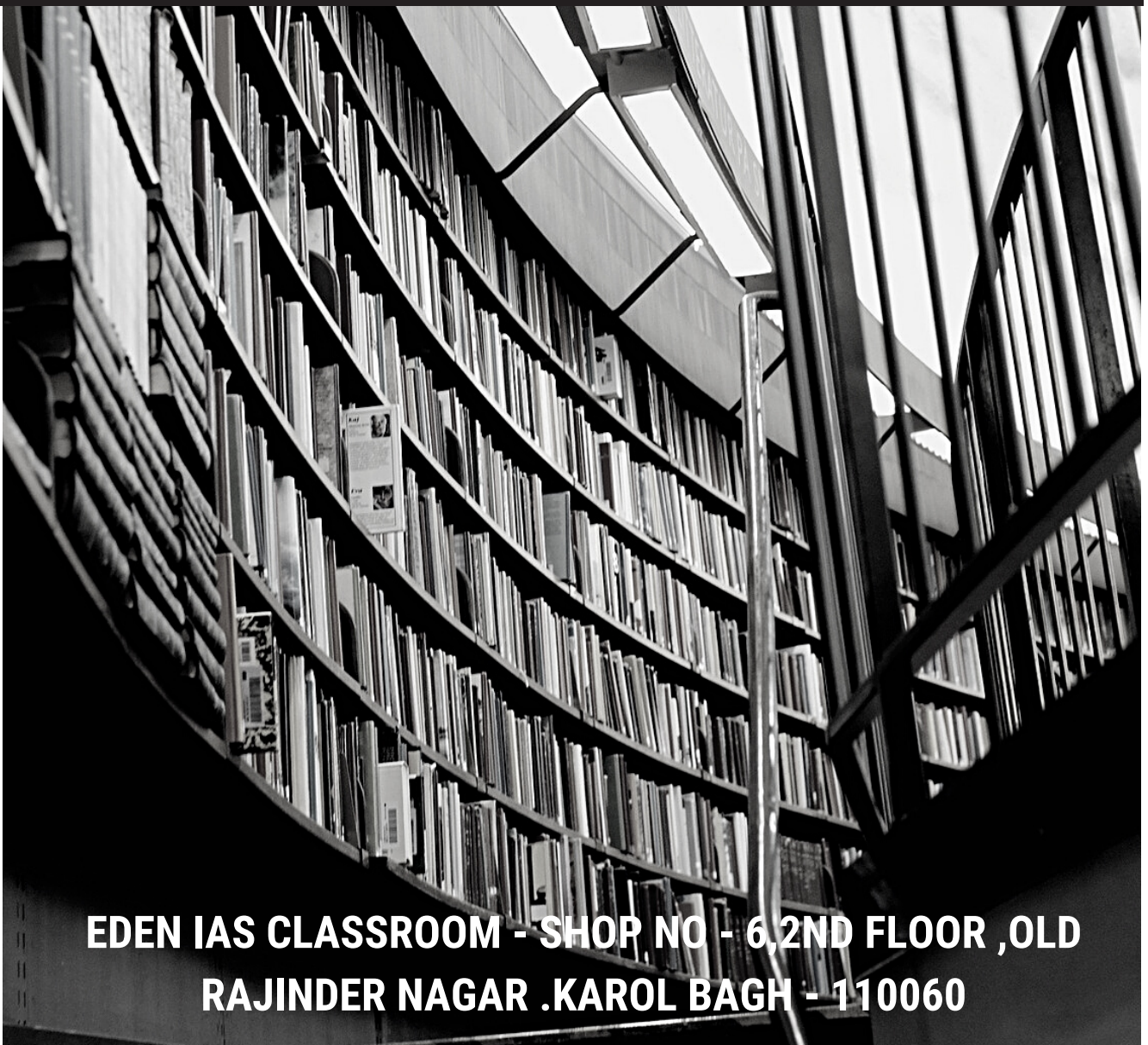


**EDEN IAS**

# **NEWS IMPULSE**

**MAY 2021**



**EDEN IAS CLASSROOM - SHOP NO - 6, 2ND FLOOR, OLD  
RAJINDER NAGAR .KAROL BAGH - 110060**

# EDEN IAS - Educational Development & Enrichment Network

## OPERATION SAMUDRA SETU-II

### Syllabus Section: Defence

#### Why in News?

Indian Navy Launches Op Samudra Setu-II for Shipment of Oxygen-filled Containers to India.

#### About:

- Indian Navy has launched Operation Samudra Setu-II to augment the ongoing national mission for meeting the Oxygen requirements
- Mission deployed Indian Naval warships will undertake shipment of liquid Oxygen filled cryogenic containers and associated medical equipment in support of nation's fight against COVID-19.
- Two ships INS Kolkata and INS Talwar have entered port of Manama, Bahrain for embarking and transporting 40MT of liquid oxygen to Mumbai.
- INS Jalashwa is enroute to Bangkok and INS Airavat to Singapore for similar missions.
- Last year Indian Navy had launched Operation Samudra Setu as part of the Vande Bharat Mission and repatriated approx 4000 (3992) stranded and distressed Indian citizens from Maldives, Sri Lanka and Iran.

**Source: All India Radio**

## LEGAL METROLOGY (PACKAGING RULES 2011)

### Syllabus Section:Governance

#### Why in News?

- Government Facilitates faster imports of key medical devices by relaxing the conditions for clearances under Legal Metrology (Packaging Rules 2011).

#### About:

- Department of Consumer Affairs, administers the Legal Metrology Act 2009. The act provides for application of legal requirements to measurements and measuring instruments.
- The objective of Legal Metrology is to ensure public guarantee from the point of view of security and accuracy of the weighments and measurements.

- The Legal Metrology (Packaged Commodities), Rules 2011 are primarily intended to ensure that the consumers are able to make informed choices by being informed of essential declarations on the pre-packed commodities.

**Source: The Hindu**

## TRIFED JOINS HANDS WITH THE LINK FUND

### Syllabus Section:Social Development

#### Why in News?

TRIFED joins hands with The LINK Fund to work towards tribal development.

