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**MADE EASY
WEEKLY
CURRENT AFFAIRS**

WEEK-4

22nd January - 31st January, 2021

**Targeted Examinations:
CSE, ESE, PSUs, State Exams,
SSC and Banking Exams**

22nd JANUARY 2021

Exercise Kavach

- The Indian Army held a large-scale joint Kavach military drill in the Andaman Sea and the Bay of Bengal.

Key Points:

- The Kavach Joint Military Drill will include the Indian Navy, the Indian Army, the Indian Air Force and the Indian Coast Guard.
- At the drill, the Joint Forces are enforcing high density offensive and defensive initiatives in the Andaman Sea and the Bay of Bengal.
- Kavach Exercise involves coordinated air and maritime strikes, synergized application of maritime surveillance assets, air defence and landing operations.

Intelligence Surveillance Reconnaissance Exercise:

- The Joint Intelligence Monitoring Reconnaissance (ISR) Exercise was also conducted along with the Kavach Exercise. The ISR will confirm information collection capability.

■ NOTE:

China has developed ELINT (Electronic Intelligence) and SAR (Synthetic Aperture Radar). SAR covers a small area, while ELINT covers a larger area for Intelligence Surveillance Reconnaissance Exercises.

SAAW: Smart Anti-Airfield Weapon of DRDO

- Recently, the Hindustan Aeronautics Limited test successfully launched the Hawk aircraft SAAW (Smart Anti Airfield Weapon). SAAW was created by the Defence Research Development Organisation (DRDO).

About SAAW:

- SAAW is a long-range, precision-guided anti-aircraft weapon. The weapon is capable of capturing ground targets with accuracy up to a maximum of 100 kilometres.
- SAAW is essentially a bomb. It is designed to kill objectives such as bunkers, runways, concrete walls and aircraft braces.
- The SAAW project was approved by the Government of India in 2013.

■ NOTE:

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

Root Zone Moisture

- NASA recently published soil moisture projections in the root zone (the top 39 inches of soil). Accordingly, the Konya Plains had the lowest root zone moisture content.

Key Findings

- The Konya Plains in Turkey received 38% less rainfall in 2020 compared to 2019. This is the biggest explanation for the region to become the lowest "root zone moisture" location in the world.
- The wetness percentile of Root Zone Moisture in western India was between 80% and 98%. In Eastern India, the wetness percentile was between 30% and 70%. It was less than 10% in northern India.
- The Surface Soil Moisture along the coasts of Western Ghats was above 95%. In the rest of the country, it was less than 30%. In northern India, it was less than 10%.

About Root Zone Moisture:

- Water and soil moisture at a depth of 39 inches is considered root zone moisture. It takes a lot of time for aquifers to regenerate from drought in the absence of moisture. Aquifers depend on surface moisture to percolate through soil and rock.

Great Green Wall Initiative

- The Great Green Wall for the Sahel and Sahara Project recently secured USD 14 billion in funding at the latest One World Biodiversity Summit.
- The money will be used to regenerate depleted property, improve resilience, build green jobs and conserve biodiversity.

Key points:

- The goal of the Great Green Wall initiative is to change the lives of 100 million Africans by developing 8,000 kilometres long and 15 kilometres wide mosaic of trees, vegetation, grasslands and plants.
- The Great Green Wall is an African project. The African Union began battling desertification, soil erosion, drought in 2007.
- The project aims to restore 100 million hectares of degraded land by 2030.
- Objective: The initiative aims to sequester 250 million tonnes of carbon and create ten million green jobs. It will support the African communities to grow fertile land and increase economic opportunities for the youngest population.

NOTE:

Countries that are selected as intervention zones for the Great Green Wall initiative are Chad, Burkina Faso, Eritrea, Ethiopia, Mali, Niger, Mauritania, Nigeria, Sudan, Senegal and Djibouti.

23rd JANUARY 2021

Mount Merapi

- The most active volcano in Indonesia, Mt Merapi, has recently erupted with a river of lava and gas clouds. The lava and the clouds flew down its cliffs for 1,600 metres.
- This was the biggest flow of lava in Mount Merapi.
- The sound of an explosion has been heard 30 kilometres away.

- The last major eruption of the Merapi was in 2010 that had killed 347 people.

