



## EVERYDAY CURRENT AFFAIRS – DECEMBER 6, 2020

### TAMIL NADU

- **Tamil Nadu government - has sought ₹3,759 crore Central assistance to carry out relief and restoration of Cyclone Nivar-affected districts**
- ✓ Out of the total amount, the state has sought temporary relief of Rs 650 crore
- ✓ An inter-ministerial Central team led by Union home ministry joint secretary Ashutosh Agnihotri is on a four-day visit to the state to assess the damage caused by the cyclones, Nivar and Burevi.
- ✓ Meanwhile, Chief minister Edappadi K Palaniswami deputed 11 ministers to take up rescue and relief work in Cuddalore, Tiruvarur, Nagapattinam, Chengalpet, Kancheepuram and Chennai districts affected by cyclone 'Burevi'
- ✓ The CM also announced ₹10 lakh each to the families of seven who died in rain-related incidents across the state
- ✓ At least 1.21 lakh people from low-lying areas across the state were shifted to 515 relief camps until December 5.
- ✓ This includes about 42,000 people in the worst-hit Cuddalore district alone.
- ✓ Further, a total of 14 NDRF teams have been stationed in six districts.
- ✓ Across the state, one lakh food packets were being distributed to the affected people by the government.
- ✓ In Chennai, the city corporation will supply free food thrice a day to 26 lakh people belonging to 5.3 lakh families from December 6 to 13.
- ✓ The cyclone has ravaged 1.05 lakh acres of samba crop in Nagapattinam, 1.21 lakh hectares in Tiruvallur and 23,500 hectares in Thanjavur.
- ✓ Meanwhile, the well-marked low-pressure system remains stationary over Gulf of Mannar around 40km southwest of Ramanathapuram since December 4.
- ✓ It is expected to bring heavy to very heavy rain in isolated areas of Ramanathapuram, Madurai, Virudhunagar and Thoothukudi districts
- ✓ The widespread rainfall received due to the back-to-back cyclones has pushed Tamil Nadu's rainfall status to a 2% excess so far this season starting October 1.

- ✓ Ministers P Thangamani and M C Sampath are deputed to take up relief work in Cuddalore, K P Anbalagan and R Kamaraj in Tiruvarur, S P Velumani, O S Manian and C Vijayabaskar in Nagapattinam, KA Sengottaiyan and P Benjamin in Chengalpet and Kancheepuram and D Jayakumar and K Pandiarajan in Chennai.
- **The National Institute of Siddha (NIS) - entered into a Memorandum of Understanding with the National Institute of Epidemiology (NIE), an institute of the Indian Council of Medical Research.**
- ✓ R. Meenakumari, Director of NIS, and Manoj V. Murhekar, Director and scientist-G, NIE, signed the MoU on December 4.
- ✓ The two institutes have agreed to collaborate in the following areas - conduct joint research and development projects in the areas of clinical and health system research; epidemiological studies, basic medical and allied sciences research to be funded by specific funding sources; to organise seminars, workshops, webinars; and continuing education programmes develop academic programmes in areas of mutual interest.
- ✓ The MoU would also promote exchange of students, Ph.D./postdoctoral scholars, faculty for teaching and training programmes, use of laboratories and library facilities for institutional members and scholars.
- ✓ A post Covid-19 Siddha care unit was inaugurated at the NIS recently.
- ✓ The unit will attempt to address the health issues of patients suffering from post Covid-19 manifestations
- **On December 5, the state government - released a set of standard operating procedures (SOPs) to be followed by the educational institutions inside the campuses.**
- ✓ Earlier, the government had announced that the colleges will reopen for final year undergraduate students from December 7
- ✓ The government had announced a two-week quarantine period 'mandatory' for all hostel students before they are allowed to attend classes.
- ✓ Moreover, the institutions are asked to encourage the students to stay in nearby relative houses and attend classes so that overcrowding will be avoided in hostels.
- ✓ The sharing of rooms should not be allowed in hostels.
- ✓ There should be adequate isolation arrangements for those having symptoms and for those to test Covid-19 positive either at the level of institution or in collaboration with the government authorities.
- ✓ The government also advised the universities and colleges to reduce the class size by splitting the strength into multiple sections.
- ✓ The institutions should make arrangements to provide online study materials and access to e-resources for those students who opt not to attend classes and prefer to study online while staying at home

