh, Uttarakhand and Telangana so far wherein 16,651 cases were taken up and 12,686 disposed of resulting in settlement of Rs 107.4 cr.

Significance of e-Lok adalats

- The global pandemic has fundamentally changed the way in which the Legal Services Institutions function. To facilitate access to justice amidst the constraints placed by Covid-19 and various public health guidelines, the Legal Services Authorities have ingeniously integrated technology into its conventional methods of justice delivery.

- Online Lok Adalat popularly known as E -Lok Adalat is one such innovation of Legal Services Institutions where technology has been used to its maximum advantage and has become a platform to deliver justice at the doorstep of people.

- E- Lok Adalats are also cost effective as it eliminates the need for organisational expenses.

About Lok Adalats

- Organised by Legal Services Authorities, Lok Adalats (State as well as National) are an Alternative Dispute Resolution (ADR) mode wherein pre-litigation and pending cases in the courts are disposed on the basis of amicable settlement without any expense on the part of litigants.

- It is free of cost and expeditious method of bringing litigating parties on the same side and saving them from the rigours of trial under adversarial system of adjudication which is generally perceived to be time consuming, complex and costly.

- Lok Adalats are also instrumental in reducing the burden on arrears of the court disposal of long pending litigation between the parties.

Source- PIB

SITMEX-20 EXERCISE

Syllabus Section: Security and Defence/ International Relations

WHY IN NEWS

The trilateral naval exercise between Singapore, India and Thailand called the SITMEX- 20 was held in the Andaman Sea. The naval exercise was organized in a "Non-contact at sea only format" because of covid19 restrictions.

HIGHLIGHTS OF SITMEX-20 EXERCISE:

- This is the second edition of SITMEX exercise conducted between the navies of three countries.

- The Second edition of the SITMEX is being participated by the Indian Navy Ships including indigenously built Kamorta-class corvette (INS Kamorta) and INS Karmuk (Kora-class corvette).

- The 2020 edition of the exercise was hosted by Singapore navy-Republic of Singapore Navy.

- Republic of Singapore Navy was represented by the 'Formidable' Class frigate 'Intrepid' and 'Endurance' Class Landing Ship Tank 'Endeavour'.

- While the Thailand's Royal Thai Navy was represented by the 'Chao Phraya' Class frigate 'Kraburi'.

- The trilateral exercise also involved firing of the weapon on the surface, war at sea exercise, coordinated navigation operation and evolution of the seamanship

- The primary objective of the SITMEX-20 is to increase the interoperability between the three countries navies and it also enhances the multifaceted Maritime operations.

- First edition of SITMEX-19 : In September 2019, first edition of the SITMEX trilateral exercise was hosted by Indian Navy at the Port Blair

Source: the news on All India Radio (AIR)

EDEN IAS - Educational Development & Enrichment Network

CHINA'S CHANG'e-5 PROBE TO THE MOON

Syllabus Section: Science &Tech

WHY IN NEWS?

China plans to, launch (on Nov 24) a spacecraft to the moon's surface that aims to be the first to bring back lunar rocks in more than four decades.

ABOUT CHANG'e-5 MISSION

- Chang'e-5 probe, is the Chinese National Space Administration's (CNSA) lunar sample return mission. It is set to launch from the Wenchang Space Launch Center on Hainan Island in China.

- The goal of the mission is to land in the Mons Rumker(volcanic plain. in the OceanusProcellarum region on the moon's near side)region of the moon, where it will operate for one lunar day, which is two weeks long and return a 2 kg sample of the lunar rock possibly by digging about 2 metres deep into the surface of the Moon.

- The mission comprises a lunar orbiter, a lander and an ascent probe that will lift the lunar samples back into orbit and return them back to Earth.

- Chang'e-5 comprises a robotic arm, a coring drill, a sample chamber and is also equipped with a camera, penetrating radar and a spectrometer.

SIGNIFICANCE OF LUNAR SAMPLES

- Help in unravel the Moon's age, the formation of the Moon, the similarities and differences between the Earth and the Moon's geologic features and history and to see if the Moon can give scientists information about the solar system itself.

- Rocks found on the Moon are older than any that have been found on Earth and therefore they are valuable in providing information about the Earth and the Moon's shared history.(Accor to Lunar and Planetary Institute)

PREVIOUS LUNAR SAMPLE RETURN MISSIONS

Soviet Union: Luna Programme

US: Apollo Programme

Source: Indian Express

NATIONAL DIGITAL HEALTH MISSION

SECTION OF THE SYLLABUS- Government Schemes

Why in News ?

Digital health mission ready for nationwide roll-out soon.

About

- **Health ID**- Health account will contain details of every test, every disease, the doctors visited, the medicines taken and the diagnosis. This information will be very useful as it is portable and easily accessible even if the patient shifts to new place and visits a new doctor. The health ID card is created with details like Aadhar and mobile number and generate unique ID for each individual.

- It voluntary healthcare programme which will integrate doctors, hospitals, pharmacies, insurance companies and make a digital health infrastructure.

- It will bring cheers to the poor and disadvantaged.

- The national digital health mission includes health ID, digidoctor, telemedicine, ePharmacy , healthcare registry and personal health records digitally stored.

Aim of the Mission: To provide quality health care is implementing Pradhan Mantri Jan arogyayojana- Ayushman Bharat scheme providing free health care to almost half the population of the country.

Current scenario of heath sector:

Health service sector is most crucial especially during a pandemic outbreak. The medical services are made accessible to poor and rural people through teleconsultancy by government. eSanjeevani scheme is getting popular during covid 19 lockdown as people are not able to travel to hospitals and doctors are busy treating covid 19 patients.

Conclusion :

there should be reforms in health care system , Poor people are not getting good medical care and it is necessary to set up AIIMS like medical institutes in every district so that villagers don't have to travel much to get good health care.

Source- The Hindu

EDEN IAS - Educational Development & Enrichment Network

5 TECHNOLOGIES RECOMMENDED BY THE TECHNICAL COMMITTEE OF JAL JEEVAN MISSION

Syllabus Section- Science and Technology

Why in news

A Multi-disciplinary Technical Committee set up under the Jal Jeevan Mission has recommended 5 technologies in order to provide field-level solutions to the states.

The 5 technologies are:

1-Johkasou technology

- It is one of the five technologies in Drinking Water and Sanitation to provide Field Level Solutions to the States.

- It is recommended by a multi-disciplinary Technical Committee in the Department of Drinking Water and Sanitation, Ministry of Jal Shakti.

- It has inbuilt sewage and Kitchen and bath water treatment systems.

- It has an advanced anaerobic-aerobic configuration that can be installed underground.

2- GrundfosAQpure

- It is a solar energy-based water treatment plant which uses ultra-filtration as well as optimised for producing drinking water in local communities

3-Janajal Water on Wheel

1. It is an Internet on Things based technology that delivers safe water to the doorsteps of households to ensure better living and it is GPS enabled.

4-Presto Online Chlorinator

1. It is a non-electricity dependent online chlorinator that removes bacterial contamination.

5- FBTec

1. It is a decentralized sewage treatment system.

About Jal Jeevan Mission

1. It aims to provide 55 litres of water per person per day to every household by 2024.

2. The funding pattern of Jal Jeevan Mission is 50:50 between the centre and the states.

Source- PIB

PORTAL FOR DEFENCE LAND MANAGEMENT SYSTEM (LMS)

Section of the syllabus –society

Why in News ?

Defence Minister launched a portal for defence land management system (LMS) that is expected to bring greater transparency, efficiency and speed in dealing with land management matter.

About :

- Developed by the Department of Defence (DOD) in conjunction with the Directorate General Defence Estates (DGDE) and Armed forces

- The Intranet portal will digitise all requests of defence land management received by the DOD in the future.

- data for cases since 2016 have already been captured and are available in the portal. Progressively, data of prior period will also be entered in the portal which is meant only for departmental use and it is not open for the public.