About Mount Merapi:

- Mount Merapi is the Fire Mountain in Indonesia and Java.
- It is an active stratovolcano that is located on the border between the Central Java and Yogyakarta provinces, Indonesia.
- It is considered as the most active volcano in Indonesia and has erupted regularly since 1548.

Global Climate Litigation Report, 2021

- The United Nations Environment Program (UNEP) has updated its Global Climate Litigation Report 2021.
- The research was written by UNEP in conjunction with the Sabin Center for Climate Change Law at Columbia University.

Key Findings:

- According to the report, environment cases have almost doubled over the last three years.
- Rising climate cases are gradually pressuring policymakers and private players to deliver on their climate promises.
- Cases also enable the government to adopt more stringent climate change reduction and adaptation objectives.
- As per the data provided by the report, in 2017 884 cases were brought in 24 countries. As of 2020, cases have increased to 1,550 filed in 38 countries and the European Union courts.

About United Nations Environment Programme (UNEP):

- UNEP, which is also called UN Environment, was established by Maurice Strong in June 1972 following the UN conference on the Human Environment in Stockholm.

- The organisation involves in coordinating the responses to environmental issues within the United Nations system.
- It provides leadership, delivers science and develops solutions on issues like climate change, management of marine & terrestrial ecosystems and green economic development.

Jarosite: Rare Mineral Found

- An unusual maritime mineral, jarosite, has been detected in ice in Antarctica. It was found by digging deep into the Antarctic ice.
- The newly discovered mineral was investigated and it was determined to have been formed in pockets within the glacier.

About Jarosite:

- Jarosite is a mineral from mars which is scarcely seen on earth. It is a sulphate of potassium and iron.
- The mineral can be formed by both water and acidic conditions.
- It was first discovered on Mars in 2004 by a rover named "opportunity".
- Other Jarosite minerals include silver, sodium, lead and ammonium.
- It can be found in the mining and ore processing wastes where they act as sinks for other toxic elements such as lead and arsenic.
- Jarosite is used in hydrometallurgy to control impurities.

National Marine Turtle Action Plan

- The Ministry of Environment, Forest and Climate Change (MoEF&CC) has issued 'Sea MegaFauna Stranding Guidelines' and 'National Marine Turtle Action Plan.' It seeks to establish a model for the survival of aquatic megafauna and marine turtles.

Key Highlights:

- Documents providing the means and means to encourage inter-sectoral conservation action have been published.

- The documents further recommend strengthening cooperation between the government, civil society and other related stakeholders in order to respond to cases of stranding, illness or mortality of marine mammals.
- It also suggests coordinated efforts for the conservation of marine turtles.
- The documents contain the actions that are required to handle the stranded animals on shore.
- It will also look after the stranded or entangled animals in the sea or on a boat.

24th JANUARY 2021

Govt approves hike in MSP for Copra

- The Cabinet Committee on Economic Affairs (CCEA) chaired by the Prime Minister Narendra Modi has approved the Minimum Support Prices (MSPs) for milling copra and ball copra.
- The government has increased the MSP of copra by 375 from 2020.

About Minimum support price (MSP)

- MSP is an agricultural product price which is set by the Government of India. At this price, the government purchases the commodities directly from the farmer.
- The MSP is not enforceable by law. MSP seeks to safeguard the farmer interest by providing them a minimum profit for their harvest in case the open market has a lesser price than the actual cost incurred. The price of the 23 commodities is set by the government twice a year.
- The MSP is fixed based on the recommendations of the Commission for Agricultural Costs and Prices (CACP).

Off-Budget Borrowings

- The Government of India presented the Union Budget 2021 on February 1, 2021. This year, the focus of the budget was on off-budget borrowings so as to reduce the Fiscal Deficit.

About off-budget borrowings:

- The loans that are taken by any public institution and not by the Centre directly are called the “Off-Budget Borrowings”. The public institution borrows on the directions of the central government.
- These borrowings are used to fulfil the expenditure needs of the government.
- Under such borrowing norms, the Centre used to finance its expenditures while keeping the debt off the books. Thus, the debt is not counted while calculating the fiscal deficit.
- The liability of the loan is not formally on the Centre and is not included in the national fiscal deficit. Thus, it helps in keeping the fiscal deficit of the country within acceptable limits.