- ✓ The colleges are also asked to disinfect the classrooms and furniture and make arrangements for hand-washing, masks and checking the temperatures of students.
- ✓ The order also allowed institutions to reopen for final year diploma and hotel management students.
- **The phase-3 human clinical trials of indigenous Covid-19 vaccine Covaxin - will begin on December 7 at SRM Medical College Hospital and Research Centre (SRM MCHRC) in Kattankulathur.**
- ✓ According to the hospital, volunteers administered shots at the hospital as part of the phase-1 and 2 trials did not suffer any adverse reactions except mild fever and body ache.
- ✓ The centre is among 12 institutions in the country chosen by ICMR to conduct trials for the vaccine developed by Hyderabad-based Bharat Biotech in collaboration with ICMR and the National Institute of Virology.
- ✓ A total of 1,000 to 1,500 volunteers will be administered two shots (dose), each 28 days apart, at the hospital.
- ✓ Any person above the age of 18 and not previously tested positive for Covid-19 can participate in the trials.
- ✓ Pregnant women are excluded from the trial.
- ✓ While the dosage may be around 0.5ml, the same as those administered in phase-2 trials, the follow-up schedule may vary as phase-3 will be a year-long study.
- ✓ The phase-3 trials will be on a larger population and will study the efficacy of the vaccine.
- ✓ Bharat Biotech had received DGCI approval for phase-3 clinical trials on 26,000 participants in over 25 centres across India after successful completion of the interim analysis from the phase-1 and 2 clinical trials.
- ✓ Phase-3 trials of Covaxin have begun in a few states such as Haryana, Delhi, West Bengal, Gujarat, Odisha and Madhya Pradesh.
- ✓ At SRM, phase-1 trials began in July with 30 volunteers followed by phase-2 in September with 45 volunteers.
- ✓ The results of the first two phases are yet to be declared.
- **France - will sign a memorandum of understanding (MoU) with Tamil Nadu's Industrial Guidance and Export Promotion Bureau and the Indo-French Chamber of Commerce and Industry to facilitate mutual investments and to promote ease of doing business.**
- ✓ The MoU will be signed when ambassador of France to India, Emmanuel Lenain, visits Chennai from December 7-8.
- ✓ Lenain will call on chief minister Edappadi K Palaniswami and industries minister M C Sampath and hold talks with them

- ✓ The talks will focus on how France and French companies can continue contributing to Tamil Nadu's ambitious development goals in areas of industry, research and development and renewable energy.
- ✓ The ambassador will also highlight the significant business opportunities for Indian companies proposing to invest in France particularly in La Reunion Island.
- ✓ Lenain will visit the main factory of Royal Enfield motorbike company.
- ✓ Royal Enfield has established a site in France to cater to the European market.
- ✓ Lenain will also visit French company Air Liquide's medical system facility manufacturing medical ventilators.
- ✓ Air Liquide scaled up production to supply 1,000 ventilators to Tamil Nadu's hospitals, highlighting the support that France and India lent each other during this crisis.
- ✓ The ambassador will conclude his tour with a visit to Kabadiwala, an Indian startup that aims at revolutionizing urban waste management through digital solutions.

## STATES

- **Assam government – has launched the Assam Orunodoi Scheme from December 1, 2020**



- ✓ The scheme was inaugurated at a yearly budget of Rs 2400 crore in 29 districts across the state
- ✓ Under the Scheme Rs 830 per month will be given to the nominated female head of the household to buy fundamental items like medicines, pulses, sugar etc.
- ✓ Further, Rs 400 will be given to purchasing medicines, Rs 200 will be provided to buy 4 kilograms of pulses, Rs 80 to buy sugar and Rs 150 to buy fruits and vegetables.
- ✓ The sanctioned amount will be transferred into the bank account of the beneficiaries through direct benefit transfer method from the eKuber system of Reserve Bank of India.
- ✓ More than 18 lakh beneficiaries have already been selected by the government under this scheme.
- ✓ This number is expected to increase to 22 lakh after the inclusion of districts in the Bodoland Territorial Area.

- ✓ The scheme was announced during the state budget 2020-21.
  - ✓ The scheme is first of its kind in the country, providing the basic requirement of Health and nutrition of a household.
  - ✓ The household owning tractor, four wheelers, fridge or TV are not eligible under the scheme.
  - ✓ eKuber system is the core banking solution of the Reserve Bank of India.
  - ✓ The core banking solutions enable the banks to offer Customer centric services 24/7 from a single location.
  - ✓ When money is transferred through e-Kuber system, it reaches the beneficiary as soon as it is sanctioned.
- **A “Child-friendly” police station - was recently established in Pune as per the guidelines provided by the National Commissioner for Protection of Child Rights (NCPCR).**