- With the integration of GIS (Geographic Information System) based tools, it will improve the decision-making process by removing duplication and unnecessary communication between various stakeholder groups involved in the decision-making process.

- The software, apart from capturing the textual details of all proposals relating to defence management, integrates these textual details with RakshaBhoomi software as well as other relevant GIS-layers which include satellite imagery of the area, other amenities

Need :

- To bring in greater speed, transparency and efficiency into the LMS of the DOD.

- Defence Land encroachment is considered as the major issue in defence land management

- Encroachments of defence lands are more common near airfields of Indian Air force. Such encroachments have contributed to 10% fighter jet accidents.

- Indian Govt is strengthening defence land management system by means of digitisation of land records, demarcation, survey, land audit, verification and in-

EDEN IAS - Educational Development & Enrichment Network

spection under the Cantonment Executive Officers

Benefits : The portal will improve the decision-making process by removing unnecessary communication between the stakeholders.

Source – The Hindu

PILIBHIT TIGER RESERVE GETS TX2 GLOBAL AWARD FOR DOUBLING THE TIGER POPULATION

Syllabus Section: Environment, Ecology and Biodiversity

WHY IN NEWS?

The Pilibhit Tiger Reserve (PTR) and the Uttar Pradesh Forest department won the first-ever international award called TX2. The tiger reserve has won the award in the context of doubling the number of tigers in four years.

KEY HIGHLIGHTS

- There was a set target of doubling the number of tigers within 10 years. But, the Pilibhit Tiger Reserve has completed the target in just four years starting from 2014.

- The target was set by the partners of the award in 2010. The partners are Global Tiger Forum, United Nations Development Programme, Conservation Tiger Standards and Lion's Share.

- The tiger reserve became the first to receive the award among the 13 tiger range countries.

- The reserve had 25 tigers in the year 2014. Now, it increased up to 65 in 2018. Figure does not include the tiger cubs below the age of one year.

ABOUT TX2 GLOBAL AWARD

- The TX2 award was virtually presented to the principal chief conservator of forest (wildlife) of the state.

- The award was presented by United Nations Development Program (UNDP) head of the ecosystems and biodiversity.

WHAT ARE THE THIRTEEN TIGER RANGE COUNTRIES?

- There are thirteen tiger range countries where the tigers still roam around freely. The criteria of "roam

around freely" is important because tigers need huge territories.

- The tiger range countries are India, Bhutan, Bangladesh, Cambodia, Indonesia, China, Russia, Malaysia, Laos, Thailand, Myanmar, Vietnam and Nepal

ABOUT PILIBHIT TIGER RESERVE

- This tiger reserve is situated in Pilibhit and Shahjahanpur Districts of Uttar Pradesh. The reserve forms the part of the Terai Arc Landscape.

- It is situated in the upper Gangetic Plain Biogeographic Province. Rivers like Sharda, Chuka, Mala and Khannot originates from the tiger reserve.

- The reserve is home to sal forests, tall grasslands and swamp. These are maintained by periodic floods from rivers.

Source: DD News

ATAL ACADEMY FACULTY DEVELOPMENT PROGRAMMES

Syllabus Section- Polity and Governance

Why in the news?

- Union Education Minister has recently inaugurated 46 online AICTE Training and Learning (ATAL) Academy Faculty Development Programmes (FDPs) to train teachers of higher education institutions associated with All India Council of Technical Education (AICTE) in emerging areas in technology.

About Atal Faculty Development Programmes (FDPs)

- The FDPs will be conducted in 22 Indian states.

- The online FDPs will be conducted according to the new National Education Policy (2020).

- The main objective of ATAL Academy is to provide quality technical education in the country and to promote research and entrepreneurship through training in various emerging fields. IITs, IIITs, NITs CU and research labs are organizing these ATAL FDPs.

- These programmes will help Indian students get acquainted with new technological developments and choose it as a career.

EDEN IAS - Educational Development & Enrichment Network

Achievements

- Book of World Records, London acknowledges the training of over one lakh people in 1,000 programs under 'FDP' as a world record, under which 1,000 online FDPs in over 100 emerging areas will benefit one lakh faculty members across premier institutions like IITs, NITs, and IIITs.

- Out of 1000, 499 FDPs have already been completed with more than 70,000 faculty members already trained.

- In 2019-20, 185 five-day face-to-face FDPs in nine thrust areas -- Artificial Intelligence, Internet of Things, Block-chain, Robotics, Quantum Computing, Data Sciences, Cyber Security, 3D Printing & Design, and Augmented Reality/Virtual Reality -- benefited around 10,000 participants.

Source- PIB

DESALINATION PLANT IN MUMBAI

Syllabus section- Environment and Science and Technology

Why in news?

Worldwide, desalination is seen as one possible answer to stave off water crisis. On Monday, Maharashtra government announced the setting up of a desalination plant in Mumbai, becoming the fourth state in the country to experiment with the idea.

What are desalination plants?

- A desalination plant turns salt water into water that is fit to drink. The most commonly used technology used for the process is reverse osmosis where an external pressure is applied to push solvents from an area of high-solute concentration to an area of low-solute concentration through a membrane.

- The microscopic pores in the membranes allow water molecules through but leave salt and most other impurities behind, releasing clean water from the other side. These plants are mostly set up in areas that have access to sea water.

How widely is this technology used in India?

- Desalination has largely been limited to affluent countries in the Middle East and has recently started making inroads in parts of the United States and Australia.

- In India, Tamil Nadu has been the pioneer in using this technology, setting up two desalination plants near Chennai in 2010 and then 2013.

- The two plants supply 100 million litres a day (MLD) each to Chennai. Two more plants are expected to be set up in Chennai. The other states that have proposed these plants are Gujarat, which has announced to set up a 100 MLD RO plant at the Jodiya coast in Jamnagar district.

- There are also proposals to set up desalination plants in Dwarka, Kutch, Dahej, Somnath, Bhavnagar and Pipavav, which are all coastal areas in Gujarat. Andhra Pradesh, too, has plans of setting up a plant.

What is the need to set up a desalination plant in Mumbai?

- According to the BMC's projection, the population of Mumbai is anticipated to touch 1.72 crore by 2041 and accordingly, the projected water demand would be 6424 MLD by then.

- Currently, BMC supplies 3850 MLD as against the requirement of 4200 MLD each day. In 2007, a state government-appointed high-level committee had suggested setting up desalination plants in Mumbai, however, over the years the authorities have avoided building the project claiming that the cost is prohibitive.

- The project is proposed to be set up on 25 to 30 acres of land at Manori and will have a capacity of 200 MLD. It will take about two and a half to three years to complete and is expected to cost around Rs 1,600 crore. The BMC will be floating tenders for building the project.

Is it ecologically safe?

- The high cost of setting up and running a desalination plant is one reason why the Maharashtra government has over the last decade been hesitant in building such a plant. Desalination is an expensive way of generating drinking water as it requires a high amount of energy.

- The other problem is the disposal of the by-product — highly concentrated brine — of the desalination process. While in most places brine is pumped back into the sea, there have been rising complaints that it ends up severely damaging the local ecology around the plant.

Source- Indian Express

EDEN IAS - Educational Development & Enrichment Network

HIMACHAL PRADESH GOVERNMENT LAUNCHED HIM SURAKSHA ABHIYAN

Syllabus Section: Polity and Governance/ Government Schemes & Initiatives.

WHY IN NEWS?

The Himachal Pradesh government has launched "Him Suraksha Abhiyan" to sensitize the people regarding Covid-19 pandemic and the campaign also intends to collect the information regarding symptoms of diseases like TB, Leprosy, sugar and blood pressure by door to door campaign throughout the State.

KEY HIGHLIGHTS

- The campaign is being launched from 25th November and will continue till coming 27th December, across the State.

- Under the campaign not only symptomatic patients with probable Covid-19 would be detected but patients with other ailments would also be listed.