NOTE:

- Government can raise the borrowings by asking the implementing agency to raise the required funds from the market by loans or by issuing bonds.
- The borrowings can also be raised through the Public Sector Banks (PSBs) where the PSBs can be asked to fund off-budget expenses.

National Non-Communicable Disease Monitoring Survey (NNMS)

- The National Non-Communicable Disease Monitoring Survey (NNMS) was recently released in India by the Ministry of health. The survey was conducted for the period of 2017-18.
- This is the first of its kind of a comprehensive survey on NCDs. It covers the age groups of 15-69 years, males and females from the urban and rural areas.

Key Findings:

- The report highlights that, two in five adults have three or more risk factors for non-communicable diseases (NCD) in India.
- Further, the status of the health system to respond to the disease burden is underscored.

- It also states that more than one in every four adults and 6.2% adolescents were overweight or obese.
- Three out of ten adults had raised blood pressure.
- 3% had raised blood glucose.

About NNMS:

- It is the largest comprehensive national Survey on risk factors and health systems preparedness of non-communicable disease (NCD).
- It also provides a framework on the use of telemedicine for cancer, heart diseases, diabetes, and stroke.

25th JANUARY 2021**World Economic Outlook, 2021**

- The International Monetary Fund (IMF) has released the “World Economic Outlook, 2021” Report.

Key Findings:

- The study points out that India will see the fastest growth among the major economies.
- India's economy will increase by 11.5 per cent in 2021, relative to the 8.8 per cent expansion expected in October 2020.
- However, growth was expected to be 6.8% for the year 2022.
- The report further highlights that the global growth for 2021 will be 5.5 percent as compared to 5.2 percent October 2020.
- The economic growth of the world is projected at 4.2 percent in 2022.

About World Economic Outlook (WEO):

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

Lost Galaxy ‘NGC 4535’

- NASA's Hubble Space Telescope recently collected images of the NGC 4535, also known as the Lost Galaxy.

- The picture reveals that the young and hot stars that hang out are the light blue dots. Older and colder stars, on the other hand, are illuminated by vivid colours closer to the middle.

About Lost Galaxy

- It's also known as NGC 4535.
- The galaxy is one of the largest of the 2,000 galaxies in the Virgo Cluster.
- The cosmos is situated some 50 million light-years away from Earth.
- It is a barred spiral galaxy that implies a large vortex of stars with a distinct bar pattern in the middle of it.
- The Galaxy was discovered in 1785 by William Herschel who found the planet Uranus.

■ NOTE:

The concept of the Spiral Galaxy was first described by Edwin Hubble in 1936. The Spiral galaxy is the most common type of galaxy in the universe.

Alpha Global Union

- Google employees from all over the world have recently created a multinational union dubbed "Alpha Global."
- The new union was named after Google's parent corporation, Alphabet. The union was formed in coordination with the UNI Global Union.

About Alpha Global

- The Alpha Global Union is made up of 13 separate unions.
- These 13 unions organise workers in 10 countries, including the United States, Switzerland, Germany, Sweden and the United Kingdom.
- The grouping was created with the goal of "building a more ethical and accountable company."
- It also aims to bring together the direct Alphabet employees besides the temporary, vendor, and contract workers.

About Alphabet Workers Union (AMU)

- The Alphabet Employees Union has been launched by the United States and Canada. It's a union of minorities.
- Initially, more than 200 employees were associated with the Communications Workers of America. AWU rose to more than 700 members within a week.

26th JANUARY 2021

Akash-NG Missile

- The Defence Research and Development Organisation (DRDO) has successfully test-fired the surface-to-air Akash-NG (New Generation) Missile off the Odisha coast.

About Akash-NG:

- Akash-NG is a medium-range mobile surface-to-air missile defense system.
- It has been developed by the Defence Research and Development Organisation (DRDO).
- The missile has been produced jointly by the Bharat Dynamics Limited (BDL) that developed the Missile Systems and the Bharat Electronics (BEL), Tata Power Strategic Engineering Division & Larsen & Toubro that developed the radars, control centers, launcher systems.
- The missile has the capability of targeting the aircraft up to 50-60 km away at altitudes of 18,000 m.
- The missile can neutralize the aerial targets such as the fighter jets, cruise missiles and air-to-surface missiles.