- ✓ This police station intends to develop character building among children and will also create a perception that police are friends of people.
  - ✓ It also aims to prevent juvenile crimes and ensure children reforms and rehabilitation.
  - ✓ The police station has a separate room designed for children who come to the police station to report cases.
  - ✓ The main objective of the child friendly police station is to create an environment that will enable children to report cases and crimes without fear.
  - ✓ It will also help the children who have committed offences and ensure repeated offenders are not engaged in criminal activities but help the police in prevention of crime.
  - ✓ The ‘Hope For Children’ Foundation is to train the police on child friendly mechanism.
  - ✓ A Juvenile in India is an individual below the age of 18 years.
  - ✓ According to the Indian laws, a child below the age of seven years cannot be convicted under any law for any crime.
- **Karnataka government – had recently launched ‘The Learning Management System’ (LMS) in digital mode**



- ✓ The newly launched digital system will be implemented in government colleges within the state.
- ✓ It will benefit around 4.5 lakh students and 24000 teachers, providing a refreshing change in learning and teaching modes.
- ✓ This digital platform will have multilingual e-content in the form of PPTs, videos, quizzes, assignment and e-study materials developed as per the University syllabus.
- ✓ It is said to be the first of its kind initiative in the country aimed at encouraging digital learning and improving the Gross Enrolment Ratio in higher education.
- ✓ The Learning management system is to be implemented at a cost of Rs. 304.14 crore
- ✓ The system is expected to improve the gross enrollment ratio in higher education by seeking to establish 2500 ICT enabled classes

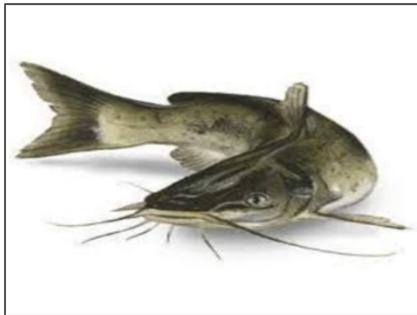
## NATIONAL

- **Prime Minister Narendra Modi - will lay the foundation stone of the New Parliament building on December 10 with a 'Bhoomi Pujan' for the project**



- ✓ The Parliament project is scheduled to be completed by 2022, coinciding with 75 years of India's independence
- ✓ The new Parliament building will remain as a symbol of "atmanirbhar Bharat" and a "temple of democracy" for Independent India, according to Lok Sabha Speaker Om Birla

- ✓ The new building would be built adjacent to the existing building in over 22 months.
  - ✓ The grand 4-storey building will be a modern one and also incorporate regional arts and crafts.
  - ✓ On the periphery of the new building, blocks will come up for reception, information counter and public waiting area with separate access to the differently-abled.
  - ✓ Besides the main entrance, the triangular structure will have a ceremonial entrances and one exclusively for the Speaker of Lok Sabha and Chairman of Rajya Sabha.
  - ✓ The building, to be constructed by Tata Projects Ltd. at ₹971 crore, would have a built-up area of 64,500 sq m over four floors.
  - ✓ It will have more space to accommodate 888 MPs in Lok Sabha compared to the present strength of 543 members while Rajya Sabha will accommodate 384 seats against the current strength of 245.
  - ✓ Also, the earthquake-proof new Lok Sabha building will have the option to increase seating capacity to 1,224 for joint sittings.
  - ✓ The MPs' offices, of 40 sq m each, would be built in place of the Shram Shakti Bhawan by 2024 and would be connected to Parliament via an underground pathway
  - ✓ The new building has been designed for better facilities, space and technology.
  - ✓ The digital audio-visual system, which will be placed in front of every seat, will have “programmable rules-based microphones”, which will put the Speaker in control of who gets to speak and who doesn't.
  - ✓ The existing Parliament building was constructed by the British in the 1920s
  - ✓ It was designed for the Imperial Legislative Council and not for a bicameral Parliament.
  - ✓ The building has been modified over the years, including in 1956 when two floors were added.
- **The National Green Tribunal – has recently banned a type of catfish ‘Thai mangur’, as it was harming the local ecosystem and the consumers’ health.**



- ✓ Recently, huge volumes of this banned catfish were found to be illegally bred in over 125 artificial ponds in rural Thane, Maharashtra under unhygienic conditions