#### About:

- TRIFED, as the nodal agency working for the empowerment of tribal people.
- It has been focusing its efforts on finding new ways to improve the lives and the livelihoods of the tribal people.
- TRIFED has now entered into a collaborative project titled "Sustainable Livelihoods for Tribal Households in India" with The LINK Fund, a philanthropic operational foundation.
  - LINK Fund, is mandated to eradicate extreme poverty and mitigate the effects of climate change.
  - The LINK Fund (TLS) is a practitioner-led fund that, headquartered in Geneva, Switzerland
- Both will work together towards Tribal Development and employment generation by providing support to tribal people for increasing value addition in their produce and products.
- They will also work for Sustainable livelihoods and value addition for increase in income and employment generation through technological intervention for efficiency in value addition for MFPS, produce and crafts diversification, skill training and enhancement of value additions in minor forest produce.
- Both the organizations will also work together to creating women-cantered infrastructure and innovation and entrepreneurship.

**Source: PIB**



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### KYRGYZSTAN, TAJIKISTAN BORDER TENSIONS

**Syllabus Section: International Relations**

#### Why in News?

- Recently, a ceasefire on the border between Kyrgyzstan and Tajikistan appeared to be holding after a day of intense fighting between the two countries that has killed about 40 people and wounded about 175.

#### About:

#### Background:

- In the volatile region of the Ferghana valley, where the borders of Tajikistan, Kyrgyzstan, and Uzbekistan converge violent confrontations between locals and state forces have been a longstanding concern.
- Disputes between Kyrgyzstan and Tajikistan are particularly frequent as almost half of the 971-kilometer-long border territory remains contested, creating challenges for local populations hoping to address infrastructural and economic issues in the region.
- Both nations have claimed the area around the water supply facility in Kok-Tash, a dispute dating back decades to when they were both part of the Soviet Union.
- The current configuration of the Kyrgyz-Tajik border is the product of Soviet mapmakers drawing the dividing lines for Soviet republics, after the Union of Soviet Socialist Republics (USSR) collapsed in late 1991.

#### International Response:

- Russia and European Union (EU) welcomed the ceasefire deal and emphasised the need for a lasting and peaceful solution.

#### Importance of the Region:

- Geography has placed central Asia at the nexus of crucial political and economic transformations for centuries. With the actualization of the Belt and Road Initiative, India's Connect Central Asia policy, and the EU's new Central Asia strategy, the 21st century could possibly be the most decisive period for the region.

**Source: The Hindu**

### DRONE DELIVERY OF COVID-19 VACCINES

**Syllabus Section: Health**

#### Why in News?

- Drone use Permission to Telangana Government for Experimental delivery of Covid-19 Vaccines.

#### About:

- Ministry of Civil Aviation (MoCA) and Directorate General of Civil Aviation (DGCA) have granted conditional exemption for drone deployment to the Government of Telangana.
- The drone usage permission has been granted for conducting experimental delivery of Covid-19 vaccines within Visual Line of Sight (VLOS) Range using drones.
- The permission exemption is valid for a period of one year or until further orders.
- Earlier this month, similar permission was granted to the Indian Council of Medical Research (ICMR) for conducting feasibility study of Covid-19 vaccine delivery using drones in collaboration with IIT Kanpur.

#### Objective of the Permission

The grant of these permissions is intended to achieve the dual objectives of faster vaccine delivery & improved healthcare access by:

- Ensuring primary healthcare delivery at the citizen's doorstep
- Limiting human exposure to COVID congested or COVID prone areas through aerial delivery
- Ensuring access to health care to the last mile, especially in remote areas
- Possible integration into the middle mile of medical logistics for long range drones
- Improving medical supply chain, especially with a third vaccine expected to be commissioned and millions of doses to be transported across India

**Source: Times of India**

### MYANMAR APPROACHING POINT OF ECONOMIC COLLAPSE

**Syllabus Section: International Relations**

#### Why in News?

UN Report has said that Myanmar is approaching towards the point of economic collapse.

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### About:

- The political turmoil in Myanmar combined with the impact of the COVID 19 pandemic could result in almost half of the nearly 50 million population in the country living into poverty by early next year.
- o The ongoing political crisis will compound the socioeconomic impact of the COVID 19 pandemic.
- Close to 48.2 percent of the Myanmar population will live in poverty by 2022 compared to 24.8 percent in 2017.
- UNDP report said that there was significant improvement over 12 years between 2005-17, the report mentions that Myanmar was able to nearly halve the number of people living in poverty during this period.
- o The challenges of the last 12 months have put all these gains at risk.
- The urban poverty is also expected to triple as the worsening security situation continues to affect supply chains and hinder movement of people, services and commodities.
- The World Bank has projected a 10 percent contraction in the Myanmar economy in 2021 due to a combination of several factors like insufficient stimulus and investment, government relief not matching earning losses among others.
  - o The banking operations are in a standstill situation in the country.
- Almost 80 percent of Myanmar's international trade is seaborne.
- o UNDP estimates that the trade volume in ports has dropped by between 55 and 64 percent in the two months since military take over on Feb 1.
- All these factors point out to the possibility of Myanmar approaching the point of economic collapse, says the UNDP report.

**Source: All India News**

### ASSAM STRING PUPPETRY

**Syllabus Section: Art and Culture**

#### Why in News?

Assam string puppetry rides COVID campaign for revival.

### About:

- In collaboration with the UNICEF-Assam, the Anamika Ray Memorial Trust (ARMT) has produced three short videos using string puppetry for creating mass awareness on COVID appropriate behaviour.
- Videos are named as COVID Shatru (Enemy), COVID Bibhrat (Confusion) and 'Mama ro Mina ko COVID Katha' (COVID Tale of Mama and Mina). First two are in Assamese and third one is in Nepali language.
- These videos are a part of a larger collaborative project with UNICEF done in November and December 2020
- The string puppetry of Assam is called PutalaNach and is performed in three areas with distinct characteristics.
  - o These areas are Barpeta-Nalbari in western Assam, Kalaigaon in northern Assam and Majuli "island" in eastern Assam.

#### String Puppetry

- Marionettes or String Puppets having jointed limbs controlled by strings allow far greater flexibility.
- The puppets are generally 8–9-inch miniature figures chiselled out of wood.
- Oil colour is used to paint the wood with skin colour and add other facial features such as eyes, lips, nose, etc.

Small wooden pipes are created with the body to form the limbs. The body is then covered with colourful miniature dress and stitched.

- Miniature jewellerys and other accessories are attached to give a realistic feel.
- Strings are attached to small holes in the hands, head and back of the body which are then controlled by the puppeteer.
- Some of the popular examples of string puppetry in India are: Kathputli (Rajasthan), Kundhei (Odisha), Gambeyatta (Karnataka) and Bommalattam (Tamil Nadu)

**Source: The Hindu**



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## CLIMATE CHANGE CAUSING A SHIFT IN EARTH'S AXIS

**Syllabus Section: Environment**

### Why in News?

A study published in Geophysical Research Letters of the American Geophysical Union (AGU) says that due to the significant melting of glaciers because of global temperature rise, our planet's axis of rotation has been moving more than usual since the 1990s.