About Passive Electronically Scanned Array (PESA):

- It is also called the passive phased array. PESA is an antenna in which a beam of radio waves can be electronically directed to point in different directions in which all the antenna elements are connected with the single transmitter. PESA is highly used in radars.

Green Tax

- The Ministry of Road Transport has decided to put additional taxes on old vehicles that are no longer suitable on the road.
- The extra tax is considered the Green Tax. Action has been taken to minimise pollution.

Key Highlights:

- The Green Tax would reduce the level of emissions.
- That would even make the polluter responsible for emissions.
- Under the Green Tax Rules, travel vehicles older than eight years will be paid a green tax at the time of renewal of the health certificate. They will be taxed at a rate of between 10% and 25% of the road levy.
- Public transit buses such as city buses can pay a smaller green fee.
- Revenue collected from the green tax will be kept in a separate account. The amount will be used for tackling the problem of pollution.

■ NOTE:

Green tax is also called the pollution tax or environmental tax. The tax is an excise duty on goods that results into the environmental pollutants.

Climate Adaptation Summit 2021

- The Prime Minister of India addressed the Climate Adaptation Summit 2021. India plans, by the year 2030, India will target 450 gigawatt of renewable energy capacity.

Key Points:

- The climate adaptation summit was held by the Netherlands Government on 25 January 2021. The summit was held online and is called "CAS Online."
- The summit was based on the success of the United Nations Climate Change Summit.

- The summit also outlined the ground-breaking strategies of climate emergency and sustainable momentum through the COP26 UNFCCC.
- CAS will help in delivering the action and inspire the change to help the societies build back better.

■ NOTE:

The 2021 United Nations Climate Change Conference is also known as COP26. It is the 26th United Nations Climate Change conference. It will be held in Glasgow, Scotland from November 1 to 12, 2021.

Global Climate Risk Index 2021

- The Global Climate Risk Index was recently published by Germanwatch, an NGO based in Bonn, Germany.
- In the ranking, India ranked seventh among the countries most affected by climate change in 2019.

Key Findings of the report:

- Monsoon lasted for a month longer than usual in India in the year 2019, according to the study.
- Between June and September 2019, 110% of the long-term average was observed.
- Heavy rain triggered extreme floods in India, resulting in 1,800 deaths across 14 provinces. The flood has contributed to the evacuation of 1.8 million people.
- As per the report, eight tropical cyclones came in India. Six of them intensified to be very severe.
- Report further highlights that, 'Extremely severe' cyclone Fani affected 28 million people and killed 90 people in India and Bangladesh.

The Global Climate Risk Index (CRI):

- The Global Climate Risk Index is annually published by Germanwatch. The index analyses the impact of extreme climate events on the country and the economy.
- It analyses how countries have been affected by the impacts of weather-related loss events.

27th JANUARY 2021

Treaty on Prohibition of Nuclear Weapons

- India has recently declared that it does not accept the "Treaty on the Prohibition of Nuclear Weapons" and is not bound by any of the obligations of the Treaty.

Key Highlights:

- The UN General Assembly (UNGA) approved the "Treaty on the Prohibition of Nuclear Weapons" in 2017.
- However, it was not sponsored by the nine countries that own nuclear weapons.
- The treaty was also not endorsed by the NATO alliance.
- In spite of this, the Treaty entered into effect on 22 January 2021.
- India maintains that it will continue to provide the high priority and remain committed to the universal, non-discriminatory and verifiable nuclear disarmament.

About: Treaty on Prohibition of Nuclear Weapons

- The Convention is also called the Protocol on the Ban of Nuclear Weapons. This is the first legally binding multinational agreement.
- Which bans nuclear weapons and aims at the complete destruction of those weapons. The Treaty was ratified on 7 July 2017. For Member States, the Treaty bans the development, research, manufacturing, stockpiling, transfer and use of nuclear weapons.
- The states that have declared possessing the nuclear weapons include India, Pakistan and North Korea while Israel is the state that is indicated for possessing the nuclear weapons.