- ✓ The Thai mangurs are preferred over other types of fishes as they are cheaper, have the ability to feed on anything and survive in hostile conditions.
  - ✓ According to a study, the Thai Mangur is responsible for 70% decline of native fish species of India.
  - ✓ In September 2020, the Uttarakhand State Government warned several fish farmers for cultivating Thai Mangur illegally.
  - ✓ In spite of several legal measures and bans, the species is being cultivated illegally and its sales are popular mainly for its surviving capabilities.
  - ✓ The freshwater air breathing fish can grow in any type of water - muddy waters, stagnant or slow moving waters
  - ✓ It grows three feet to five feet weighing three to four kilograms in just two to three months.
  - ✓ These characteristics make the cultivation of the fish highly profitable and economical for farming.
- **The Government of India – has recently constituted the Apex Committee for the Implementation of the Paris Agreement (AIPA)**
- ✓ The committee will ensure coordinated response to climate change issue
  - ✓ It will also make sure that the country is on track towards meeting its climate change obligations under the Paris Agreement
  - ✓ It will act as the national authority for regulating carbon markets within the country.
  - ✓ The committee was formed under the chairmanship of Union Ministry of Environment, Forest and Climate Change secretary.
  - ✓ The committee has 17 members, responsible for formulating policies to implement the Nationally Determined Contributions (NDC) under the Paris Agreement
  - ✓ It will also regularly communicate and report the progress of India's status in achieving its NDC to the United Nations Framework Convention on Climate Change (UNFCCC).
  - ✓ The committee will define the responsibility of different government Ministries to achieve the climate change mitigation and adaptation goals of India.
  - ✓ India had submitted its National Determined Contributions in 2015.
  - ✓ The three main goals of India are -
    - ✓ To increase the non-fossil fuel-based electricity share to 40% by 2030.
    - ✓ A reduction of 33% to 35% in the GDP emission intensity by 2030 as compared to that of 2005 levels
    - ✓ To create carbon sink of 2.5 to 3 billion tonnes of carbon dioxide through forest cover and afforestation programmes.
  - ✓ The Paris Agreement aims to keep the global temperature rise to less than 2 degree Celsius as compared to the pre-industrial levels
- **The Indian Oil Corporation - recently launched the country's first-ever 100 Octane petrol (XP 100)**



- ✓ The fuel was manufactured in the Indian Oil Corporation Mathura Refinery located in Uttar Pradesh.
  - ✓ The fuel is to be available at selected Indian Oil Corporation outlets in Delhi, Noida, Gurgaon, Agra, Chandigarh, Jaipur, Mumbai, Ludhiana, Pune and Ahmedabad.
  - ✓ Octane ratings, which are a measure of fuel stability, indicate the ability of the fuel to avoid 'knock' effect.
  - ✓ Higher the Octane number, higher is the resistance of the fuel to knock.
  - ✓ The 'Knock' occurs when the fuel is prematurely ignited in the engine cylinder, thereby reducing the efficiency of the engine and damaging it.
  - ✓ The 100 Octane petrol is usually used in luxury vehicles and in race vehicles, that demand high-performance
  - ✓ When the level of Octane is higher, the cylinders do not ignite as quickly as that of a regular gas engine cylinder.
  - ✓ It is available only in six countries in the world namely Germany, United States, Greece, Malaysia, Indonesia and Israel.
  - ✓ In India, only three Octane grades are available in the retail stations.
  - ✓ They are - 87 Octane petrol called the 'regular petrol', 89 octane grade called the 'mid-grade petrol' and 91 to 94 octane grade called the 'premium petrol'
- **India - recorded the largest reduction in malaria cases in South East Asia, as per the World Malaria Report, 2020 released by the World Health Organisation**
- ✓ India's case count has reduced from 20 million in 2000 to around 5.6 million in 2019.
  - ✓ India has also reduced the malarial deaths in the past two years from 411,000 in 2018 to 409,000 in 2019.
  - ✓ This has made India one of the largest contributors to drop in malaria cases in the south-east Asia region.
  - ✓ However, the global malaria case count has remained unchanged for the past four years and stands at around 229 million in 2019.
  - ✓ India was one among the 11 highest Malaria burden countries in the world.
  - ✓ It is the largest contributor of Malaria cases (88%) in the south-east Asia region.

- ✓ According to the report, the highest Malaria burden countries were Cameroon, Democratic Republic of Congo, Burkina Faso, Mozambique, Mali, Ghana, India, Nigeria and United Republic of Tanzania.
  - ✓ These countries accounted to 70% of global estimated Malaria burden.
  - ✓ African region accounted to more than 90% of overall malarial disease burden.
  - ✓ However, since 2000, the number of Malaria deaths in the continent has reduced by 44%.
  - ✓ The malarial funding in 2019 reached \$3 billion as against the target of \$5.6 billion.
  - ✓ World Malaria Day is celebrated every year on April 25.
- **Hindustan Aeronautics Limited (HAL) – had delivered the largest-ever cryogenic propellant tank – C32 LH2 – to ISRO recently**