### About:

#### How the Earth's axis shifts?

- The Earth's axis of rotation is the line along which it spins around itself as it revolves around the Sun.
- The points on which the axis intersects the planet's surface are the geographical north and south poles.
  - The location of the poles is not fixed.
- Axis moves due to changes in how the Earth's mass is distributed around the planet.
- Thus, the poles move when the axis moves, and the movement is called "polar motion".

#### What the new study says?

- According to NASA, data from the 20th century shows that the spin axis drifted about 10 centimetres per year
  - Generally, polar motion is caused by changes in the hydrosphere, atmosphere, oceans, or solid Earth.
  - But now, climate change is adding to the degree with which the poles wander.
- Since the 1990s, climate change has caused billions of tonnes of glacial ice to melt into oceans. This has caused the Earth's poles to move in new directions.
  - As per the study, the north pole has shifted in a new eastward direction since the 1990s, because of changes in the hydrosphere (meaning the way in which water is stored on Earth)
- From 1995 to 2020, the average speed of drift was 17 times faster than from 1981 to 1995.
- The calculations were based on satellite data from NASA's Gravity Recovery and Climate Experiment (GRACE) mission as well as estimates of glacier loss and groundwater pumping going back to the 1980s.

- The faster ice melting under global warming was the most likely cause of the directional change of the polar drift in the 1990s,"

### Other Possible Causes

- These are (terrestrial water storage) change in non-glacial regions due to climate change and unsustainable consumption of groundwater for irrigation and other anthropogenic activities.

**Source: Indian Express**

## P-8I PATROL AIRCRAFT

**Syllabus Section: Defence**

### Why in News?

The U.S. State Department has approved the proposed sale of six P-8I patrol aircraft and related equipment to India, a deal estimated to cost \$2.42 billion.

### About:

- In November 2019, the Defence Acquisition Council, chaired by Defence Minister Rajnath Singh, approved the procurement of the long-range maritime surveillance aircraft manufactured by Boeing.
- The original proposal was for 10 more aircraft but was cut down to six due to budgetary constraints as well as because the Navy had adopted some fleet rationalisation measures and was considering long-endurance unmanned platforms.
- With India having signed the Communications Compatibility and Security Agreement (COMCASA) foundational agreement with the U.S., the six aircraft will come fitted with encrypted systems.
- These systems were replaced with commercial off-the-shelf systems in the earlier deals.
- The P-8I is based on the Boeing 737 commercial aircraft and India was its first international customer.

**Source: The Hindu**

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## STATE DISASTER RESPONSE FUND (SDRF)

### Syllabus Section: Economy

#### Why in News?

Centre releases 8873.6 crore from disaster response fund in advance to states.

#### About:

- As a special dispensation, the Department of Expenditure, Ministry of Finance at the recommendation of Ministry of Home Affairs has released in advance of the normal schedule the 1st instalment of the Central Share of the State Disaster Response Fund (SDRF) for the year 2021-22 to all the States
- o Normally, the first instalment of SDRF is released in the month of June as per the recommendations of the Finance Commission.
- o Up to 50% of the SDRF amount can be used by the states for covid-19 containment measures.

#### Use of Funds:

- The funds from SDRF may be for various measures related to containment of COVID-19 including meeting the cost of oxygen generation and storage plants in hospitals, ventilators, air purifiers, strengthening ambulance services, COVID-19 hospitals, Covid Care Centres, consumables, thermal scanners, personal protective equipment, testing laboratories, testing kits, containment zone, etc.

#### State Disaster Response Fund (SDRF):

- It was constituted under Section 48 (1) (a) of the Disaster Management Act, 2005, is the primary fund available with State Governments for responses to notified disasters.
- The Central Government contributes 75% of SDRF allocation for general category States/UTs and 90% for special category States/UTs (NE States, Sikkim, Uttarakhand, Himachal Pradesh, Jammu and Kashmir).

#### Source: PIB

## SUTRA MODEL

### Syllabus Section: Health

#### Why in News?

Scientists working on the SUTRA model have rejected media reports claiming that they had cautioned the Government regarding the second wave of the corona pandemic in March this year.

#### About:

- SUTRA model is used for charting the trajectory of COVID-19 in the country.
- Group of scientists working on the model stated that a mathematical model can only predict future with some certainty so long as virus dynamics and its transmissibility don't change substantially over time.
- They added that in the case of COVID-19, the nature of the virus has been changing very rapidly.
- In such a context, they said any prediction for COVID-19 must be continually readjusted.

#### Source: All India Radio

## ASIAN DEVELOPMENT BANK (ADB)

### Syllabus Section:

#### Why in News?

Finance Minister Smt. Nirmala Sitharaman participates in Governor's Seminar as part of Asian Development Bank's annual meeting 2021.

#### About:

#### Highlights:

- Smt. Sitharaman also spoke on the need for private sector and Civil Society for partnering with the government to achieve resilient growth.
- The Finance Minister stated that cooperation for resilient and sustainable growth, needs the involvement of Multilateral Institutions for creation of digital assets as well as disaster resilient assets while keeping human development a priority.
- Smt. Sitharaman appreciated ADB for providing timely financial support for COVID and non-COVID projects.
- The Finance Minister said that there should be a greater focus on health resilience in the Asia Pacific and ADB should come out with comprehensive solutions to address the same.



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### Background:

- ADB was conceived in the early 1960s when a resolution was passed at the first Ministerial Conference on Asian Economic Cooperation held by the United Nations Economic Commission for Asia and the Far East in 1963.
- The institution was opened in 1966 at Manila (Philippines capital) with 31 initial members.
- It is a regional development bank.
- It is an official United Nations Observer.
- Members: It has 67 members—of which 48 are from within Asia and the Pacific and 19 outside. India is one of the founding members.
- Objective:
  - It was conceived as a financial institution that would be Asian in character and foster economic growth and cooperation in one of the poorest regions in the world.
  - As a multilateral development finance institution, ADB provides loans, technical assistance and grants.

**Source: PIB**

### CENTRE WAIVES OFF IGST

#### Syllabus Section: Economy

#### Why in News?

Centre waives off IGST on import of Corona related medical supplies.

