



**MADE EASY**

India's Best Institute for IES, GATE & PSUs

**MADE EASY  
WEEKLY  
CURRENT AFFAIRS**

**WEEK-1**

01<sup>st</sup> June - 07<sup>th</sup> June, 2021

**TARGETED EXAMINATIONS**

**CSE, ESE, PSUs, State Exams,  
SSC and Banking Exams**

1<sup>st</sup> JUNE 2021

## Vajra Kavach Disinfection System

- Mumbai-based start-up, Indra water has developed "Vajra Kavach Disinfection System" which removes scourge of viral particles from equipment used by Corona warriors front line workers.

### About Disinfection System

- It was tested with Escherichia virus MS2 (a single-stranded RNA virus and a well-known surrogate of human respiratory viruses such as influenza virus and coronavirus) and E.coli strain C3000.
- The system employs a multistage disinfection process consisting of advanced oxidation, corona discharge and UV-C light spectrum to inactivate the viruses, bacteria, and other microbial strains present on the PPE, achieving more than 99.999% efficiency.
- It removes any possible traces of the disease-causing SARS-Cov-2 virus from Personal Protective Equipment, N95 masks, coats, gloves and gowns.
- It thus enables reuse of PPEs and other materials used by healthcare workers.
- It protects health workers and the environment, by helping reduce biomedical waste generation.
- "Vajra Kavach's UV disinfection of PPE is elegant, user friendly and convenient.

## Superworms

- Kuwaiti businessman Jassem Buabbas has spent years breeding "superworms" for animal feed. He is now hoping that superworms will find their way into diets of Gulf citizens.
- He places worm-like larvae of the darkling beetle in a small, dark room. Darkling beetles are known for their high protein content.

### About Superworms:

- Superworms are larvae of a species of darkling beetle called Zophobas morio. They are also called

King Worms, Morio Worms or Zophobas and are commonly used as food in the reptile pet industry.

- They should not be confused with giant mealworms which are Tenebrio molitor larvae. Superworms larvae resemble 50 to 60 mm long mealworms.
- However, the ends of their bodies are very dark. They have 6 small legs. Insects are accepted by turtles, lizards, salamanders, frogs, birds etc.

## AmbiTAG: India's first indigenous Temperature Data Logger

- Indian Institute of Technology, Ropar (IIT Ropar) in Punjab has developed a first-of-its-kind IoT device AmbiTag that records real-time ambient temperature during the transportation of perishable products, vaccines and even body organs and blood.

### About AmbiTAG

- AmbiTAG is shaped like a USB device. It continuously records the temperature of its immediate surroundings.
- It can detect temperatures "from -40 to +80 degrees" in any time zone for 90 days on a single charge unlike other devices available in the market that record data only for a duration of 30- 60 days. Recorded data can be retrieved by connecting USB with any computer.
- That recorded temperature further helps to know whether that particular item transported from anywhere in the world is still usable or perished because of temperature variation.
- AmbiTag was developed under Technology Innovation Hub – AWaDH which stands for "Agriculture and Water Technology Development Hub" and it's Startup ScratchNest.

### ■ NOTE:

AWaDH is a research center at IIT Ropar. It was established with support of the Department of Science & Technology (DST) and Science & Engineering Research Board (SERB). It carries out extensive research in agriculture and water.

2<sup>nd</sup> JUNE 2021

## India's GDP contracts 7.3% in FY21

- The Central Statistics Office (CSO) of India has issued GDP figures for the January-March quarter of fiscal year 2020-21. According to it, the Indian economy is expected to develop in a favorable direction beginning in the December quarter.

### Key Highlights

- Prior to the second wave of Covid-19, India's GDP increased by 1.6% in the fourth quarter of 2020-21 (January-March).
- However, GDP decreased to 7.3 percent for the entire quarter. Because of a strong increase in government spending, this improved from an earlier projection of an 8% decline in February's second advance estimates.
- Improvement in the fourth quarter was driven by the manufacturing sector even when services were comparatively sluggish.
- Agricultural growth slowed to 3.1 percent in January-March from 4.5 per cent growth in October-December.