- Under this Abhiyan about 8000 teams comprising of Health, Ayurveda, Women and Child Development, Panchayat Raj Departments, District Administration and NGOs would be involved in this campaign.

- It would ensure door to door data collection of health parameters of the people.

Source: The News on All India Radio (AIR)

CHINA'S NEGATIVE YIELD BONDS ARE IN DEMAND

Syllabus Section: Economy

WHY IN NEWS?

Last week, China sold negative-yield debt for the first time, and this saw a high demand from investors across Europe.

NEGATIVE-YIELD BONDS

- These are debt instruments.

- It offer to pay the investor a maturity amount lower than the purchase price of the bond.

- These are generally issued by central banks or governments, and investors pay interest to the borrower to keep their money with them.

REASON FOR HUGE DEMAND

- China's 5-year bond was priced with a yield of –0.152%, and the 10-year and 15-year securities with positive yields of 0.318% and 0.664%.Positive returns are a big attraction at a time when interest rates in Europe have dropped significantly, even against minus —0.15% yield on the 5-year bond issued by China, the yields offered in safe European bonds are much lower, between –0.5% and —0.75%..

- While the majority of the large economies are facing a contraction in their GDP for 2020-21, China is one country that is set to witness positive growth in these challenging times: its GDP expanded by 4.9% in the third quarter of 2020.

- While Europe, the US and other parts of the world are facing a second wave of Covid-19 cases, China has demonstrated that it has controlled the spread of the pandemic and is therefore seen as a more stable region

FACTOR DRIVING THIS DEMAND

- Massive amount of liquidity injected by the global central banks after the pandemic began that has driven up prices of various assets including equities, debt and commodities.

- Investors could also be temporarily parking money in negative-yielding government debt for the purpose of hedging their risk portfolio in equities.

- Global central banks have injected an estimated more than $10 trillion of liquidity through various instruments in the financial system — which is finding its way into various assets in the economy.

Source : Indian Express

ISRO'S VENUS MISSION

Syllabus Section: Science and tech

WHY IN NEWS?

The Indian Space Research Organisation (ISRO) has short-listed 20 space-based experiment proposals, including from France, for its proposed Venus orbiter mission 'Shukrayaan' to study the planet for more than four years.

ABOUT MISSION

Aim: Scientific objectives of ISRO's Venus mission are investigation of the surface processes and shallow sub-

surface stratigraphy; and solar wind interaction with Venusian Ionosphere, and studying the structure, composition and dynamics of the atmosphere.

- Earlier ISRO was planning June, 2023 for the country's first mission to Venus. "But delays arising from the pandemic situation",

- Future launch opportunity is either in 2024 or 2026, because optimal launch window (when Venus is closest to the Earth) comes about every 19 months.

- ISRO has received 20 payload (scientific instruments) proposals, including collaborative contributions from Russia, France, Sweden and Germany, are currently under review.

- The one already selectedis France's VIRAL instrument (Venus Infrared Atmospheric Gas Linker) co-developed with the Russian space agency Roscosmos, and the LATMOS atmospheres, environments and space observations laboratory attached to the French national scientific research centre CNRS.

- Swedish Institute of Space Physics is also engaged with India's mission to Venus.

FACTSTO KNOW:

- Exploration of Venus began in the early 1960s. Venus has been explored by flyby, orbiter, a few lander missions and atmospheric probes.

- Venus is often described as the "twin sister" of the Earth because of the similarities in size, mass, density, bulk composition and gravity.

- It is believed that both planets share a common origin.

Source : Financial Express

FRONTIER HIGHWAY PROJECT

Syllabus section –Internal security

Why in news?

Since the Ladakh stand-off between the Indian and Chinese armies in May, Arunachal Pradesh has been pushing for the ambitious Frontier Highway project along the "India-Tibet border" for facilitating faster movement of troops if a war-like situation arises.

About

- It is also called as the Arunachal Frontier Highway and Mago-Thingbu–Vijaynagar Border Highway.

- The 2,000-kilometre-long (1,200 mi) road follows the McMahon Line,[2][3] the international border between India and China

- The highway along the China border would accompany the Trans-Arunachal Highway (through the middle) and the Arunachal East-West Corridor (in the foothills along the Assam border) as major highways spanning the whole state, pursuing the Look East connectivity concept.

- The highway will pass through the BCIM Economic Corridor proposed by the Bangladesh-China-India-Myanmar Forum for Regional Cooperation (BCIM Forum),[1][3] a multi-mode corridor that includes a highway from Calcutta in India's West Bengal state to Kunming in China's Yunnan province

- The highway will cross the Dibang Wildlife Sanctuary, which may raise environmental issues.

Need to Establish

Various sources in the Government of India and media have mentioned the following reasons to build the highway:

- Highway will generate employment and increase tourism in these hard-to-reach areas.

- Highway will check Chinese incursions into Indian territory.

- China has built an extensive road and railway network on its side, posing a security risk to India as the region is relatively inaccessible on the Indian side.

Source- The Hindu

RE-INVEST 2020

Syllabus Section- Environment

Why in News ?

PM to inauguratethe virtual 3rd Global Renewable Energy Investment Meeting and Expo (RE-Invest 2020),the summit is organised by the Ministry of New and Renewable Energy

Theme: The theme for RE-Invest 2020 is 'Innovations for Sustainable Energy Transition

About :

- It will feature a 3-day conference on renewables and future energy choices, and an exhibition of manufacturers, developers, investors and innovators.

EDEN IAS - Educational Development & Enrichment Network

- It showcases India's renewable energy potential and the Government's efforts to scale up capacity to meet the national energy requirement in a socially, economically and ecologically sustainable manner.

Aim:

- It aims to accelerate the worldwide effort to scale up development and deployment of renewable energy and connect the global investment community with Indian energy stakeholders.

- It aims to build upon the success of the first two editions held in 2015 and 2018 and provide an international forum for investment promotion in renewable energy

SOURCE - PIB

CYCLONE NIVAR

Syllabus section - Geography

Why in news ?

Cyclone Nivar is likely to cross Tamil Nadu and Puducherry coasts between Karaikal and Mamallapuram with a wind speed of 120-130 kmph, gusting up to 145 kmph.

About:

- India Meteorological Department (IMD) forecast and requirements projected by the state authorities

- NDRF is working in close coordination with district and local administrations.

- NDRF is spreading a sense of security amongst the communities that teams are available at their service and will remain present in the area until the situation returns to normal, so that the public does not panic.

What is Cyclone ?

- cyclone is a large scale air mass that rotates around a strong center of low atmospheric pressure.

- Cyclones are characterized by inward spiraling winds that rotate about a zone of low pressure.

- The largest low-pressure systems are polar vortices and extratropical cyclones of the largest scale.

- They use warm, moist air as fuel and therefore form over warm ocean waters near the equator.

Source- PIB

CHANGE e'4 PROBE

Syllabus section – science and tech

Why in News?

China's Chang'e-5 lunar mission will become the first probe in over four decades to bring back samples of lunar rock from a previously unexplored portion of the Moon.

About:

- It is the Chinese National Space Administration's (CNSA) lunar sample return mission that is set to launch from the Wenchang Space Launch Center on Hainan Island in China.

- The mission comprises a lunar orbiter, a lander and an ascent probe that will lift the lunar samples back into orbit and return them back to Earth.

- Chang'e-5 comprises a robotic arm, a coring drill, a sample chamber and is also equipped with a camera, penetrating radar and a spectrometer

Goal:

The goal of the mission is to land in the Mons Rumker region of the moon, where it will operate for one lunar day, which is two weeks long and return a 2 kg sample of the lunar rock possibly by digging about 2 metres deep into the surface of the Moon.

What do lunar samples tell us?

- Lunar samples can help to unravel some important questions in lunar science and astronomy, including the Moon's age, the formation of the Moon, the similarities and differences between the Earth and the Moon's geologic features and history and to see if the Moon can give scientists information about the solar system itself.