#### About:

- Centre has waived off IGST on the import of COVID related medical supplies including Remdesivir Injection/API, Medical Oxygen, O<sub>2</sub> Concentrators, Cryogenic tanks & COVID Vaccines among others.
  - The exemption has been granted till 30th June for free distribution of these medical supplies.
  - Earlier the Centre had waived the import duty & health cess on such medical supplies.

### Background:

- Integrated Goods and Service Tax (IGST), is one of the three categories under Goods and Service Tax (CGST, IGST and SGST) with a concept of one tax one nation.
- IGST falls under Integrated Goods and Service Tax Act 2016.

- IGST is charged when movement of goods and services from one state to another. For example, if goods are moved from Tamil Nadu to Kerala, IGST is levied on such goods.
- The revenue out of IGST is shared by state government and central government as per the rates fixed by the authorities.
- Under the IGST scheme, 50% of the collections will go to the Centre (as the Central Goods and Services Tax component) and the remaining 50% will be allocated to the States and Union Territories (as the State Goods and Services Tax component). And, 42% of the CGST will be devolved to the States and Union Territories.

**Source: All India Radio**

### MALARIA VACCINE CANDIDATE HAS RAISED NEW HOPE

#### Syllabus Section: Health

#### Why in News?

- R21/Matrix M, a malaria vaccine candidate has shown promise in phase 2b clinical trials, with high efficacy at 77%.

#### About:

- The new vaccine candidate, called R21/Matrix M, is a modified version of RTS, S.
  - RTS, S — another candidate against malaria that has been in development for more than 30 years by Walter Reed Institute of Research, GlaxoSmithKline and Bill and Melinda Gates Foundation with the PATH Malaria Vaccine Initiative.
  - RTS,S is the first, and to date the only, vaccine to reduce malaria in children. But it is not highly efficacious,
- This vaccine is designed to stop the Plasmodium falciparum malaria parasite from entering the liver and preventing the subsequent deadly blood stages.
- It targets the liver stage protein of the Plasmodium falciparum life cycle.
- R21/Matrix M has been developed by scientists at University of Oxford, the same location where the AstraZeneca Covid-19 vaccine was developed.
- This vaccine was produced in the Serum Institute of India.

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### Why it matters?

- In 2019, there were an estimated 229 million cases of malaria and 409 000 malaria-related deaths in 87 countries.
- Children under the age of 5 in sub-Saharan Africa accounted for approximately two-thirds of global deaths.
- Between 2000 and 2020, 24 countries reported zero indigenous cases of malaria for 3 or more years. This is the benchmark for the World Health Organization (WHO)
  - Globally, 39 countries have achieved the milestone.
- In 2019, India had an estimated 5.6 million cases of malaria compared to about 20 million cases in 2020 according to WHO

**Source: Indian Express**

### NON-BASMATI RICE EXPORTS

**Syllabus Section: Agriculture**

#### Why in News?

First consignment of non-basmati rice exports from Paradip port, Odisha flagged off to Vietnam.

#### About:

- This is the first time in the history of Paradip Port, non-basmati rice will be exported
- It will boost India's rice exports potential especially from eastern region,
- Non-basmati rice exports to African and Asian countries are undertaken from various ports of India such as Kakinada, Vishakhapatnam, Chennai, Mundra and Krishnapatnam.
- Paradip will soon emerge as one of the major rice-exporting port of the country.

#### Paradip Port:

- Paradip Port is a natural, deep-water port on the East coast of India in Jagatsinghpur district of Odisha.
- It is situated at confluence of the Mahanadi river and the Bay of Bengal.
- The port is administered by the Paradip Port Trust (PPT), an autonomous corporation under the Major Port Trusts Act, 1963 functioning under Ministry of Shipping.

**Source: PIB**

### PRODUCTION LINKED INCENTIVE SCHEME FOR FOOD PROCESSING INDUSTRY

**Syllabus Section: Agriculture**

#### Why in News?

Govt issues guidelines for Production Linked Incentive Scheme for Food Processing Industry.

#### About:

- As part of the Prime Minister's announcement of Aatmanirbhar Bharat Abhiyan, the Government has approved a new Central Sector Scheme namely PLISFPI for implementation during 2021-22 to 2026-27 with an outlay of 10 thousand 900 crore rupees.
- The aim is to support creation of global food manufacturing champions commensurate with India's natural resource endowment and support Indian brands of food products in the international markets.
- Ministry is inviting applications for availing sales based incentives and grants for undertaking Branding and Marketing activities abroad under the scheme from three categories of Applicants
  - Category-1:
- The applicants are large entities who apply for Incentive based on Sales and Investment Criteria.
- Applicants under this category could undertake Branding and Marketing activities abroad also and apply for grant under the scheme with a common application.
  - Category-2:
- Small and Medium Enterprises Applicants manufacturing innovative products who are applying for PLI Incentive based on Sales.
  - Category-3:
- applicants who are applying solely for grant for undertaking Branding and Marketing activities abroad,

#### Features of PLISFPI:

- It will support food manufacturing entities with stipulated minimum Sales and willing to make minimum stipulated investment for expansion of processing capacity and Branding abroad.
- The first component relates to incentivising manufacturing of four major food product segments viz. Ready to Cook/ Ready to Eat (RTC/ RTE) foods, Processed Fruits & Vegetables, Marine Products, Mozzarella Cheese.



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- It also covers organic products, free-range eggs, poultry meat and egg products.
- The second component relates to support for branding and marketing abroad.

**Source: PIB**

### SMALL SAVINGS INSTRUMENTS

**Syllabus Section: Economy**

**Why in News?**

- Recently, the central government withdrew its orders of reducing the rates on all small savings instruments/schemes.

**About:**

- The Small savings instruments are the major source of household savings in India.
- Broadly, the small savings schemes basket comprises 12 instruments and can be classified under three heads.
  - Postal Deposits: (comprising savings account, recurring deposits, time deposits of varying maturities and monthly income scheme).
  - Savings Certificates: National Small Savings Certificate (NSC) and Kisan Vikas Patra (KVP).
  - Social Security Schemes: Sukanya Samridhi Scheme, Public Provident Fund (PPF) and Senior Citizens' Savings Scheme (SCSS).