Pradhan Mantri Rashtriya Bal Puraskar 2021

- Thirty-two children were awarded the Pradhan Mantri Rashtriya Bal Puraskar in the year 2021.

- The award was presented to these children for their excellent achievements and extraordinary ability in the areas of creativity, scholastics, athletics, social work, arts, culture and courage.
- As per the statement of The Ministry of Women and Child Development these awardees have been selected from the 32 districts of 21 states and Union territories.

About : Pradhan Mantri Rashtriya Bal Puraskar

- The award is formerly known as the National Child Award for Exceptional Achievement.
- This is Highest Civilian Honour in India that is given to the exceptional achievers under the age of 18.
- A child must be an Indian Citizen and reside in India in order to get the award.
- The Ministry of Women and Child Development has instituted the puraskar in 1996.
- This puraskar recognizes the children with exceptional abilities and outstanding status in fields including the arts, culture, academics, research, social service, design, innovation and sports.
- The President of India confers the award in the week preceding the Republic Day.
- The awardees also participate in the Republic Day Parade.
- It is presented in the Durbar Hall of Rashtrapati Bhavan in New Delhi.
- The individual award comprises a medal, cash prize of Rs. 1,00,000, citation and a certificate.

NOTE:

The names of the awardees for the award is finalized by a National Selection Committee which is headed by the Minister of Ministry of Women and Child Development.

AMPHEX 21: A Tri-Services Exercise

- The Indian Armed Forces performed a large-scale tri-service AMPHEX – 21 joint amphibious exercise in the Andaman and Nicobar Islands.

Key Highlights:

- In this drill, Naval ships, Army amphibious forces and numerous types of aircraft from the Air Force participated.
- The exercise was carried out with the intention of validating the ability of India to defend the territorial integrity of the island territories.
- The exercise was also aimed at enhancing the operational synergy and joint warfighting capabilities between the three Services.

Exercise KAVACH

- It is also a tri-service military exercise. The exercise was carried out with the AMHEX-21 in January 2021.
- The exercise was carried out under the aegis of the Andaman and Nicobar Command (ANC), the only Indian Joint Forces Command.
- The exercise was participated by the Indian Army, Indian Navy, Indian Air force and the Indian Coast Guard.

28th JANUARY 2021

MeerKAT Radio Telescope

- The MeerKAT Radio Telescope recently discovered two giant radio galaxies. The galaxies were discovered under the MIGHTEE survey.

About : MeerKAT Radio Telescope

- The MeerKAT Radio Telescope is situated in the North Cape of South Africa. It's a radio telescope with sixty-four antennas.
- The array configuration of the MeerKAT Radio Telescope consists of 61 percent of the antennas positioned within a kilometre diameter circle and the remaining 39 percent of the antennas are spread over a four kilometre range.
- MeerKAT is a follow up to Karoo Array Telescope (KAT 7). In simple words, KAT 7 is a precursor to

MeerKAT. KAT 7 has seven dishes of Prime Focus Reflecting Telescope.

Square Kilometre Array:

- The receiving stations of SKA are to extend out to a distance of 3,000 kilometres. The SKA is being built in Australia and South Africa. The four precursor facilities of the project are as follows:
- atmospheric above the deserts are favourable with clear sky and provide maximum radio quietness.

Europe's Largest Solar Power Plant: Francisco Pizarro

- Spain and France have recently signed an agreement to construct 590 MW of solar power plants.
- It will be the first solar power plant in Europe. The deal was signed by Iberdola of Spain and Donone of France.

Key Points:

- The solar power plant is to be installed at a cost of USD 364 million. The solar power plant is to be situated in the western province of Caceres, Spain.
- The solar power plant will prevent the release of 245,000 tonnes of carbon dioxide.
- It is expected to provide electricity to 375,000 people each year.
- The project is to begin supplying power in 2022.

Digital Voter-ID Cards

- The Indian Election Commission (ECI) is scheduled to introduce an Electronic Electoral Photo Identification Card (e-EPIC) programme on the occasion of National Voters Day.
- The new digital card is being launched, taking into account the forthcoming polls in five states, namely Kerala, Puducherry, Assam, Tamil Nadu and West Bengal.

About e-EPIC?