- As per the Lunar and Planetary Institute, rocks found on the Moon are older than any that have been found on Earth and therefore they are valuable in providing information about the Earth and the Moon's shared history

Source- Indian Express

EDEN IAS - Educational Development & Enrichment Network

US WITHDRAWS FROM OPEN SKIES TREATY

Syllabus Section- Events of International importance

The United States has formally withdrawn itself from the Treaty of Open Skies. The US Department of State spokesman informed on November 22, 2020 that six months had passed since the US notified the countries party to an agreement about its decision to withdraw.

What is the Treaty of Open Skies?

- Negotiated in 1992 and signed on January 1, 2002, the Treaty of Open Skies is an agreement that seeks to foster trust by allowing unarmed aerial surveillance flights over the entire territory of the participating countries.

- The treaty was signed by 35 nations including the United States, United Kingdom, France, Germany, Canada, Spain, Greece, Italy, Portugal and Russia.

Open Skies Treaty Benefit

- Under the treaty, all participating countries can observe one another's militaries through aerial surveillance.

- The treaty allows the participating nations to fly over the entire territory of the party state and no territory can be declared off-limits by the host nation.

- Under the treaty, each country has an annual quota for how many flights it must accept and how many it can conduct. The overflights are largely determined by the size of the participating nations.

- All signatories of the treaty have the right to conduct an equal number of observation flights over any party nation that overflies it and multiple states-parties can take part in one overflight.

Open Skies Treaty Signatories

The signatory nations of the treaty include the US, UK, Russia, Canada, France, Germany, Spain, Portugal, Italy, Turkey, Denmark, Finland, Sweden, Croatia, Belgium, Belarus, Bulgaria, Bosnia and Herzegovina, the Czech Republic, the Netherlands, Hungary, Norway, Poland, Romania, Ukraine, Slovenia, Georgia, Estonia, Slovakia, Latvia, Lithuania, Iceland and Luxembourg. Kyrgyzstan is the only nation that has signed the treaty but not ratified it.

Significance

- The Open Skies Treaty aims to boost mutual understanding among the participants by giving all of them an equal opportunity to gather relevant information regarding the military forces of the other nations. The treaty also promotes openness and transparency of military forces and activities.

- The basic idea behind the treaty is to prevent conflict, as the more rival militaries will know about each other, the lesser chances there are of conflict.

Why did the US withdraw from the Open Skies Treaty?

- US President Donald Trump had claimed in May that Russia has not stuck to its part of the deal. So, Trump had stated that the US will pull out until Russia adheres to the treaty.

- As per the Trump administration, Russia continues to violate its obligations under the treaty and implements it in ways that contribute to military threats against the United States and its allies and partners.

- According to the US, Russia has refused access to observation flights within a 10-kilometer corridor along its border with Abkhazia and South Ossetia.

- Russia has also reportedly restricted flight distance over Kaliningrad, which a base of its short-range and medium-range nuclear-tipped missiles.

- In 2019, Russia had also denied a shared observation flight by US and Canada over a large Russian military exercise in 2019.

- Russia also designated an Open Skies refueling airfield in Crimea, Ukraine. This was seen by the US as an attempt by Russia to advance its claim of the annexation of the peninsula, which the United States does not accept.

Background

- The US withdrawal from the Open Skies Treat is the third US pullout from an arms control pact since Donald Trump took the office of the President of the United States. Critics have called the move a major blow to US allies, as Russia has shown more interest in aerial surveillance of European states than the US.

- The Russian Foreign Minister Sergei Lavrov had earlier this month demanded written assurances from remaining NATO members in the treaty that any data they gather under the treaty will not be shared with the US. He had also clarified that the US bases in Europe will not be exempt from Russian surveillance missions.

Source- Indian Express and Jagran Josh

EDEN IAS - Educational Development & Enrichment Network

GERMANY'S NEW BOARDROOM QUOTA FOR WOMEN

Syllabus Section: Society

WHY IN NEWS?

Germany is planning to impose a mandatory quota for the number of women working in senior management positions in the country's listed firms.

ABOUT NEW BOARDROOM QUOTA

- In case executive boards of the listed companies have more than three members, one of them must be a women.

- Companies in which the federal government has a stake will require a supervisory board quota of at least 30 percent and minimum participation in executive boards.

NEED FOR SUCH A QUOTA IN GERMANY

- Since 2015, Germany, which Europe's biggest economy, has had a voluntary quota of 30 per cent for women on supervisory boards.

- The new provision will build upon this already existing voluntary quota.

Source: Indian Express

NATIONAL PORTAL FOR TRANSGENDER PERSONS AND GARIMA GREH

Syllabus section: POLITY AND GOVERNANCE.

WHY IN NEWS?

Union Minister for Social Justice & Empowerment e-launched a "National Portal for Transgender Persons" and e-inaugurated a "Garima Greh: A Shelter Home for Transgender Persons" in Vadodara, Gujarat on 25th of November.

ABOUT NATIONAL PORTAL FOR TRANSGENDER PERSONS

- The National Portal for Transgender Persons is an end to end online process. The transgender persons can avail the services offered by the portal from anywhere in the country.

- The Portal would help a transgender person in applying for a Certificate and Identity card digitally from anywhere in the country.

- The most important benefit is that it helps the transgender person to get the I-Card without any physical interface and without having to visit any office.

- This portal will help a lot of people from the community to come forward and get Transgender Certificate and Identity Cards as per their self-perceived identity which is an important provision of The Transgender Persons (Protection of Rights) Act, 2019.

- National Portal for Transgender Persons has been developed within 2 months of Notification of Transgender Persons (Protection of Rights) Rules, 2020 on 29 September, 2020.

ABOUT GARIMA GREH

- Garima Greh is a shelter Home for Transgender Persons and it will be run in association with Lakshya Trust, a Community based organization entirely run by the Transgenders.

- The purpose of the Shelter Home is to provide shelter to Transgender persons, with basic amenities like shelter, food, medical care and recreational facilities.

- Besides, it will provide support for the capacity-building/skill development of persons in the Community, which will enable them to lead a life of dignity and respect.

Source: PIB

LOKVIRASAT A FESTIVAL OF FILMS ON FOLK ART AND PAINTING

Syllabus Section- Indian Art and Culture

Why in news

Films Division, as part of 'art-outreach' initiative, has been presenting select package of films on Indian art and heritage as curated online festivals during the last few months. After the overwhelming response to Raagotsav and Nrityanjali, festivals focusing on Indian classical music and dance respectively, an exclusive bouquet of documentary films on folk art and paintings - LokVirasat - is being showcased, between November 27–29, 2020 on FD website and You Tube channel.

About

- LokVirasat will begin with Bastar - Rhythm of Progress , a film depicting the life of tribals and their folk art which are increasingly getting the urban patronage.

- The other films being streamed include The Kingdom of God , on the great Indian heritage of art and culture with focus on various folk art traditions, Bhavai - Fading Memories , a film on Bhavai - a folk art of Gujarat, Naman – Khele , a film on the ancient folk art performed in Ratnagiri, Maharashtra, SahiJata, The Fusion Cult , a film on the unique fusion of muscle and music in the form of folk art on the back-drop of the ancient Orissa town of Puri, Therukoothu : Dancing For Life , a film depicting the age old Tamil folk art, Echoes of the Past Rahman Baruah), exploring the unique folk art form of Behrupiyas from historical perspective extending to the contemporary state, Folk Paintings of Orissa , a film on the varied and rich folk paintings of Orissa and the dedicated work of folk painters and Kalighat Paintings, presenting a brief history of the unique Kalighat paintings.

- Warli Paintings , a film about the traditional art evolved by the Warlitribals living in the Thane District in Maharashtra, Madhubani Paintings, a film on the famous painting of Madhubani, Patachitra, a film on the art of scroll painting practiced by village folks across India, Pichwai, a film that traces the origin of Nathdwara School of painting complete the festival package.