### Central Statistics Office (CSO)

- A governmental agency, working under the Ministry of Statistics and Programme Implementation. It is responsible for coordination of statistical activities in India. It maintains statistical standards and has a well-equipped Graphical Unit. Headquarter is in Delhi.

## WHO names COVID-19 variants found in India

- The B.1.617.1 and B.1.617.2 variants of the Covid-19, first identified in India, have been named as 'Kappa' and 'Delta' respectively, by the World Health Organisation (WHO).

### Key Highlights

- 'UK variant' was named 'Alpha'.

- Existing scientific nomenclature system will continue while new names will only aid public discussion using labels in order to "non stigmatising" with the countries where variants were first identified.

### Variants of concerns

- WHO has identified four VOCs- B.1.1.7, B.1.351, P2 and B.1.617.2. They have been labelled as 'Alpha, Beta, Gamma and Delta' respectively.

### Variants of Interest

- The variants of Interest were, less globally widespread and transmissible, also given Greek names. The B.1.617 virus, belonging to the B.1.617 family was identified in India which has been labelled as 'Kappa'.

## Goa Institution for Future Transformation (GIFT)

- On the model of NITI Ayog, the Goa government founded the "Goa Institution for Future Transformation (GIFT)."

### About GIFT

- GIFT will operate similarly to NITI Aayog. It will help, advise, and lead the government in the formulation and execution of policies.
- It will also aid in the monitoring of long-term development goals and the evaluation of various development plans, programs, and schemes.
- The Directorate of Planning, Statistics and Evaluation issued the notification.
- It will be backed up under Article 309 of Constitution of India to attain autonomy.

3<sup>rd</sup> JUNE 2021

## Second BRICS Sherpas' meeting convened

- The second BRICS Sherpas' and Sous Sherpas' meeting was convened under India's Chairship. It was conducted to discuss preparations for the scheduled meeting of BRICS Foreign Ministers on 1st June.

- First BRICS Sherpa meeting was held in 2019 under the Presidency of Brazil in Curitiba, Brazil.
- In 2019, India received 83.3 billion USD remittances. This fell by 0.2% in 2020. This was the maximum remittance from the UAE. The remittance from UAE to India was reduced by 17%.

### Key Highlights:

- The BRICS Sherpas' and Sous Sherpas meeting was convened under India's Chair-ship from 25th to 28th of May. During the meeting BRICS partners negotiated key deliverables for India's chair-ship at BRICS 2021. They also negotiated including outcome documents for Foreign Ministers' meetings.
- Sherpa is the personal representative of the head of state or government, preparing an international summit like G7 and G20 summits.
- First BRICS Sherpa meeting was held in 2019 under the Presidency of Brazil in Curitiba.
- In Pakistan, the remittances increased by 17%. The biggest growth in remittances to Pakistan came from Saudi Arabia.

### ■ NOTE:

Remittance is a sum of money sent from one country to another country. It can be business payments or remittances paid to a family member, friends.

### About Sherpas:

- Name Sherpas is derived from "Sherpa people" who are Nepalese ethnic group. They serve as guides and porters across the Himalayas. Thus, designating grouping as Sherpa refers to the fact that Sherpa clears the way for heads of state at major summits.

## "Migration and Development Brief" Report

- According to the latest edition of the World Bank's Migration and Development Brief, despite Covid-19, remittance flows remained resilient in 2020, registering a smaller decline than previously projected.
- The report said that the remittance flows to the low-income and middle-income countries were 1.9% lower in 2020 as compared to that of 2019.

### Key Findings:

- The reduction in remittance inflows were smaller than that of the 2009 Global Financial Crisis.
- However, the remittance inflows to China will be reduced by 30% in 2020.
- The inflows to the Caribbean and Latin countries increased by 6.5%.

## H10N3 Bird Flu

- Recently, China has reported the first case of human infection with the H10N3 strain of bird flu in Jiangsu province.
- First Human case of H10N3 bird flu was reported in eastern province of Jiangsu in China.