- ✓ It is designed to increase the payload capability of ISRO'S Geosynchronous Satellite Launch Vehicle Mark III (GSLV Mk III) from 4 tonnes to 6 tonnes.
  - ✓ The C32 LH2 is a cryogenic propellant tank made of aluminium alloy that can carry a load of 5,755 kilo grams of propellant fuel.
  - ✓ Currently, India is dependent on French Guiana to launch heavier communication satellites (of 5 to 6 tonnes).
  - ✓ C32 LH2 will put an end to India's dependence on a foreign country and will boost its self-reliance.
  - ✓ Cryogenic fuels are the fuels that require extremely low storage temperature
  - ✓ They are generally used in space as the temperature is low and cannot support combustion.
  - ✓ Usually the cryogenic engines use Liquid Hydrogen as fuel and Liquid Oxygen as oxidiser
  - ✓ In 1991, the Soviet Union agreed to transfer the cryogenic technology to ISRO.
- **The draft National Unmanned Aircraft Traffic Management Policy - aims to allow the usage of drones alongside manned aircrafts (scheduled and non-scheduled aircrafts).**
- ✓ It aims to integrate drone operations in current Air Traffic Management System while ensuring maintenance of high levels of aviation safety

- ✓ The 'unmanned aircraft system traffic management' will provide real-time situation awareness, flight planning capabilities, facilitate flight authorisation, provide weather and Terrain data.
- ✓ In January 2019, the Heathrow Airport of London shut its operation for an hour due to Drone sighting.
- ✓ Similarly in 2016, Dubai airport, which is considered as the world's busiest airport shut down its operation for about 30 minutes after a Drone sighting.
- ✓ Recently in November 2020, the International Crops Research Institute located in Hyderabad was granted conditional exception for the deployment of drones for Agricultural Research activities by the Ministry of Civil Aviation and directorate General of Civil Aviation.
- ✓ The policy mainly focuses on the unmanned aircraft operating below 2000 feet above the ground level.
- ✓ The Digital Sky platform creates centralised, seamless and automated regulatory environment for the unmanned aircraft systems.
- ✓ Under the policy the digital Sky Platform adopts 'no permission, no takeoff' model.
- ✓ Accordingly, the unmanned aircraft system cannot take off without a signed digital permission, providing an additional layer of safety and security.
- ✓ The four-dimensional authorisation permission is called the permission artefact.

## INTERNATIONAL

- **Moscow - began distributing the Sputnik V Covid-19 vaccine shot to the most exposed groups through 70 newly opened coronavirus vaccine centres from December 5**



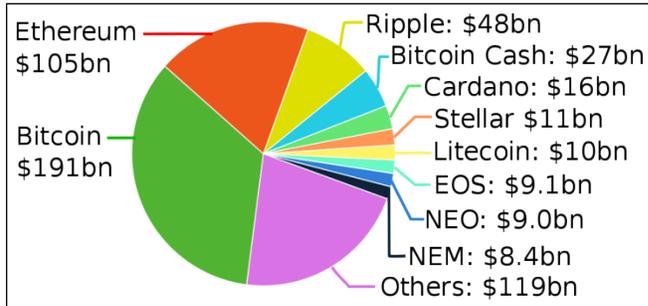
- ✓ This marks Russia's first large-scale vaccination against the disease
- ✓ The Russian-made vaccine will first be made available to doctors and other medical workers, teachers and social workers
- ✓ Russia expects to give the vaccine to about 2 million people this month. Russia has already vaccinated more than 1,00,000 high-risk people
- ✓ The age for those receiving shots is capped at 60.
- ✓ People with certain underlying health conditions, pregnant women and those who have had a respiratory illness for the past two weeks are barred from vaccination.

- ✓ The Sputnik V vaccine is administered in two injections, with the second dose is expected to be given 21 days after the first.
  - ✓ Russia was one of the first countries to announce the development of a vaccine, Sputnik V — dubbed after the Soviet-era satellite — in August but before beginning final clinical trials.
  - ✓ It is currently in its third and final stage of clinical trials involving some 40,000 volunteers.
  - ✓ The vaccine was found to be 95% effective, as per the interim results released last month and would be cheaper and easier to store than some alternatives.
  - ✓ It uses two different human adenovirus vectors and will be administered free to all Russian citizens, who turn up voluntarily
- **The US Senate - has passed a legislation to name a post office in Houston after Sikh police officer Sandeep Singh Dhaliwal, who was killed in the line of duty during a routine traffic stop last year.**



- ✓ The US House of Representatives had passed the bipartisan legislation in September to rename a post office in Houston as “Deputy Sandeep Singh Dhaliwal Post Office Building”.
  - ✓ The bill is now headed to the White House for President Donald Trump’s signature to become a law.
  - ✓ This post office will only be the second American post office named after an Indian-American.
  - ✓ The first one was named after the first Indian-American Congressman Dalip Singh Saund in California in 2006.
  - ✓ Born in India, Dhaliwal moved to Houston along with his parents.
  - ✓ He was the first Sikh cop to serve in the Harris County sheriff’s office.
  - ✓ In 2015, he became the first Sikh-American in Texas to receive a policy accommodation to serve while wearing his articles of faith.
  - ✓ On September 27, 2019, Dhaliwal was killed in the line of duty
- **The upgraded version of crypto currency, Ethereum – was launched recently**

- ✓ The new version 'Ethereum 2.0' was launched in a faster, cheaper and more environmentally friendly platform
- ✓ Ethereum is a decentralised and open source blockchain platform, which is a growing list of cryptographic blocks.
- ✓ Ether (ETH) is the cryptocurrency token of the Ethereum platform.
- ✓ It is the world's second-largest cryptocurrency by market capitalization, only after bitcoin.