Source - PIB

COMMUNITY DEVELOPMENT PROJECTS IN AFGHANISTAN

Syllabus section- International Relations

Why in news

India on November 26, 2020 unveiled Phase-IV of High Impact Community Development Projects for Afghanistan worth USD 80 million.

The new development initiatives include 150 community projects and a dam to supply water to Kabul.

Key Highlights

- External affairs minister also announced an agreement with Afghanistan to build the Shahtoot Dam in the Kabul river basin with the purpose of providing drinking water to two million residents of Kabul city.

- He informed that India had earlier built the 202-kilometer Phul-e-Khumri transmission line in 2009 to provide electricity to Kabul city.

- India would also launch new community development projects USD 80 million under the Phase-IV of High Impact Community Development initiative.

- The initiative is to focus on smaller projects that can be completed speedily to benefit people in villages and districts.

- Dr Jaishankar emphasized India's long term commitment to Afghanistan's development and the benefit of its people as a contiguous neighbor and strategic partner.

- India would also launch new community development projects USD 80 million under the Phase-IV of High Impact Community Development initiative.

- The initiative is to focus on smaller projects that can be completed speedily to benefit people in villages and districts.

- Dr Jaishankar emphasized India's long term commitment to Afghanistan's development and the benefit of its people as a contiguous neighbor and strategic partner.

India's development initiatives in Afghanistan

- The EAM shared that India's development portfolio in Afghanistan to date amounts to over USD 3 billion.

- Dr Jaishankar further highlighted that India has left no part of Afghanistan untouched by its 400 plus development projects in all 34 of Afghanistan's provinces.

India's developmental aid for Afghanistan can be categorised under five types:

1. Large infrastructure projects such as the 218-km Delaram-Zaranj road to provide alternative connectivity through Iran

2. India-Afghanistan friendship dam and the Parliament building

3. Human resource development, humanitarian assistance

4. High impact community projects

5. Enhancing trade and investment through air and land connectivity

Source- Jagran(English)

EDEN IAS - Educational Development & Enrichment Network

SDG INVESTOR MAP

Syllabus section- Current events of national and international importance/Environment

Why in news?

UNDP and Invest India have launched the SDG Investor Map for India, laying out 18 Investment Opportunities Areas (IOAs) in six critical SDG enabling sectors, that can help India push the needle forward on Sustainable Development.

Significance

- India occupies a key role in determining the success of the SDGs, globally. Invest India is pleased to have partnered with UNDP India to develop the first-ever 'SDG Investor Map for India'.

- This initiative is an instrumental stride in India's development trajectory, and I believe it couldn't have come at a better time.

- India hopesits data-backed research and insights serve as useful blueprints to understand how best the SDG financing gap can be narrowed in India.

- The Map comes at a critical time for India. With the emergence of the COVID-19 pandemic, the financing gap for the SDGs in India has only widened further and decades of development progress is nearly on the verge of reversal.

- Investing in the SDGs at this point is crucial to 'Building Back Better' and making the economy and our societies more resilient and sustainable. Enhanced productivity, technology adoption and increased inclusion are all critical factors that this map uses to identify the most attractive sectors for investors.

- By mapping the overlaps and gaps between public sector priorities and private sector interest, the SDG Investor Map lays out pathways that can bring together private-sector investment and public sector support for 6 SDG-enabling sectors including Education, Healthcare, Agriculture & Allied Activities, Financial Services, Renewable Energy & Alternatives and Sustainable Environment.

- These sectors and the IOAs within them were selected through a rigorous analytical process that included extensive consultations with a number of major domestic and international investors, government stakeholders and think-tanks. This ensured that the Map's findings were truly reflective of market sentiment.

Key highlights of the SDG Investor Map:

- Of the 18 IOAs identified, 10 are already mature investable areas that have seen robust Private Equity and Venture Capital activity, and feature companies that have been able to unlock scale and demonstrate profitability. The remaining eight IOAs are emerging opportunities, which have seen traction from early-stage investors.

- The map has also identified eight White Spaces, which have seen investor interest and have the potential to grow into IOAs within a 5-6-year horizon. However, these require further policy support and private sector participation to mature into commercially attractive IOAs.

- Nearly 50% of the shortlisted IOAs have historical investments that have yielded IRRs in excess of 20%.

- 84% of the IOAs have investment timeframes ranging from the short term (less than 5 years) to the medium-term (between 5- 15 years).

The observations from the map present a strong case for investing in SDG enabling sectors and IOAs, bridging the gap between high-level development targets and the need for commercially viable returns. Moreover, investing in the SDGs is crucial to 'Building Back Better' from COVID-19 and enhancing India's resilience to future threats. Investing in opportunities that enhance employment and employability, push forward the inclusion of underserved communities and leverage technology will be of essence to India as it grapples with the challenges of a post-COVID economy.

83% of the identified IOAs address job creation and industrialization needs, 70% focus on inclusive business models and 50% leverage digital technologies to deliver commercial returns and impact at scale. Notable IOAs include 'Online Supplementary Education for K12' (Education), 'Tech-Enabled Remote Care Services' (Healthcare), 'Digital Platforms to service input/output needs of farmers to enable easy access to markets' (Agriculture) and 'Access to credit by Micro, Small and Medium Enterprises and Low-Income Groups especially through digital platforms for Income Generating Purposes' (Financial Services).

Source- PIB

CLOUD COVER IN WESTERN HIMALAYAN REGION

Syllabus Section- Physical Geography

Why in news

For the past few days, Chandigarh and its neighbouring states have been experiencing unusually cold days although the night temperatures are normal. The maximum or day temperatures in the region are several notches below the long period average or normal value, while the minimum or night temperatures are more or less normal.

Note- In Haryana, cold day conditions have been observed at isolated places – a cold day is declared when the maximum daytime temperature of a weather station in the plains goes below 16°C. In Himachal Pradesh, the maximum temperatures are five to six degrees below normal.

Why is this so?

- Meteorological officials have attributed the trend to the cloud cover in the region which was absent until a few days ago. It is the result of a western disturbance, which has brought about a spell of precipitation in the northwest Himalaya.

- During the day, clouds obstruct the heat from the sun from reaching the surface of the earth, reflecting some of it back into space. This lowers the temperature. Cold winds blowing down from snow-bound areas in the mountains also contribute to the cooling effect.

- At night, however, clouds act like blankets – they help retain some of the heat energy radiated back by the earth's surface. An overcast weather at night, thus, increases the greenhouse warming.

What happens when the cloud cover goes away?

- The reverse. After Thursday, dry conditions and a clear sky are expected to prevail. This will increase the day temperatures, but nights will become cooler.

How did the clouds get here?

- In northern India, winter rains and clouds are generally caused by moisture-bearing wind systems called western disturbances, which originate and gather moisture over the Mediterranean region and flow eastwards towards the Indian subcontinent.

- When some of these winds run into mountains of the northwest Himalaya, they are forced upward. At higher altitudes, the temperatures drop and water vapour gets condensed. This leads to cloud formation and eventually rain and snow.

What causes cold winters in North India?

- Billions of years ago, a big heavenly body smashed into the then young earth and caused a tilt in the axis of our planet around which it rotates. This tilted axis remains in the same direction as the earth revolves around the sun.

- So when the earth's north pole is facing the sun, solar rays hit the northern hemisphere directly and lead to rise in temperatures and the summer season. After half a revolution or six months, the same pole faces away from the sun and the northern hemisphere receives the sun's rays obliquely.

- As a result, the rays spread over a greater surface area and are low in intensity, leading to the reduced temperatures and the winter season.

- The climate of an area depends on a number of other geographical factors. In north India, the huge temperature difference between summers and winters is due to its continentality. Air from oceans moderates the temperature as it moves onshore, but this effect is missing in continental interiors.

- As a result, north India has greater seasonal differences as compared to peninsular India.