**Reasons for the cut in the interest rates:**

- Higher borrowings of the Government through the Small Savings schemes (2020-21: Rs 4.8 lakh crores; 2021-22: Rs 3.9 Lakh crores)
- Higher interest rates would make Government's borrowings costly and hence the plan to reduce the interest rates.
- Fall in the yield rates on the G-Secs. (Yield on 10-year G-Sec reduced from 6.8% in April 2020 to 6.1% now)

**Implication:**

- Government's borrowing cost reduces and hence lower interest burden.
- Enable the Banks to reduce rate of interest on the Deposits
- Lower avenues for the Investors to invest money either in Bank Deposits or Small Savings → Increase consumption expenditure.

**Source: The Hindu**

### 5G TRIALS IN DIFFERENT LOCATIONS ACROSS INDIA

**Syllabus Section: Science and Technology**

**Why in News?**

The Department of Telecommunications (DoT), Government of India, approved permissions to Telecom Service Providers (TSPs) for conducting trials for use and applications of 5G technology.

**About:**

- The applicant TSPs include Bharti Airtel Ltd., Reliance JioInfocomm Ltd., Vodafone Idea Ltd. and MTNL
  - These TSPs have tied up with original equipment manufacturers and technology providers which are Ericsson, Nokia, Samsung and C-DOT.
  - Reliance JioInfocomm Ltd. will also be conducting trials using its own indigenous technology.
- The experimental spectrum is being given in various bands which include the mid-band (3.2 GHz to 3.67 GHz), millimetre wave band (24.25 GHz to 28.5 GHz) and in Sub-Gigahertz band (700 GHz).
- The duration of the trials, at present, is for a period of 6 months. This includes a time period of 2 months for procurement and setting up of the equipment.

**Mandates:**

- Each TSP will have to conduct trials in rural and semi-urban settings also in addition to urban settings so that the benefit of 5G Technology proliferates across the country and is not confined only to urban areas.
- The TSPs are encouraged to conduct trials using 5G technology in addition to the already known 5G Technology.
  - International Telecommunications Union (ITU) has also approved the 5G technology, which was advocated by India, as it facilitates much larger reach of the 5G towers and Radio networks.
  - The 5G technology has been developed by IIT Madras, Centre of Excellence in Wireless Technology (CEWiT) and IIT Hyderabad.
- Trials will be on non-commercial basis.

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- The objectives of conducting 5G trials include testing 5G spectrum propagation characteristics especially in the Indian context; model tuning and evaluation of chosen equipment and vendors; testing of indigenous technology; testing of applications (such as tele-medicine, tele-education, augmented/ virtual reality, drone-based agricultural monitoring, etc.); and to test 5G phones and devices.
- Trials will be isolated and not connected with the existing networks of TSPs.
- The data generated during the trials shall be stored in India.
- The intervention was triggered through an initiative by North East Centre for Technology Application and Reach (NECTAR), an autonomous body under Department of Science & Technology (DST),
  - It involves the entire women community associated with a collective called 'Simang' meaning dream, led by the 6 girls to create wealth from water hyacinth plants.
  - '7WEAVES', (a sister concern of the Simang Collectives) team provided expertise on natural dyeing from locally available natural materials of Loharghat Forest Range, Kamrup District enabling NECTAR to include naturally dyed cotton yarns from lac, onion skins, iron and jaggery, in various patterns for the mat.

### Benefits of 5G Technology

- It will deliver improved user experience in terms of data download rates (expected to be 10 times that of 4G),
- Deliver up to three times greater spectrum efficiency,
- Provide ultra-low latency to enable Industry 4.0. Applications are across a wide range of sectors such as agriculture, education, health, transport, traffic management, smart cities, smart homes, and multiple applications of IOT (Internet of Things).

**Source: PIB**

## BIODEGRADABLE YOGA MAT

### Syllabus Section: Environment and Ecology

#### Why in News?

A biodegradable and compostable yoga mat developed from water hyacinth by six young girls from the fishing community in Assam.

#### About:

- The mat called 'Moorhen Yoga Mat' has been made by the water hyacinth.
  - It will soon be introduced to the world market as a unique product.
  - The mat developed through fibre processing and technological interventions could improve the aquatic ecosystem of the wetland through removal of water hyacinth, help sustainable production of utility products with community engagement and generate of livelihood for indigenous communities to become completely 'Atamanirbhar'.
- The girls belong to the fishing community living in the fringe of the DeeporBeel.

#### DeeporBeel:

- DeeporBeel is a permanent freshwater lake in south west of Guwahati city,
- It is recognised as a Ramsar Site (a wetland of international importance) and a bird wildlife sanctuary.
- The lake has been a source of livelihood for 9 villages of the fishing community who shared this biome for centuries, but over the years suffered from excessive growth and accumulation of water hyacinth.

**Source: DD News**

## INDIA-UK VIRTUAL SUMMIT

### Syllabus Section: Bilateral Relation

#### Why in News?

Prime Minister Shri Narendra Modi and The Rt Hon'ble Boris Johnson, Prime Minister of the United Kingdom recently held a Virtual Summit.

#### About:

#### New Initiatives:

##### 1) Roadmap 2030:

- An ambitious 'Roadmap 2030' was adopted at the Summit to elevate bilateral ties to a 'Comprehensive Strategic Partnership'
  - The Roadmap will pave the way for a deeper and stronger engagement over the next ten years in the key areas of people-to-people contacts, trade and economy, defence and security, climate action and health.



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## 2) Enhanced Trade Partnership:

- The two Prime Ministers launched an 'Enhanced Trade Partnership' (ETP) to unleash the trade potential between the 5th and 6th largest economies of the world.
- As part of the ETP, India and the UK agreed on a roadmap to negotiate a comprehensive and balanced FTA, including consideration of an Interim Trade Agreement for delivering early gains.

### Significance of this Initiative:

- o This will help in doubling bilateral trade by 2030.
- o The enhanced trade partnership between India and UK will generate several thousands of direct and indirect jobs in both the countries.

## 3) Global Innovation Partnership:

- A new India-UK Global Innovation Partnership was announced at the Virtual Summit.
  - o The UK is India's second largest partner in research and innovation collaborations.
- It aims to support the transfer of inclusive Indian innovations to select developing countries, starting with Africa.
- 4) Both sides agreed to enhance cooperation on new and emerging technologies, including Digital and ICT products, and work on supply chain resilience
- 5) They also agreed to strengthen defence and security ties, including in the maritime, counter-terrorism and cyberspace domains.
- 6) They reiterated commitment to climate action to achieve the goals of the Paris Agreement and agreed to closely engage in the run up to CoP26 hosted by the UK later this year.
- 7) Comprehensive Partnership On Migration And Mobility:

India and the UK launched a comprehensive partnership on migration and mobility that will facilitate greater opportunities for the mobility of students and professionals between the two countries.