### Key Highlights

- A 41-year-old man has become the first human case of infection with H10N3 strain of bird flu. He was diagnosed with H10N3 avian influenza virus on May 28. It is still not confirmed how he was infected with the virus.
- H10N3 is a low pathogenic or less severe strain of virus in poultry. The risk of it transmitting on a large scale is also very low.
- In about 40 years, only 160 isolates of this virus were reported, in wild birds or waterfowl across Asia and North America. It has not been detected in chickens.

### Avian influenza or Avian flu or Bird flu

- It is caused by viruses adapted to birds. It is similar to swine flu, horse flu, dog flu and human flu. Among three types of influenza viruses namely, A, B, and C; influenza A virus is zoonotic infection which entirely affects birds.

4<sup>th</sup> JUNE 2021

## SWASTIIK Technology for Disinfecting Water

- The CSIR-National Chemical Laboratory (CSIR-NCL), Pune has developed a hybrid technology called "SWASTIK" for disinfecting water.

### Key Points:

- CSIR-NCL has used natural oils having antimicrobial properties for disinfecting water.
- This is a cost-effective method for removing harmful bacteria from water. It is developed by using the traditional method of Ayurveda.
- It has used the hydrodynamic cavitation technique for removing impurities from water.
- It will help the government in providing clean drinking tap water supply to all rural households by 2024.

### NOTE:

SWASTIIK Technology can eliminate harmful bacteria and antibiotic-resistant strains, economically. It integrates Indian traditional knowledge of Ayurveda to disinfect water and offer possible health benefits of natural oils.

## Model Tenancy Act

- The draft of the Model Tenancy Act (MTA) was approved by the Union Cabinet, chaired by Prime Minister Narendra Modi on 2 June.

### Key Highlights

- The draft of the Model Tenancy Act (MTA) creates a balance between the interest of owners and tenants. It will help in revamping the legal framework related to rental housing across the country.
- It will develop a vibrant, sustainable, and inclusive rental housing market in the country. Through this draft, private participation in developing the tenancy market as a business will increase.

- It will cover urban and rural areas and also create a time-bound grievance redressal mechanism.

### About Model Tenancy Act:

- Model Tenancy Act, 2019, a tenancy law in India, was designed to rebuild the tenancy market. Creation of the act was first announced in the budget speech of 2019 by finance minister Nirmala Sitharaman. It seeks to replace archaic rental laws of India and to solve housing availability deficit. The Act will help in achieving the target of "Housing for All by 2022".

## Aspergillosis Fungal Infection reported among COVID 19 patients

- In the midst of the country's fight against the covid-19 epidemic and rising occurrences of mucormycosis, doctors in Ghaziabad, Mumbai, and Gujarat have reported cases of a new illness known as 'aspergillosis.'
- People can come in contact with the fungus by breathing in microscopic "aspergillus spores" from the environment.
- Though people come in contact with the fungus daily but never contract illness. Because, aspergillosis infects people suffering from lung disease or weak immune system. It causes infections in organs and other allergic reactions.

### About Aspergillosis

- Aspergillosis is a fungal infection, fungal growth or allergic reaction caused due to Aspergillus fungus.
- The fungus is found indoors as well as outdoors. It lives on decaying vegetation or dead leaves. This fungal infection is not as deadly as black fungus but it can turn fatal too.
- There are 5 types of aspergillosis namely, allergic bronchopulmonary aspergillosis, aspergilloma (fungus ball), allergic Aspergillus sinusitis, chronic pulmonary aspergillosis and invasive aspergillosis. But, COVID-19 patients are being diagnosed with rare sinus pulmonary aspergillosis.

- Signs and symptoms depend on which organs are affected, but in general, invasive aspergillosis can cause:
  - Fever and chills
  - A cough that brings up blood (hemoptysis)
  - Shortness of breath
  - Chest or joint pain
  - Headaches or eye symptoms
  - Skin lesions

5<sup>th</sup> JUNE 2021

## RDSO- India's First Standard Developing Organization

- Indian Railways' Research Design & Standards Organization (RDSO) has recently become the nation's first institution to be declared as Standard Developing Organization (SDO) under the mission called "One Nation One Standard" by the Bureau of Indian Standards.