- Temperature also reduces rapidly with altitude, and thus, the Himalayan region is colder still.

Source- Indian Express

GANGA EXPRESSWAY GREEN FIIELD PROJECT

Syllabus Section: Polity and Governance / Government initiatives

WHY IN NEWS?

The Uttar Pradesh government has approved its ambitious Ganga Expressway Greenfield Project on November 26, 2020. Total length of the project is 594 kilometers. The project would cost rupees 36,402 crore.

ABOUT THE PROJECT

- It is a proposed six lane Greenfield expressway proj-

EDEN IAS - Educational Development & Enrichment Network

ect in Uttar Pradesh and it was launched by the Uttar Pradesh Chief Minister on January 29, 2019.

- The government said that it would be the longest expressway in the world. The expressway will provide for better connectivity of the Prayagraj (Allahabad) to Western Uttar Pradesh.

- The 594 Kms Expressway will be completed in two phases.

- Phase-1 of the project would pass through 13 districts including Meerut, Amroha, Bulandshahr, Budaun, Shahjahanpur, Kannauj, Unnao, Rae Bareli, Pratap garh. It will end at Malawan Khurd village in Prayagraj District.

- The Phase-2 of the project would consists of a 110 km long section connecting Tigri to nearby Haridwar and a 314 km section that will connect Prayagraj to Ballia. Phase 1 of the project would be completed by 2025.

ABOUT THE EXPRESSWAY PROJECTS

- Expressways are the highest class of roads in the road network in India. National Expressways Authority of India under the Ministry of Road Transport and Highways is responsible for the construction and maintenance of expressways.

- Expressways are controlled-access highway, the highest-grade type of highway with access ramps, lane dividers, etc., for high-speed traffic.

Source: NDTV News .

SAHAKAR PRAGYA

Syllabus Section- Agriculture and Economic development

Why in the news?

- Union Agriculture Minister rolls out training programme 'SahakarPragya'

SahakarPragya

- It is a part of National Cooperative Development Corporation (NCDC) to strengthen India's cooperative societies.

- The 45 new training modules of SahakarPragya of the National Cooperative Development Corporation (NCDC) will impart training to primary cooperative

societies in rural areas of the country along with LakshmanraoInamdar National Cooperative Research and Development Academy.

- It embodies enhancing NCDC's training capacity through an elaborate network of 18 Regional Training Centres across the country.

Need of the SahakarPragya

- Today India boasts a huge network of over 8.5 lakh cooperative societies with about 290 million members.

- Nearly 94% of the farmers in India are members of at least one cooperative society.

- Cooperatives lend strength to farmers to minimize risks in agriculture and allied sectors and act as a shield against exploitation by unscrupulous traders.

- Cooperatives have a major role in AtmaNirbhar Bharat.

SahakarCooptube NCDC Channel

- The central body had recently launched the SahakarCooptube NCDC Channel with an aim to involve youngsters in the cooperative movement.

- It is a new initiative by the National Cooperative Development Corporation (NCDC).

- It is an initiative towards One Nation One Market with the objective for India to become a food factory of the world.

Source - PIB

CLIMATE EMERGENCY MIGHT BE DECLARED BY NEW ZEALAND

Syllabus Section- Environment and Ecology

Why in News

New Zealand's government will decide next week if a climate emergency should be declared in the country or not. The country's prime minister JacindaArdern will introduce the motion in the parliament next week and if passed the move will be a symbolic announcement about the government's commitment towards doing more for the climate and bringing climate change to the centre of policymaking.

EDEN IAS - Educational Development & Enrichment Network

Zero Carbon Act

Ardern's Labour Party won nearly 49 per cent of the votes in the general elections last month, which was the biggest victory for her party in about 50 years. As prime minister, Ardern has been vocal about climate change and last November, the parliament passed the Zero-Carbon Act, which commits New Zealand to zero carbon emissions by 2050 or sooner.

What is the meaning of a climate emergency?

In its ongoing online petition, Greenpeace New Zealand is urging the government to declare a climate emergency since people are "facing more extreme weather events, catastrophic loss of wildlife and a crisis over access to freshwater and food".

In 2019, the Oxford dictionaries declared "climate emergency" to be the word of the year, a word that reflects "the ethos, mood, or preoccupations of the passing year, and have lasting potential as a term of cultural significance". It defines climate emergency as "a situation in which urgent action is required to reduce or halt climate change and avoid potentially irreversible environmental damage resulting from it".

But even before the New Zealand government planned to declare a climate emergency, some of the regions in the country had already started declaring it since last year. Even so, such a declaration is only symbolic and does not have any legal weight because of which critics have said that such announcements don't do enough and are, in fact, "hollow".

Some of the countries that have declared a climate emergency in recent years include the UK, Portugal, Canada, France and, most recently, Japan.

Source – Indian Express
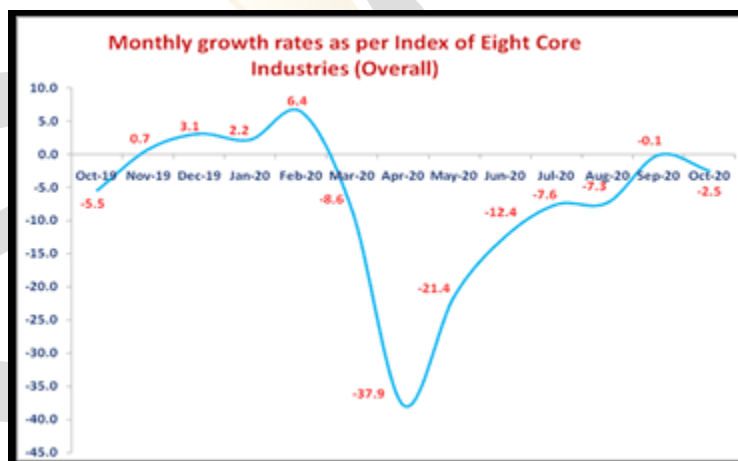
INDEX OF EIGHT CORE INDUSTRIES FOR OCTOBER 2020

Syllabus Section: Economy& Related Issues/ Reports & Indiices.

WHY IN NEWS?

The Office of Economic Adviser, Department for Promotion of Industry and Internal Trade (Ministry of commerce & Industry) has released Index of Eight Core Industries for the Month of October, 2020.

KEY FINDINGS

- The combined Index of Eight Core Industries stood at 124.2 in October,2020, which declined by 2.5 (provisional) per cent as compared to the Index of October, 2019.Its cumulative growth during April to October, 2020-21 has been(-) 13.0%.

- Final growth rate of Index of Eight Core Industries for July'2020 is revised to(-) 7.6%. The Eight Core Industries comprise 40.27 per cent of the weight of items included in the Index of Industrial Production (IIP).

- Monthly growth rates of Index of Eight Core Industries (Overall) is depicted in the graph:

The summary of the Index of Eight Core Industries is given below:

1. **Coal- Coal production** (weight: 10.33per cent) increased by 11.6 per cent in October, 2020 over October, 2019. Its cumulative index declined by 3.6per cent during April to October, 2020-21over corresponding period of the previous year.

2. **Crude Oil-Crude Oil production** (weight: 8.98per cent) declined by 6.2 per cent in October, 2020 over October, 2019. Its cumulative index declined by 6.1 per cent during April to October, 2020-21over the corresponding period of previous year.

3. **Natural Gas- The Natural Gas production** (weight:6.88per cent) declinedby8.6 per cent in October, 2020 over October,2019. Its cumulative index declined by 12.5 per cent during April to October, 2020-21 over the corresponding period of previous year.

EDEN IAS - Educational Development & Enrichment Network

4. **Refinery Products- Petroleum Refinery production** (weight: 28.04per cent) declined by17.0 per cent in October, 2020 over October, 2019. Its cumulative index declined by 16.4per cent during April to October, 2020-21over the corresponding period of previous year.