- ✓ It is also the world's most actively used blockchain.
  - ✓ Ethereum was first proposed in 2013 by a Russian- Canadian cryptocurrency researcher and programmer Vitalik Buterin.
  - ✓ The largest cryptocurrency 'Bitcoin' works on the principle of Mining, which in turn requires solving complex problems leading to large consumption of electricity.
  - ✓ This updated Ethereum 2.0 changes this system into 'proof of stake', which links the quantities of ether with the selection as validators.
  - ✓ India has banned the use of Cryptocurrencies as a legal currency.
  - ✓ In December 2017, the Centre had clarified that the virtual currencies do not have protection or regulator permission in India.
  - ✓ In 2018-19 Budget, the Finance Minister Nirmala Sitharaman announced that the central government will take all measures to eliminate the use of cryptocurrencies as a part of the payment system in the country.
  - ✓ In 2018, the RBI notified that the entities operating under it should not deal with cryptocurrency.
  - ✓ The inter-ministerial committee constituted under the chairmanship of Subhash Chandra Garg has submitted its report suggesting the draft bill, "Banning of Cryptocurrency and Regulation of Official Digital Currency bill, 2019".
  - ✓ Cryptocurrency is a specific type of virtual currency that are protected by cryptographic encryption techniques.
  - ✓ Some of the popular cryptocurrencies are ripple, Bitcoin, ethereum.
  - ✓ There is no Central authority to record the transactions.
  - ✓ The cryptocurrencies use technologies such as distributed ledger Technology or blockchain technology to store transaction data.
- **Facebook-backed cryptocurrency Libra - has been renamed as "Diem" (means 'Day' in Latin) to gain regulatory approval by emphasising that the project has "organisational independence".**

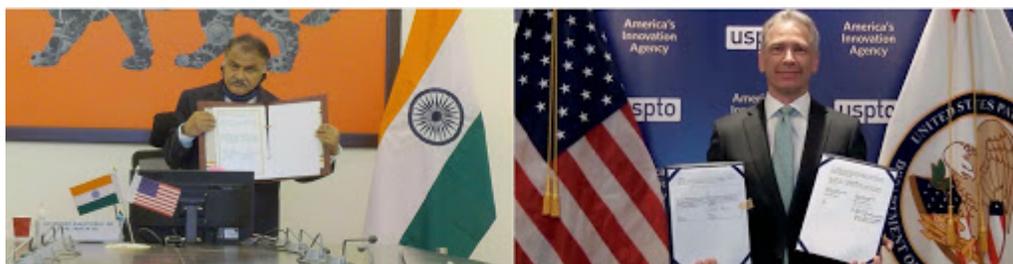
- ✓ The independent organisation, Libra Association, which runs the Libra project will also be renamed as the Diem Association.
  - ✓ Diem is a stable coin and uses Permissioned blockchain, which is a private blockchain
  - ✓ Majority of the cryptocurrencies found in the market use Permissionless blockchain.
  - ✓ The stable coins are the cryptocurrencies that are backed by a reserve asset.
  - ✓ Their market value is dependent on some external reference like a value of gold or to that of US dollars or to the asset held by the launcher.
  - ✓ The only difference between the permissioned and permissionless blockchain is that the permissioned blockchain has an access control layer.
  - ✓ The European Union has not allowed stable coins to operate within its territory, as they serve threat to monetary sovereignty of states.
  - ✓ The US wants to stop Facebook from launching the currency as the cryptocurrency market is lacking a clear regulatory framework.
  - ✓ Libra is planning to launch the currency through Swiss Financial Market Supervisory Authority (FINMA).
- **The United Nations – has recently launched a new initiative -3RF - to revitalize Beirut after the recent chemical blast**
- ✓ 3RF stands for Reform, Recovery and Reconstruction Framework
  - ✓ It will assess the levels of incoming support against the needs of the population of the country, focusing particularly on the vulnerable sections
  - ✓ On August 4, 2020, a deadly blast occurring at Beirut, the capital of Lebanon, killing more than 200 people and leaving a million homeless.
  - ✓ The plan aims to reconstruct port facilities, rehabilitation of districts affected by the explosion and integration of the port facility with the city.
  - ✓ The revitalisation plan is to be supported by the Multi-Donor Trust Fund established by World Bank, European Union and United Nations.
  - ✓ The funds are to be utilised for prioritised areas such as health, good governance, education, small and medium sized enterprises, housing, social protection, culture and heritage.
- **World’s second-largest single-dish radio telescope, Arecibo Telescope – has collapsed recently**
- ✓ Puerto Rico’s Arecibo Telescope, owned by the US National Science Foundation, was built in 1963.
  - ✓ It is known for its finding that Mercury rotates in 59 days and not 88 days as per the original calculation
  - ✓ Apart from its scientific contributions, it is a tourist and cultural symbol for Puerto Rico, attracting around 90,000 visitors annually.