**Source: PIB**

## PROJECTMediCAB

### Syllabus Section: Science and Technology

#### Why in News?

- IIT Madras-incubated start-up Modulus Housing has developed a portable hospital unit called 'MediCAB', to treat COVID-19 patients.

#### About:

- It is an initiative of the Office of principal scientific advisor and Modulus Housing incubated at IIT Madras, to boost healthcare infrastructure by assisting states to set up COVID-19 extension hospitals.
- The unit can be installed anywhere within two hours by four people.
- It is a decentralized approach to detect, screen, identify, isolate and treat COVID-19 patients in their local communities through these portable microstructures.
- Modulus Housing is developing micro hospitals that can be deployed rapidly across the nation.
- MediCAB was recently launched in Wayanad District of Kerala and collaborated with Sree Chitra Tirunal Institute for Medical Sciences and Technology (SCTIMST) .

**Source: DD News**

## RBI PROPOSES TERM LIQUIDITY FACILITY OF RS 50,000 CRORE

### Syllabus Section: Economy

#### Why in News?

RBI proposes term liquidity facility of Rs 50,000 crore to ease access to emergency health services

#### About:

- RBI Governor Shaktikanta Das has said that the bank will continue to monitor the emerging situation and deploy all resources and instruments at its command in the service of the nation.
- On the basis of continued assessment of the macroeconomic situation and financial market conditions, RBI proposes for Term Liquidity Facility of 50,000 crore rupees to Ease Access to Emergency Health Services.

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- To boost provision of immediate liquidity for ramping up COVID related healthcare infrastructure and services in the country, an on-tap liquidity window of 50,000 crore rupees with tenors of up to three years at the repo rate is being opened till March 31, 2022.
  - The loan will be available at the RBI's Repo Rate, i.e., 4 per cent.
- Under the on-tap liquidity scheme, banks can provide fresh lending support to a wide range of entities including vaccine manufactures; importers/suppliers of vaccines and priority medical devices; hospitals/dispensaries; pathology labs; manufactures and suppliers of oxygen and ventilators; importers of vaccines and COVID related drugs; logistics firms and also to patients for treatment.
- For supporting small business units, micro and small industries, and other unorganised sector affected during the current wave of the pandemic:

It has been decided to conduct special three-year long-term repo operations of 10,000 crore rupees at repo rate for the Small finance banks, to be deployed for fresh lending of up to 10 lakh rupees per borrower.

**Source: All India Radio**

### STRIKE DOWN OF MARATHA RESERVATION

**Syllabus Section: Polity and Governance**

#### Why in News?

In its recent decision, Supreme Court strike down the Maratha reservation.

#### About:

#### Background:

- In November 2018, the Maharashtra legislature unanimously passed the Bill giving 16% reservation to the Maratha community in jobs and education by according them the status of Socially and Economically Backward Class (SEBC).
- About Maratha Community:
  - Marathas are essentially agrarian community — historically identified as warriors — which is politically dominating in Maharashtra.
  - They own over 75% of the land in the State as well as 86 of the 105 sugar factories besides controlling about 55% educational institutions and over 70% of cooperative bodies.

- Marathas have dominated the political landscape with 12 of the 18 Chief Ministers coming from the community, and over 60% of all the members of Legislative Assemblies of Maharashtra have been Marathas since 1962.
- Despite the political dominance over the years, subsequent agrarian crisis has led to wide gap among them leading to a decline in financial stability among lower middle class and middle class.
- It led to the demand for reservation in jobs and education.
- The Bill came after the community held mammoth 'silent marches' across the State demanding reservation throughout 2017 and 2018.
  - The demand was not new and had been pending since 1980s.

#### M G Gaikwad Commission

- A nine-member Maharashtra State Backward Class Commission headed by Justice (retired) M.G. Gaikwad, in its report submitted to the government in November 2018 took into consideration various parameters to recommend reservation.
- The Maharashtra State Reservations (of seats for admissions in educational institutions in the State and for appointments in the public service and posts under the State) for Socially and Educationally Backward Classes (SEBC) Act 2018, as it was called.
- It was later challenged in the Bombay High Court. While the court upheld the Act, it reduced the 16% reservation to 12%.
- In Maharashtra, the total reservation was at 52% before the Maratha quota. The addition of 12% Maratha quota took the total reservation to around 64%, which has now been struck down by the Supreme Court.

#### Socio-Political Impact of the Order:

- The discontent amongst the community is likely to manifest once again.
- The divide between rich and poor Marathas could manifest in new form of politics and protests.
- The complex reservation politics had set the process of polarisation between Marathas versus OBCs. With SC's order, it is likely to sharpen the divide on reservation.

**Source: The Hindu**



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## CCMB – LaCONES

### Syllabus Section: Science and Technology

#### Why in News?

Based on reports by CCMB-LaCONES, it has now been confirmed that eight Asiatic lions housed in Nehru Zoological Park (NZP), Hyderabad have tested positive for SARS-CoV2 virus.

#### About:

- LaCONES or Laboratory for the Conservation of Endangered Species, is a Council of Scientific and Industrial Research lab located in Hyderabad.
- It is a part of CCMB (centre for cellular and molecular biology).
- It was conceptualised by Lalji Singh.
- It is India's only research facility engaged in conservation and preservation of wildlife and its resources. This lab would strive to: "To promote excellence in conservation biotechnology and serve for conservation of endangered wildlife in India".
- It was established in 1998 with the help of Central Zoo Authority of India, CSIR and the government of Andhra Pradesh. It was dedicated to the nation in 2007 by then President of India APJ Abdul Kalam.

**Source: The Hindu**

## CONDITIONAL EXEMPTION FROM UNMANNED AIRCRAFT SYSTEM (UAS) RULES, 2021 TO 20 ENTITIES

### Syllabus Section: Science and Technology

#### Why in News?

Ministry of Civil Aviation has granted conditional exemption from Unmanned Aircraft System (UAS) Rules, 2021 to 20 entities to conduct Beyond Visual Line of Sight (BVLOS) experimental flights of drones.

#### About:

- The preliminary permission grant is envisioned to assist the supplementary framework development of subsequent UAV rules pertaining to Beyond Visual Line of Sight (BVLOS) drone operations.
- BVLOS trials will help create framework for future drone deliveries and other major applications using drones.
- The Central Government had constituted the 'BVLOS Experiment Assessment and Monitoring (BEAM) Committee' to invite Expression of Interest (EOI) to undertake BVLOS experimental flights of drones.