### Key Highlights

- The idea of One Nation One Standard Mission was first conceived in 2019, it was envisioned on the line of one nation, one ration card scheme in order to ensure quality products in the country.
- To attain the One Nation One Standard vision of the Government of India, BIS launched a scheme which provides for Recognition of SDO. The recognition is valid for 3 years and will require renewal after completion of the validity period.
- BIS launched the 'National Standards Body' scheme to attain the government's vision of "One Nation One Standard".
- The National Standards Body Scheme also provides for "Recognition of SDO".

### NOTE:

RDSO in Lucknow, is the sole Research and Design Wing of the Railway Ministry. It is India's leading standard formulating body that undertakes standardization work for the railway sector..

## NITI Aayog Sustainable Development Index

- Recently, the third edition of the Sustainable Development Goals (SDG) India Index and Dashboard 2020–21 was released by NITI Aayog. The SDG India Index 2020–21 is developed in collaboration with the United Nations in India.

### Key Points:

- The index measures the progress at the national and sub-national level in the country's journey towards meeting the Global Goals and targets.
- It has been successful as an advocacy tool to propagate the messages of sustainability, resilience, and partnerships, as well.
- From covering 13 Goals, 39 targets, and 62 indicators in the first edition in 2018-19 to 17 Goals, 54 targets and 100 indicators in the second; this third edition of the index covers 17 Goals, 70 targets, and 115 indicators.
- In terms of score improvement, Mizoram, Haryana and Uttarakhand are the top gainers in 2020-21 who have gained 12, 10 and 8 points, respectively as compared to the index of 2019-2020.

### India's Overall SDG Score

- India's overall SDG (Sustainable Development Goal) score has increased from 60 in 2019 to 66 in 2020-21. This increase is driven by good performance in SDG goal 6 (clean water and sanitation) and SDG goal 7 (affordable and clean energy).

## Cheetah to be re-introduced in India

- The world's fastest land animal, Cheetah which was declared extinct in India in 1952, has been expected to be re-introduced in India in November 2021 at the Kuno National Park in Madhya Pradesh.

### Key Points:

- India had spotted its last Cheetah in Chhattisgarh in 1947. After the death of the last Cheetah, it was declared extinct in 1952.

- Kuno is located in Chambal region. It is spread across an area of 750 sq km. Park has a conducive environment for cheetahs.
- It is a protected area which has a considerable population of four-horned antelopes, nilgai, chinkara, spotted deer and wild boar. Thus, the park has a good prey base for cheetahs.

### About Cheetah:

- The fastest land animal is native to Africa and central Iran. It can attain a running speed of 80 to 128 km/h.
- Cheetah is listed in the “vulnerable category” of the International Union for Conservation of Nature’s (IUCN) red list of threatened species.

6<sup>th</sup> JUNE 2021

## China launches New Generation Meteorological Satellite

- China successfully launched the first of a new generation meteorological satellite into planned orbit which will be used in the fields of weather analysis, environmental and disaster monitoring.
- This satellite, named Fengyun-4B (FY-4B), will be used for fields of weather analysis, environmental and disaster monitoring.

### Key Points:

- The FY-4B satellite which is the first of China's new-generation meteorological satellites will be used in the fields of weather analysis and forecasting, and environmental and disaster monitoring.
- The new satellite will further strengthen China's observation and response capability of small and medium scale disaster events and provide information security services for a range of sectors including meteorological, agricultural, aviation, marine and

environmental protection, the China National Space Administration (CNSA).

- The network will also be able to conduct dynamic monitoring and tracking of a variety of disaster elements including floods, cold fronts, droughts and sand storms.
- Its observation range covers Asia, the central Pacific Ocean and Indian Ocean regions, so that the network will also greatly improve China's forecast accuracy of disaster weather including typhoons and storms.

## K.P. Krishnan Committee on Variable Capital Company

- Dr. K.P. Krishnan headed the expert committee on Variable Capital Company (VCC). It has submitted its report on the feasibility of Variable Capital Companies in the International Financial Services Centres in India.

### Key Points:

- IFSCA had set up K.P. Krishnan committee to explore potential for allowing variable capital company (VCC) as an additional option using which asset managers could pool investors' funds
- VCC structure dispenses with some of the key limitations of companies and LLPs. It provides for higher regulatory standards.
- Committee assessed features of VCC or its equivalent, in jurisdictions of Singapore, UK, Ireland and Luxembourg.