- It is the electronic edition of the Electoral Photo Identification Card (EPIC).
- It is a variant of a stable portable text file (PDF) that cannot be modified.
- The e-EPIC contains a protected QR code along with the picture and demographics, including the serial number and part number.
- This portable version can be downloaded on a mobile or a computer.

Blue Jet Lightning

- Scientists at the International Space Station (ISS) have witnessed a brilliant blue lightning bolt flying out from the thunderclouds.
- These blue jets are impossible to detect from the ground, since electrical discharges originate from the tops of thunderclouds. But the effect can easily be observed from space.

Key Highlights:

- The space station instrument caught a blue jet fired from a thunderstorm cell above a small island in the central Pacific Ocean on February 26, 2019.
- Scientists have seen five powerful bursts of blue light.

About Blue Jets:

- Blue jets are started as "normal" lightning discharges.
- It appears between the upper positive charge area in the thundercloud and the negative scanning layer above the charging region.
- The positive end network fills the negative charge region and then the negative end fills the positive charge region.

NOTE:

Cumulonimbus Cloud is a dense and towering vertical cloud. This cloud is formed by the water vapor which is carried by the powerful upward air currents.

29th JANUARY 2021**Resolution on safeguarding religious sites**

- The United Nations General Assembly recently adopted a resolution on the security of religious sites around the world.
- The resolution was titled "Promoting a culture of peace and tolerance for the protection of religious sites." India is supporting the bill.

Key Features:

- The resolution condemns crimes against religious sites and icons.
- It opposes the use of aggression to convey an opinion (related to protecting religious practices).
- The resolution further opposes the forced conversion of faiths.
- It opposes acts of violence that are killing holy sites all over the world.
- The United Nations Plan of Action to safeguard religious sites has been adopted.
- United Nations Plan of Action to safeguard Religious Sites
- In order to remind the universality of religious sites, mapping of religious sites all over the world is to be developed.

New START Treaty

- US President Joe Biden suggested a five-year extension of the New START (Strategic Weapons Limitation Pact) Treaty. Russia accepted the idea.

Key Features:

- The New START Treaty was announced between the United States and Russia in Prague in 2010. (capital of Czech Republic). It came into effect in 2011.
- The formal name of the New START Treaty is 'Steps for further reduction and restriction of strategic offensive weapons.'

- The treaty was signed to reduce nuclear arms production and utilisation by US and Russia. Under the treaty, the countries will reduce their strategic nuclear missile launchers by half.

■ NOTE:

The Intermediate Range Nuclear Forces Treaty was signed between the US and Russia during the cold war period. It was signed in 1987. Under the treaty, the countries agreed to eliminate their stocks of short range and intermediate range missiles. The US withdrew from the treaty in 2019.

Operation Sard Hawa

- Operation Sard Hawa was conducted by the Border Security Force on the western border of Rajasthan. The main objective of the operation is to verify the penetration of thick fog in the area.
- The operation was also conducted to improve security ahead of Republic Day. The operation is expected to continue until January 27, 2021.

About Operation Sard Hawa

- The operation was conducted in order to keep a hawk's watch on the international border.
- Under the operation, the Jawans will patrol the areas around the border with sophisticated weapons in the police station.
- The number of jawans stationed at the border has been raised as part of the campaign.
- The intelligence arm of the Border Security Force is also involved during Operation Sard Hawa.

Border Security Force

- The Border Security Force of India is also called the "First Wall of Defence of Indian Territories". It was set up in the wake of 1965 Indo-Pakistan war.
- The main function of the Border Security Force is to ensure the security of borders of India. It is headed by an officer from Indian Police Service.

30TH JANUARY 2021

Neglected Tropical Diseases

- India has entered the world to Light Up Qutub Minar as a symbol of solidarity in the fight against neglected tropical diseases (NTD).
- This was achieved to mark the second annual World NTD Day to be held on 30 January.
- The World Day of Neglected Tropical Diseases highlights the dedication of the global community to stop the epidemic.

About Neglected Tropical Diseases (NTD):

- NTDs are a diverse group of communicable diseases that are found in tropical and subtropical environments.
- More than one billion people are affected by these diseases per year. Countries spend billions of dollars per year in the war against the epidemic.
- As per the WHO major NTDs are: Buruli Ulcers, Chagas Disease, Dengue, Chikungunya, Sleeping Sickness (Human African Trypanosomiasis), Hansen's Disease (Leprosy), Trachoma Mycetoma, chromo-blastomycosis, deep mycoses etc.