- An EOI notice was issued by the Directorate General of Civil Aviation (DGCA) for the aforementioned purpose. The BEAM Committee evaluated the 34 EOIs received and selected 20 consortia ("Selected Consortia") for the experimental flights.
- These exemptions are subject to complete adherence to the requirements stated in the said EOI notice and the directions/exemptions issued (or to be issued in future) by the BEAM Committee.
- This conditional exemption shall be valid for period of one year, or until further orders, whichever is earlier.

**Source: PIB**

## MODEL INSURANCE VILLAGE

### Syllabus Section: Economy

#### Why in News?

IRDAI moots 'Model Insurance Village' concept to boost insurance in rural India.

#### About:

- The concept of setting up model insured villages was mooted by the IRDAI in a discussion paper on increasing penetration of insurance in rural areas with a special focus on agriculture and allied activities.
- The concept may be implemented in a minimum of 500 villages in different districts of the country in the first year and increased to a minimum of 1,000 villages in subsequent two years,"
- the choice of villages is to be made carefully, considering various relevant aspects and parameters in order to implement the concept successfully for a period of three to five years.
- Every general insurance and reinsurance company having office in India needs to be involved for piloting the concept, and the efforts in selected villages need to be continued for a minimum period of 3-5 years so as to make the insurance benefits visible to the community.
- It said the central government's initiative through PMFBY has helped improve the insurance protection for crops in recent years.

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- However, a large number of crops and cropped area are outside the scope of PFMBY and still remaining uninsured. These can be served through different tailored indemnity-based /weather index-based products.

**Source: The Times of India**

### SECTION 142 OF THE SOCIAL SECURITY CODE

**Syllabus Section: Economy**

#### Why in News?

Section 142 of the Social Security Code, 2020 has been notified by Ministry of Labour & Employment covering applicability of Aadhaar.

#### About:

- It will enable Ministry of Labour and Employment to collect Aadhaar details for the database of beneficiaries under various social security schemes.
- Union Minister of State (I/c) for Labour and Employment has clarified that the section under the Social Security Code has been notified only for collection of data of workers including migrant workers.
- No benefit will be denied to workers for want of Aadhaar.
- National Data Base for unorganised workers (NDUW) is at an advanced stage of development by National Informatics Centre.
- The portal is aimed at collection of data for unorganised workers including migrant workers for the purpose of giving benefits of the various schemes of the Government.
- An inter-state migrant worker can register himself on the portal on the basis of submission of Aadhaar alone.

**Source: PIB**

### US STATEMENT ON WAIVING VACCINE PATENTS IS IMPORTANT IN FIGHT AGAINST COVID-19

**Syllabus Section: Health/Patent/Copyright**

#### Why in News?

The Biden administration said it would support waiving patents on Covid-19 vaccines.

#### About:

#### What does it mean waiving patents?

- It means doing away with intellectual property rights. It will pave the way for cheaper versions of the vaccine to enter the market and also scale up production.

- It will also mean two things — vaccines will be more affordable and this will be a big step in overcoming vaccine shortage.
- At present, only drug companies which own patents are authorised to manufacture Covid vaccines.

#### Why patent waiver is needed?

##### 1. Equitable Distribution of Vaccine:

The need to have more equitable distribution of the vaccine doses available.

For instance, the United States has been reportedly sitting on tens of millions of AstraZeneca vaccines even when Pfizer and Moderna are estimated to deliver 400 million doses by the end of May and 600 million by the end of July. Combined with the 20 million doses Johnson & Johnson is also expected to deliver this month, the United States may have an excess of over 80 million doses.

##### 2. Longer Circulation More Vaccine Resistant Virus:

Vaccine experts and human rights groups, have warned that the longer Covid circulates in developing nations, there is a greater chance of more vaccine-resistant, deadly mutations of the virus emerging.

##### 3. More Mutations:

Unless we vaccinate the world, we leave the playing field open to more and more mutations, which could churn out variants that could evade our current vaccines and require booster shots to deal with them.

##### 4. Global vaccine coverage.:

Open sharing of technology and intellectual property could increase global vaccine coverage.

#### What are the challenges involved in waiving the patent?

- The issue of waiving intellectual property rights is one of conflict between human rights and commercial interests of powerful pharmaceutical companies.
- The pharmaceutical industry has been arguing that innovation as well as vaccine quality and safety depend on maintaining exclusive intellectual property rights.
- Intellectual property rights are important because of the money and effort that goes into research and development.
- Lifting of patents would be a compromise on control of safety and quality standards for vaccine manufacturing.



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- The move would disincentivise pharmaceutical companies and allow countries such as Russia and China to exploit the mRNA technology to their advantage.

### What it meant to India?

- This move can help scale up production to meet demand besides making the vaccines more affordable for everyone.

**Source: Indian Express**

## USED COOKING OIL-BASED BIODIESEL

### Syllabus Section:

#### Why in News?

Petroleum Minister flags off 1st supply of Used Cooking Oil-based Biodiesel from Indian Oil's Tikrikalan Terminal.

#### About:

- To create an eco-system for collection and conversion of UCO into Biodiesel, Minister of Petroleum and Natural Gas had initiated Expressions of Interest for "Procurement of Bio-diesel produced from Used Cooking Oil" on the occasion of World Biofuel Day on 10th August 2019.
- Under this initiative, OMCs offer periodically incremental price guarantees for five years and extend off-take guarantees for ten years to prospective entrepreneurs.
- Indian Oil has received 51KL of UCO-Biodiesel at its Tikrikalan terminal in Delhi as of 31.3.2021, Under this initiative
- It is a landmark in India's pursuance of Biofuels which will have a positive impact on the environment.

#### Biodiesel

- Biodiesel is an alternative fuel, similar to conventional or 'fossil' diesel.
- It can be produced from vegetable oils, animal fats, tallow and waste cooking oil.
- A significant advantage of Biodiesel is its carbon-neutrality, i.e. the oilseed absorbs the same amount of CO<sub>2</sub> as is released when the fuel is combusted in a vehicle.
- Also, Biodiesel is rapidly biodegradable and completely non-toxic.

**Source: PIB**

## AYUSH-64

### Syllabus Section: Health

#### Why in News?

Ayush Ministry launches nationwide distribution campaign of herbal medicine.