### About Variable Capital Company (VCC):

- VCC is an alternative form of corporate vehicle which can be used for open-ended as well as closed-ended alternative and traditional fund strategies.
- It is a corporate vehicle with flexible capital because of which shares are created when investments are made and shares are readily redeemable by shareholders. It has been designed for the fund management industry.

## MadadMap: Real-time online map of vacant beds

- A group of doctors and professionals from the diaspora in the US and from India has launched a first-of-its-kind online map that shows available hospital beds in India with real-time updates, aimed at providing critical and time-sensitive information to anxious Covid-19 patients, as the country battles a devastating second wave of the pandemic.
- 'MadadMaps.com' by Project Madad (help) is India's first country-wide map of available hospital beds with real-time updates.

### Key Points:

- This online map was launched with the aim of providing critical and time-sensitive information to anxious Covid-19 patients, as the battle against the second wave of pandemic continues.
- This portal was launched by Project Madad (help). It is India's first country-wide map showing availability of hospital beds in real-time updates. Washington-based Dr Rajesh Anumolu was head architect of 'MadadMaps'.
- MadadMaps was created with the mission that "proper education and training" of local healthcare workers and Registered Medical Practitioners is the "fundamental" of controlling Covid spread across rural India.

7<sup>th</sup> JUNE 2021

## EAGLE Act of US Visas

- Legislation to remove the per-country cap on permanent residency visas, or green cards, for the US has been introduced in the House of Representatives.

### Key Points:

- The EAGLE Act is called the "Equal Access to Green cards for Legal Employment Act". It proposes to phase out the limit of seven per cent per-country on employment-based immigrant visas.

- It also seeks to raise the seven per cent per-country limit to 15 percent on family-sponsored visas.
- It provides for a nine-year period for the elimination of this limit.
- The seven percent limit was introduced in the mid-20th century, which has led countries with relatively small populations to be allocated the same number of visas as a relatively large-population country.

### Benefits of the act

- It will benefit the US economy by allowing American employers to focus on hiring immigrants based on their merit, not their birthplace.
- The bill will be advantageous for Indian job-seekers who currently rely on temporary visas or await green cards to work in the US.

## Senior Care Ageing Growth Engine (SAGE) Project

- The Ministry of Social Justice and Empowerment has launched the SAGE (Seniorcare Aging Growth Engine) initiative and SAGE portal for elderly persons.

### Key points:

- The SAGE will be a "one-stop access" of elderly care products and services by credible start-ups.
- The start-ups will be selected on the basis of innovative products and services.
- Their products should be able to provide across sectors such as health, housing, care centers, apart from technological access linked to finances, food and wealth management, and legal guidance.
- The start-ups who have applied will be selected by an independent screening committee of experts.
- A fund of upto Rs.1 crore as one-time equity will be granted to each selected start-up.
- This scheme was required in the light of increasing share of elders.
- As per a survey, the share of elders with respect to total population in percentage terms is expected to increase from 7.5 per cent in 2001 to about 12.5 per cent by 2026.

## Nashik's Buddhist Caves

- Archaeological Survey of India (ASI) has found three caves in Buddhist Caves Complex in Nashik, Maharashtra.

### Key Highlights:

- Newly discovered caves are almost two centuries after the British military officer documented the Trirashmi Buddhist caves (also known as Pandav Leni) in a hill in Nashik.
- The antiquity of the caves (which may have been dwellings of Buddhist monks) is yet to be established;
- Archaeologists studying them, however, believe they could be older than the Trirashmi caves.
- Discovered caves are on the opposite side of the current complex, and 70-80 feet above the existing complex.
- The caves have been carved out of a steep hill.

### About Pandavleni caves

- Pandavleni caves were earlier called 'Trirashmi caves'. These caves are a group of 25 caves, carved out of Tri-Rashmi Hill between 2nd century BC and 6th century AD.
- Vihara and the Chaitya are the main caves among 25 caves. Complex of the cave was documented in 1823 by Captain James Delamaine. It is an ASI protected site and a famous tourist destination.