- ✓ The Arecibo Telescope has one of the most powerful radar employed to observe asteroids, planets, ionosphere etc.,
- ✓ The telescope has discovered the first exoplanets, prebiotic molecules in distant galaxies and first millisecond Pulsar.
- ✓ Prebiotic molecules are matter that lead to the origin of life.
- ✓ The Telescope had served as a hub in the search of extra-terrestrial life and has picked up several radio signals from alien civilisations.
- ✓ It has played a major role in tracking killer asteroids heading towards the earth.
- ✓ In 1993, the scientists Joseph Taylor and Russell Hulse monitored a binary Pulsar using the observatory
- ✓ It was the first evidence of the existence of gravitational waves, for which both the scientists were awarded the Nobel Prize in physics.
- ✓ On November 19, 2020, the National Science Foundation of the United States recommended controlled demolition of the telescope as two cables broke off threatening the survival of the observatory.
- ✓ The existing cables of the telescope are no longer capable of carrying its massive weight.
- ✓ The receiver platform of the telescope alone weighs 900 tonnes.
- ✓ Earlier, the telescope had survived several hurricanes and earthquakes.

## INDIA AND OTHER COUNTRIES

- **India and the United States - recently signed the Memorandum of Understanding on Intellectual Property Cooperation.**
- ✓ The agreement was signed between the Department for Promotion of Industry and Internal Trade (DPIIT) and United States Patent and Trademark Office (USPTO).
- ✓ The agreement will facilitate exchange of best practices, experience between the industries, research and development organisations, Universities and small and medium-sized Enterprises.



- ✓ It will encourage 'active' collaboration in exchange of experts, training programmes, outreach activities and Technical exchanges.
- ✓ It also provides best practices on processes for examination of application of trademarks, Geographical Indications, patents and industrial designs.
- ✓ It will also include enforcement, protection and use of intellectual property rights.
- ✓ It will help in exchange of information on modernization projects, procedure for management of intellectual patent office services and documentation and information systems in the intellectual patent.
- ✓ India recently signed Memorandum of Understanding with Denmark on Intellectual Property Cooperation in September 2020.
- ✓ This agreement was also signed by the DPIIT on behalf of India.

## CONFERENCES, FESTIVALS & SUMMITS

- **In a first, the 21<sup>st</sup> edition of the Hornbill festival - is to go digital from December 1 to 5 amid the coronavirus pandemic.**



- ✓ The Hornbill Festival, which is called the 'Festivals of Festivals', is a 10-day cultural fest of Nagaland
- ✓ The annual festival showcases the rich and diverse Naga ethnicity and tribes through folk dances, traditional music, local cuisine, handicraft, religious ceremonies, art workshops, exhibitions, sports etc.
- ✓ The starting day of this festival - December 1- marks the Nagaland statehood day.
- ✓ Every year the Hornbill festival is celebrated between December 1 and December 10 in the northeast region and in the state of Nagaland.
- ✓ The festival is named after the Indian Hornbill Bird, as it is found in folklore of most of the tribals in the state of Nagaland.
- ✓ The festival has contributed significant tourism revenue to the north eastern part of India.

- ✓ The Naga Morungs or the Nagas are the ethnic groups native to North Western Myanmar and North Eastern India, especially Nagaland and Naga self-administered zone
- ✓ The Naga self-administered zone is located in the Naga Hills of Sagaing region of Myanmar.
- ✓ The large and colourful forest bird, Hornbill is common in tropical and subtropical Asia, Africa and Melanesia.