■ NOTE:

As per the data, one in five people across the world are affected by NTD. India is home to the world's largest absolute burden of 11 of the major neglected tropical diseases.

Kraken Mare in Titan

- The researchers have found that the largest sea in Titan (moon of Saturn) is thousand feet deep in its centre. Also, it is the size of five great lakes combined together.

About Kraken Mare

- Kraken Mare is a huge liquid body located in the north pole of Titan.

- It is made of ethane and methane. The sea covers 154,000 square miles.
- The Kraken Mare was discovered by the space probe Cassini. To study about Kraken Mare and its composition, “Titan Saturn System Mission” is to be launched.

Titan Saturn System Mission

- It is a joint mission of NASA and European Space Agency. The mission is to be developed at a cost of 2.5 billion USD. It is a four-year mission.
- It includes a two-year Saturn tour, two months of Titan aero-sampling and twenty-month Titan orbiting phase.

Hum of the Universe

- The Hum of the Universe was detected by the North American Nanohertz Observatory for Gravitational Waves (NANOGrav). According to the researchers, the hum was produced by gravitational waves.

Key Points:

- The Hum of the Universe comes from a type of dead star called a “Pulsar”. These stars are basically neutron stars. They are oriented in such a manner that they flash beams of radio waves from their poles as they rotate.
- This is the first time the humming sound has been heard from a pulsar collision. Earlier scientists have observed such humming sounds. However, they were from black hole mergers.
- The humming sound from blackhole mergers were detected by LIGO observatories. LIGO is the LASER Interferometer Gravitational Wave Observatory.

Blackhole Hum

- Similar humming sounds are produced when black holes collide. Such sounds are called Black Hole hums. On an average more than hundred thousand mergers of black holes occur in the universe in a year.

■ NOTE:

Indian Pulsar Timing Array is a project of the National Centre for Radio Astrophysics, Tata Institute of Fundamental Research. It aims to detect nano-hertz gravitational waves by precision timing.

WASP-107b

- The researchers studying about the WASP-107b have recently found that the core mass of the giant exoplanet is much lower than what was previously assumed.

Key Points:

- WASP-107b is a super-Neptune exoplanet. A super-Neptune exoplanet is a planet that is more massive than Neptune. Sometimes, a planet falling in this range is also called “sub-Saturn”. They are five to seven times as large as the earth.
- It orbits the star WASP-107.
- It is 200 light years away from the earth. It is located in the constellation Virgo.
- The unique feature of WASP-107b is that the planet migrated inward from its birth orbit. This, according to the scientists, might have occurred due to the interaction with a heavier planet.

■ NOTE:

WASP-107b has a comet-like tail. This is because, the helium absorption occurring in the atmosphere of the planet has increased the temperature to five hundred degrees Celsius.

31st JANUARY 2021

Start-up India Seed Fund Scheme

- The government decided to launch the Start-up India Seed Fund Scheme (SISFS). The scheme will be launched with a corpus of Rs 945 crore.

Key Points:

- The programme was initiated with the goal of providing financial support to start-ups for product research, business penetration, proof of concept, prototype creation and marketing.
- The funds under the Start-up India Seed Fund Scheme will be disbursed around the country through chosen incubators.
- For the year 2021-25, the scheme will be in mission mode.
- The official notification on the launch of SISFS was released by the Department for Promotion of Industry and Internal Trade (DPIIT).
- The overall execution and monitoring of the SISFS will be done by the DPIIT. The DPIIT will form an Experts Advisory Committee (EAC) to look after the same.

Eligibility Criteria:

- The funds under the SISFS which are used for start-ups who are established not earlier than 2 years ago at the time of application.
- Start-ups are recognised by the DPIIT.
- Start-ups receiving support under the programme must have an acceptable commercially feasible market plan to use innovations in their main product or service.
- The notification highlights that, preference will be given to start-ups that create innovative solutions in sectors such as waste management, social impact, healthcare, textiles, agriculture, water management, defence, food processing, education, energy, railways, financial inclusion, mobility, space, oil, gas and biotechnology.
- Start-ups should not have received monetary support of more than Rs 10 lakh under any other central or state government scheme.