5. **Fertilizers-Fertilizers production** (weight: 2.63 per cent) increased by 6.3 per cent in October, 2020 overOctober,2019. Its cumulative index increased by 4.1 per cent during April to October, 2020-21 over the corresponding period of previous year.

6. **Steel-Steel production** (weight: 17.92per cent) declined by 2.7 per cent in October, 2020 over October, 2019. Its cumulative index declined by 22.8percent during April to October, 2020-21 over the corresponding period of previous year.

7. **Cement-Cement production** (weight:5.37per cent) increasedby2.8per cent in October, 2020overOctober,2019. Its cumulative index declinedby21.3 percent during April to October, 2020-21over the corresponding period of previous year.

8. **Electricity-Electricitygeneration**(weight:19.85per cent) increasedby10.5percent in October,2020over October,2019. Its cumulative index declined by 5.6percent during April to October, 2020-21over the corresponding period of previous year.

ABOUT CORE SECTOR INDUSTRIES

- The eight core sector industries include coal, crude oil, natural gas, refinery products, fertilizer, steel, cement and electricity.

- The eight core industries comprise 40.27% of the weight of items included in the Index of Industrial Production (IIP).

- The eight Core Industries in decreasing order of their weightage: Refinery Products> Electricity> Steel> Coal> Crude Oil> Natural Gas> Cement> Fertilizers.

Industry	Weight (In percentage)
Petroleum & Refinery production	28.04
Electricity generation	19.85
Steel production	17.92
Coal production	10.33
Crude Oil production	8.98
Natural Gas production	6.88
Cement production	5.37
Fertilizers production	2.63

Source: PIB.

INDIA CLIMATE CHANGE KNOWLEDGE PORTAL

Syllabus section – Environment

Why in news?

Ministry of Environment, Forest and Climate Change launched the "India Climate Change Knowledge Portal.

About:

- The portal will be a "single point Information resource" which provides information on the different climate initiatives taken by various Line Ministries enabling users to access updated status on these initiatives.

- The portal captures sector-wise adaptation and mitigation actions that are being taken by the various line Ministries in one place including updated information on their implementation.

- The knowledge portal will help in disseminating knowledge among citizens about all the major steps Government is taking at both national and international levels to address climate change issues.

- The eight major components included in the knowledge portal are:

EDEN IAS - Educational Development & Enrichment Network

1. India's Climate Profile

2. National Policy Framework

3. India's NDC goals

4. Adaptation Actions

5. Mitigation Actions

6. Bilateral and Multilateral Cooperation

7. International Climate Negotiations

8. Reports & Publications

Source- PIB

DRAFT MERCHANT SHIPPING BILL, 2020

Syllabus Section: Governance.

WHY IN NEWS?

The Ministry of Ports, Shipping and Waterways has published a draft Merchant Shipping Bill, 2020 and has opened it for public consultation. The draft bill has been aimed at repealing and replacing the Merchant Shipping Act of 1958 and the Coasting Vessels Act of 1838.

Key Provisions of the bill:

1. The bill seeks to improve the welfare of Indian seafarers on the abandoned vessels. It has also the provision of the safety of such vessels.

2. The Bill also comprise of the provisions for repatriation of the abandoned seafarers in order to comply with the Maritime Labour Convention regulations.

3. The bill also promotes the ease of doing business. It has done away with the requirement of general trading license for the Indian vessels.

4. The bill further enables the electronic forms of registration. It grants statutory recognition to the electronic agreements, records and log-books.

5. The Bill seeks to increase India's tonnage and to make vessel a tradeable asset.

6. The bill has also a provision of promoting India as a bankable shipping jurisdiction. It seeks to avoid situations that lead to wreck.

7. It seeks to introduce the first-time statutory framework to regulate the maritime emergency response against the maritime incidents

8. The bill will make India an active enforcement jurisdiction.

9. It also incorporates the powers of the Director-General so as to take action against unsafe vessels.

10. The Bill also comprises of the provisions of active enforcement of pollution prevention standards.

The Ministry of Ports, Shipping and Waterways

It is the apex body that formulates and administrates the rules, regulations and laws related to ports, shipping and waterways.

Source: News on All India Radio.

SHAHTOOT DAM

Syllabus section – economy

Why in news?

Indian-built dams in Afghanistan are causing trouble with downstream states Iran and Pakistan.

About:

- India is expected to begin work on the $236 million Shahtoot Dam project on the Kabul River in Afghanistan.

- To be built on the Maidan River (an upper tributary of the Kabul River) in the ChaharAsiab district in Kabul province.

- The Shahtoot Dam will have a storage capacity of 147 million cubic meters (MCM) of water.

- It is designed to meet the drinking water and sanitation needs of roughly 2 million of Kabul's roughly 6 million residents

- It will irrigate about 400 hectares of agricultural land in ChaharAsiab and Khairabad districts in Kabul province.

Kabul River

- The 700-km-long Kabul River originates in the Hindu Kush Mountains in central Afghanistan.

- It flows eastward past the Afghan cities of Kabul, Surobhi, and Jalalabad. East of Jalalabad,

- It is joined by its main tributary, the Kunar River, which originates in Pakistan, where it is known as the River Chitral.

- Afghanistan and Pakistan are thus upstream and

EDEN IAS - Educational Development & Enrichment Network

downstream basin states with regard to the Kabul River.

- After crossing into Pakistan's Khyber Pakhtunkhwa province, the Kabul River runs past Peshawar and Nowshera and joins the mighty Indus River near Attock, northwest of Islamabad.

- It is the sole source of drinking water for almost 7 million Afghans and Pakistanis.

Source- The diplomat

BRAIN FINGERPRINTING

Syllabus Section: Polity and Governance

WHY IN NEWS?

The accused in Hathras rape case will undergo brain fingerprinting.

WHAT IS BRAIN FINGERPRINTING ?

- Brain Electrical Oscillation Signature Profiling (BEOSP) also known as brain fingerprinting is a neuro psychological method of interrogation in which the accused's participation in the crime is investigated by studying their brain's response.

- BEOSP test is carried out via process known as electroencephalogram. This is conducted to study the electrical behaviour of the human brain.

Selvi v. State of Karnataka Case

- In, 2010 Supreme Court passed the judgement where the bench observed that narco analysis, polygraph and brain mapping test can not be forced upon individual without their consent and the test results can not be admitted solely as evidence.

- Any Information or material discovered during the test can be made part of the evidence.

Source: Indian Express

GMRT ACCORDED PRESTIGIOUS IEEE MILE-STONE STATUS

WHY IN NEWS?

Institute of Electrical and Electronics Engineers has been given " the Giant Metrewave Radio Telescope" milestone status.

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

- IEEE is the world's largest *technical professional organisation* dedicated to advancing technology for the benefit of humanity.

- IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

- IEEE will be essential to the global technical community and to technical professionals everywhere, and be universally recognized for the contributions of technology and of technical

IEEE MILESTONES PROGRAMME

- The IEEE Milestones programmehonors significant technical achievements which have global or regional impact.

- This is only the third such IEEE 'Milestone' recognition for an Indian contribution.

- The previous two Indian IEEE Milestones were for the pioneering work done by Sir J.C. Bose to demonstrate the generation and reception of radio waves in 1895 (recognised in 2012), and for the Nobel Prize-winning (in 1930) 'scattering of light' phenomenon observed by Sir C.V. Raman in 1928.

GMRT(GIANT METREWAVE RADIO TELESCOPE)

- GMRT is one of the largest and most sensitive low frequency radio observatories in the world.

- It is operated by the National Centre for Radio Astrophysics (NCRA), Pune which is a part of the Tata Institute of Fundamental Research, Mumbai

EDEN IAS - Educational Development & Enrichment Network

- GMRT is a very versatile instrument for investigating a variety of radio astrophysical problems ranging from nearby Solar system to the edge of observable Universe.