## SCIENCE, TECHNOLOGY & ENVIRONMENT

- **Australian Square Kilometre Array Pathfinder (ASKAP) - is a new type of radio telescope developed by Commonwealth Scientific and Industrial Research Organisation (CSIRO).**



- ✓ It creates high-resolution images by combining the signals of 36 smaller dish antennas, each of 12 metre in diameter
- ✓ The array of 36 identical parabolic antennas work together as a single astronomical Interferometer
- ✓ An astronomical interferometer refers to an array of separate telescopes that work together as a single telescope to provide higher resolution of images of astronomical objects such as nebulae, stars and galaxies
- ✓ The Antennas are spread over a collecting area of 4000 square metres.
- ✓ Recently, this telescope had helped map around 300 million galaxies in approximately 300 hours to create a 'new atlas of the universe'.
- ✓ The telescope was primarily used for large survey science projects.
- ✓ It also aims to study about evolution of magnetic field and gas in the Galaxies and formation of Galaxies in the universe
- ✓ The project is expected to detect more than 70 million radio sources.
- ✓ Using these radio sources, galaxies, black holes and several other Universal bodies can be detected

## DEFENCE

- **The Defence Research Development Organization (DRDO) - recently launched a new laboratory Defence Geo Informatics Research Establishment.**



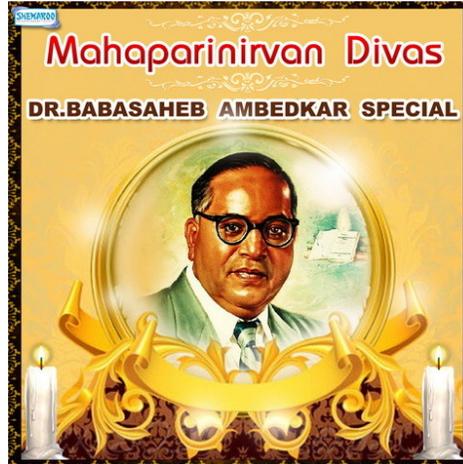
- ✓ The new lab will focus on research on the areas of terrain and avalanches along the borders with China and Pakistan.
- ✓ It was established by merging existing labs – the Manali-based Snow and Avalanche Studies Establishment (SASE) and the Delhi-based Defence Terrain Research Establishment (DTRE)
- ✓ The SASE was involved in the study of snow and avalanches
- ✓ It had prepared avalanche atlas for more than 3000 on-road location in different parts of the country, especially in the terrains where the armed forces were deployed.
- ✓ The DTRE was set up in 1954, to evaluate the deadlines and assess mobility potential of inaccessible areas.
- ✓ It was also involved in creating and updating Terrain intelligence reports and thematic maps for the users

## RANKINGS

- **Lahore - has once again topped the list of world's most polluted cities in the world, as per the recently released US Air Quality Index**
- ✓ Lahore has a particulate matter rating of 423
- ✓ It is followed by New Delhi and Kathmandu, the capital of Nepal, which has a particulate matter rating of 229 and 178 respectively.
- ✓ Air Quality Index is an index that tracks the air quality on daily basis.
- ✓ It helps to measure the effect of air pollution in the environment onto the health of the people.
- ✓ The Air Quality Index is calculated based on five major air pollutants such as ground level Ozone, Sulphur Dioxide, carbon monoxide, Nitrogen dioxide and particulate matter.
- ✓ Higher the level of Air Quality Index greater is the level of air pollution.
- ✓ The Air Quality Index is usually measured between 0 to 500.
- ✓ Accordingly, the air quality is categorized as Good (0-50), satisfactory (51-100), moderately polluted (101-200), poor (201-300), very poor (301-400) and severe (401-500)
- ✓ The above categories of air quality standards are set by Central Pollution Control Board of India.

# NATIONAL DAY

## ➤ Mahaparinirvana Divas – December 6



- ✓ The day marks the death anniversary of Dr Babasaheb Ambedkar, the father of Indian Constitution
- ✓ On this day each year, people pay respect at Dr Ambedkar's Samadhi in Mumbai, which is called Chaitya bhoomi
- ✓ This year, due to the on-going Covid-19 pandemic, the Maharashtra government has urged people to refrain from visiting this site and observe the day staying home.
- ✓ Mahaparinirvan (Nirvana after death) is one of the major goals of Buddhism.
- ✓ Dr Ambedkar died in a few days after completing his work "The Buddha and his Dhamma".
- ✓ Also, he converted to Buddhism October 14, 1956 in Nagpur along with five lakh supporters after studying the religion for years together.
- ✓ Hence, Dr Ambedkar's death anniversary is marked as Mahaparinirvan Divas.
- ✓ Dr B R Ambedkar was the first minister of law and Justice of independent India.
- ✓ He was an Indian economist, jurist, social reformer and politician, who fought against social discrimination towards untouchables.
- ✓ Dr Ambedkar holds doctorate in Economics from University of London and Columbia University.
- ✓ He was awarded with the India's highest civilian award, Bharat Ratna in 1990.