NOTE:

As per the eligibility conditions, the incubators must be legal entities. It must be operational for at least 2 years on the date of application to the scheme.

Economic Survey 2021- Key Highlights

- The Union Finance Minister sent the Economic Survey 2020-21 to Lok Sabha.
- The Economic Survey 2021 provided an assessment of the gains achieved by the Indian economy in the last 12 months.

Key Highlights:

- The survey points out that the real growth rate for the financial year 2021 was -7.7% as per MoSPI, while the real growth rate for the financial year 2022 is estimated to be 11.5% on the basis of the forecasts given by the International Monetary Fund (IMF).
- For the full fiscal, the survey projected a contraction of 7.7 percent while a V-shaped recovery in the next. GDP growth will be expanding by 11 per cent in the 2021-22 fiscal.
- As per the survey, there was de-growth for the first time.
- It highlights that the Indian economy is technically in a recession as it has witnessed a contraction in the Gross Domestic Product (GDP) for the last two consecutive quarters.
- The Survey also provided a detailed analysis of India's V-shaped economic recovery after it was affected due to corona pandemic. It highlights that mega vaccination drives support the V-shaped recovery.
- As per the survey, the Agriculture sector has remained the silver lining in the growth trajectory even during the pandemic however, contact-based services such as manufacturing and construction faced sharp decline due to the corona pandemic.
- It highlights how the Healthcare sector has taken centre stage in the economy where the government took part actively in shaping and structuring the healthcare market in the country.

About Economic Survey:

- It is the annual flagship document published by the Ministry of Finance. The paper is submitted to Parliament by the Department of Economic Affairs, Ministry of Finance, shortly before the Union budget.

- The first ever Indian Economic Survey was launched in 1950-51. It was presented as part of the budget of the Union. Since 1964, the survey has been separated from the Union budget.
- The document is prepared under the guidance of the Chief Economic Adviser of India. During the budget session, this document is presented to both the houses of the parliament. The document is non-binding in nature.

Chauri Chaura Centenary

- The Prime Minister of India will begin the Centenary of Chauri Chaura on 4 February 2021.
- The Prime Minister will also issue a postage stamp on the occasion of the centenary of the incident in Chauri Chaura.

Chauri Chaura incident

- The incident at Chauri Chaura took place in British India on 4 February 1922 at Chauri Chaura. Chauri Chaura is situated in the Gorakhpur district of modern Uttar Pradesh.
- In the attack, a large number of demonstrators who joined in the non-cooperation campaign clashed with the police and the police opened fire on them.
- In response, the protesters assaulted and set fire to a police station.
- This incident led to the killing of all of its occupants.
- In the incident, three civilians and 22 policemen were killed.
- Those protesters were protesting in the light of the "Non-Cooperation Movement" called by Mahatma Gandhi.

- Following the incident, Mahatma Gandhi halted the non-co-operation movement on February 12, 1922.

Non-cooperation movement

- This movement was launched on September 4, 1920 by Mahatma Gandhi. This movement was started with the aim of self-governance and obtaining full independence or Purna Swaraj.
- This was started in the light of withdrawal of the support by Indian National Congress (INC) for British reforms following the Rowlatt Act and the Jallianwala Bagh massacre.

125th Anniversary of "Prabuddha Bharat"

- The Prime Minister of India addressed the 125th anniversary celebration 'Prabuddha Bharata' .

About Prabuddha Bharata:

- It's the Ramakrishna Order's monthly magazine.
- This magazine was published in 1896 by P. Aiyasami, B. R. Rajam Iyer, G. G. Narasimhacharya, B. V. Kamesvara Iyer under the guidance of Swami Vivekananda.
- Prabuddha Bharata magazine was of considerable importance in transmitting the word of the ancient divine knowledge of the land.
- The magazine comprises the articles and translations by monks, scholars and other writers on humanities and social sciences.

Ramakrishna Order

- It is the monastic lineage founded by Ramakrishna. It was founded in January 1886 at the Cossipore House. It is different from the Ramakrishna Math.