- The facility was conceived of and proposed in the late 1980s, built and made operational during the 1990s, and opened for use by the global astronomy community in 2002.

SOURCE – The Hindu

INDIA CLIMATE CHANGE KNOWLEDGE PORTAL

Syllabus section – Environment

Why in News?

Minister of Environment, Forest and Climate Change launched the India Climate Change Knowledge Portal.

About:

- The portal will have all the major steps the Government is taking at both national and international levels to address the climate change issues.

- It will be a single-point information resource that provides information on the different climate initiatives taken by various Line Ministries enabling users to access d status on these initiatives.

- The portal provides adaptation and mitigation actions taken by different Ministries.

- According to the Central government, India has practically achieved its pre-2020 climate action targets.

Source: News on AIR

HOYSALA LAKSHMI DEVI TEMPLE

Syllabus section- Culture

Why in News ?

The idol of Mahakali at Mahalakshmi temple of the Hoysala era at Doddagaddavalli in the taluk has been fixed by experts, which was damaged recently.

About the Hoysala Temple Architecture:

- It is the largest monument in Halebidu, a town in the state of Karnataka, India and the former capital of the Hoysala Empire.

- The temple was built on the banks of a large man-made lake, and sponsored by King Vishnuvardhana of the Hoysala Empire.

- temple does not stand on a jagati (platform), a feature which became popular in later Hoysala temples.

- The temple is a Chatuskuta construction (4 shrine and tower) and thetowers are in Kadamba nagara style.

- The mantapa is open and square, the reason for the square plan is the presence of shrines on all four sides of the mantap

SOURCE- THE HINDU

MISSION COVID SURAKSHA

Syllabus section: Governance / Government schemes and initiatives

Why in news?

The Government of India (GOI) has announced the third stimulus package of Rs. 900 Crore for the Mission COVID Suraksha- The Indian COVID-19 Vaccine Development Mission. This grant will be provided to the Department of Biotechnology (DBT) for Research & Development of Indian COVID-19 vaccines.

Background and Highlights

- The Government of India recently launched Mission COVID Suraksha to accelerate development of vaccine in the country. It will ensure that the vaccines being developed are brought closer to the market.

- The mission was introduced by Finance Minister Nirmala Sitharaman on November 12, 2020 as a part of 12 announcements made under Atma Nirbhar Bharat Abhiyan 3.0.

- The Finance Minister had allocated Rs 2.65 lakh crores under the fourth economic package. Of this, Rs 900 crores has been allocated to Department of Biotechnology to accelerate development of COVID-19 vaccine.

- This fund is to be used to implement Phase I of Mission COVID Suraksha which is to run for 12 months. The funds allocated are to be used for the development of vaccines and licensure of vaccines that are in clinical stage or ready to enter clinical stage.

EDEN IAS - Educational Development & Enrichment Network

- The Department is currently supporting development of ten vaccines.

What is Mission COVID Suraksha?

The mission will envisage COVID-19 vaccine development from pre-clinical to manufacturing and regulatory facilitation. The other important roles of the mission are as follows:

1. To establish clinical trial sites
2. To strengthen existing immunoassay laboratories
3. To strengthen suitable facilities for animal studies
4. To establish clinical sites
5. To support data management systems, trainings, regulatory submissions, accreditations, external quality management and support development of common harmonized protocol.
6. The mission will support cell line development. Cell Line is a cell culture developed from a single cell.
7. It will also support manufacturing of good manufacturing practice batches for animal toxicology studies.

What are the supports offered to Mission COVID Suraksha?

- The mission will be supported by India Coalition for Epidemic Preparedness Innovations (Ind-CEPI) and National Bio Pharma Mission

What is CEPI?

- CEPI is Coalition for Epidemic preparedness Innovations. It is a foundation that was established in 2017 by World Economic forum, India, Norway, Bill and Melinda Gates Foundation.

- It was founded at Davos, Switzerland. The headquarters of CEPI is located in Oslo, Norway. CEPI finances independent research projects developing vaccines by taking donations from public, private and philanthropic organisations.

What is National Bio Pharma Mission?

- The National Biopharma Mission is being implemented by the Biotechnology Industry Research Assistance Council (BIRAC).

- It is implemented through industry-academia collaboration. The mission accelerates biopharmaceutical development in the country.

- The mission was launched in 2017 at a cost of 1500 crore rupees. 50% of the mission is funded by World bank.

Source: PIB

DRY SWAB-DIRECT RT-PCR TESTING METHOD

Syllabus section: Science & Technology.

Why in news?

The Indian Council of Medical Research (ICMR) has approved the "dry swab-direct RT-PCR testing method" to test the COVID-19 virus. It has been developed by CSIR-Centre for Cellular and Molecular Biology (CCMB). This developed method is a simple variation of the conventional gold standard RT-PCR method.

What is Dry swab-direct RT-PCR testing method?

- The dry swab-direct RT-PCR testing method is a RNA-extraction free testing method to test for the COVID-19 virus.

- This method has been developed with an aim of scaling up the testing by two to three fold. It does not require new investment of resources.

- The method has a less cost and has a quick turnaround time. This method involves the collection and transportation of the nasal swab in its dry state. Thus, its transportation and handling is easy and less prone to spread of infection.

Need for its development

- The CSIR-CCMB is involved in testing samples for corona virus since April 2020. It recently identified some of the key issues in the convectional testing process that slow the testing process.

- In order to make the corona virus testing process fast and simple, they developed the dry swab testing method.

- In the conventional testing method, the samples of nasopharyngeal or Oro pharyngeal swab samples are collected and transported to the testing centres. They are transported to hundreds of kilometers away.

- These samples are placed in the liquid called the Viral Transport Medium (VTM). These samples are packed heavily to avoid the leakage. This further increases the sSample processing times at the sample collection as well as the testing centres.

EDEN IAS - Educational Development & Enrichment Network

About CSIR

- Council of Scientific and Industrial Research (CSIR) is the largest research and development (R&D) organization in India. CSIR has a pan-India presence and has a dynamic network of 38 national laboratories, 39 outreach centres, 3 Innovation Complexes and 5 units.

- Established on September 1942 & Located in New Delhi.

- CSIR is funded by the Ministry of Science and Technology and it operates as an autonomous body through the Societies Registration Act, 1860.

- CSIR covers a wide spectrum of streams – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology.

It provides significant technological intervention in many areas with regard to societal efforts which include the environment, health, drinking water, food, housing, energy,farm and non-farm sectors.

Source: The Hindu.

THE ELECTRONIC VACCINE INTELLIGENCE NETWORK (E-VIN)

Why in news?

Recently, PM Modi interacted virtually with the head of all states and Union Territories for discussing the preparedness of COVID-19 vaccination in India. During the interaction, it was informed that India is using e- Vin i.e. Electronic Vaccine Intelligence Network in collaboration with the United Nations Development Program (UNDP) for identifying the primary beneficiaries of the vaccine and its distribution networks.

What is e-Vin?

- Electronic Vaccine Intelligence Network (e-Vin) is a technology that maintains digital records of stocks of vaccines and monitors the temperature of the cold chain through a mobile application.

- The e- VIN was initially launched across 12 states in the year 2015 for supporting improved vaccine logistics management at cold chain points.

- The e- VIN also supports the Universal Immunization Programme of the Indian government by providing real-time information related to the stocks and flows of the vaccine, and storage temperatures at all cold chain points across states and UTs.

How e-Vin Works?

- All the cold storage handlers are provided with mobiles/smart phones with e- Vin application wherein they update the net utilization of each vaccine every day. This data is viewed by managers at district, state, and national levels.

- Thus, the data about the stock of vaccines get available to the government. In addition to this, SIM-enabled temperature loggers are attached to the cold chain equipment which records the temperature through a digital sensor placed in the refrigerator.

- The data related to temperature is captured every 10 minutes and updated after every 60 minutes on the server. In this way, data related to storage temperatures get available.

Source: PIB.