#### About:

- AYUSH-64 is a poly herbal formulation that has been found to help in the treatment of asymptomatic, mild and moderate COVID-19 infection.
- It was developed by the Central Council for Research in Ayurvedic Sciences (CCRAS), a research institution under the Ministry of Ayush.
- Originally developed in 1980 for treatment of Malaria, this drug has notable antiviral, immune-modulator and antipyretic properties. It may also be taken as prophylactic medicine.
- But as a side effect of Ayush-64, loose motions can occur in some patients, which can be self-limiting and does not require any medical intervention.

**Source: PIB**

## INDEX OF ECONOMIC FREEDOM

### Syllabus Section: International Reports and Organisations

#### Why in News?

- Recently, the Heritage Foundation has released the 2021 Index of Economic Freedom.

#### Key Highlights

- 84 countries have been covered in the study this time and the period of study is July 2019 to June 2020.
- The Heritage Foundation decided to exclude Hong Kong from its rankings for the first time ever.
- Singapore topped the global ranking for the second year in a row in the latest Economic Freedom Index.
- The global top five is New Zealand in second place with 83.9 points, Australia in third (82.4 points), Switzerland in fourth with 81.9 points and Ireland (81.4 points).
- The Asia-Pacific nations generally scored lower than the world average in seven of 12 indicators such as property rights, judicial effectiveness, government integrity, monetary freedom, trade freedom, investment freedom and financial freedom.

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## India and 2021 Index of Economic Freedom

- India came in around the middle of the pack among Asia-Pacific countries ranking 26th out of 40 countries, scoring 56.5 points.
- Globally, the Foundation rates India's economy as the 121st freest.

## Index of Economic Freedom

- It is an annual guide published to measure the progress made in advancing economic freedom which it claims brings greater prosperity.
- The index ranks 12 indicators from property rights to financial freedom under four categories i.e., rule of law, size of government, regulatory efficiency and open markets.
- It believes that the ideals of economic freedom are strongly associated with healthier societies, cleaner environments, greater per capita wealth, human development, democracy, and poverty elimination.
- The 2021 edition measures economic freedom only in independent countries where governments exercise sovereign control of economic policies.
- It relies primarily on the World Trade Organization's annual World Tariff Profiles for trade-weighted average tariff rates in order to reflect the most authoritative and consistent tariff information.

Source: Business Standard

## MEETING OF GROUP OF 7 COUNTRIES

### Syllabus Organizations

Section: International

### Why in News?

Meeting of Group of 7 countries concludes in London with pledge to work for more affordable COVID-19 vaccine.

### About:

### Key Highlights:

#### 1) Biggest Current Threat

- The group of the most advanced economies of the world discussed what it called as the biggest current threats: China, Russia and the coronavirus pandemic.
  - The G7 would bolster collective efforts to stop China's coercive economic policies and to counter Russian disinformation.

#### 2) Decision Regarding Myanmar Military Government:

It also threatened the Myanmar military government with fresh sanctions.

#### 3) To Expand the Production of Affordable COVID-19 Vaccines.

- On the coronavirus pandemic, the G7 pledged to work with the industry to expand the production of affordable COVID-19 vaccines.
  - The work would include promoting partnerships between companies, and encouraging voluntary licensing and tech transfer agreements on mutually agreed terms.

### G7 Country:

- Founded in 1975 as a forum for the most advanced economies to discuss crises such as the OPEC oil embargo





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- Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States are the G7 countries. G-7 is a bloc of industrialized democracies
- The world's biggest population and second-biggest economy, China has relatively low levels of wealth per head of population. Thus it is not considered as an advanced economy like other G7 members. Hence China is not a member of G7.
- The bloc meets annually to discuss issues of common interest like global economic governance, international security and energy policy.

**Source: All India Radio**

### ONLINE CERTIFICATION OF DISABILITY THROUGH UDID PORTAL

**Syllabus Section: Social Issues**

#### Why in News?

The Department of Empowerment of Persons with Disabilities (DEPwD), Government of India has made it mandatory for all States/UTs to grant certificate of disability through online mode only using UDID portal.

#### About:

- The Central Government notified the Rights of Persons with Disabilities Rules, 2017 under RPwD Act, 2016 on 15.06.2017
  - Under its Rule 18(5) mandates the Central Government to appoint a date making it mandatory for the State/UT authorities to issue certificate of disability through online mode.
- It will ensure complete digitization of certification of disability from 01.06.2021, besides providing a viable mechanism for cross-checking genuineness of the certificate to achieve pan-India validity, and simplifying the process for the benefit of Divyangjan.

#### UDID PORTAL

- The UDID project is under implementation since 2016.
- Aims at building a holistic end-to-end integrated system for Issuance of Universal ID & Disability Certificates for Person with Disabilities with their identification and disability details.

**Source: PIB**

### STRATEGY FOR PULSES CULTIVATION IN KHARIF 2021

**Syllabus Section: Agriculture**

#### Why in News?

With an aim to attain self-sufficiency in the production of pulses, the Ministry of Agriculture and Farmers Welfare has formulated a special Kharif strategy for implementation in the ensuing Kharif 2021 season.

#### About:

- A detailed plan for both area expansion and productivity enhancement for Tur, Moong and Urad has been formulated through consultation with states.
- all the high yielding varieties (HYVs) of seeds that are available either with the Central Seed Agencies or in the States will be distributed free of cost to increase area through intercropping and sole crop.
- For the coming Kharif 2021, it is proposed to distribute 20,27,318 (almost 10 times more seed mini kits than 2020-21) amounting to Rs. 82.01 crores.
  - The total cost for these mini-kits will be borne by the Central Government to boost the production and productivity of tur, moong and urad.
- The Agricultural Technology Application Research Institutes(ATARIs) and Krishi Vigyan Kendras will also be roped in for effective implementation and training to the farmers.

**Source: PIB**

### CENTRE ALONE CAN IDENTIFY SOCIALLY AND EDUCATIONALLY BACKWARD CLASSES

**Syllabus Section: Polity and Governance**

#### Why in News?

- Only Central government can identify, include a community within Socially and Educationally Backward class list: Supreme Court

#### About:

- The Supreme Court ruled that after the insertion of Article 342 A in the Constitution, it is the Central government alone which is empowered to identify Socially and Economically Backward Class (SEBC) and include them in a list to be published under Article 342 A (1), specifying SEBCs in relation to each State and Union Territory.

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- The States can, through their existing mechanisms, or even statutory commissions, only make suggestions to the President or the Commission under Article 338B, for inclusion, exclusion or modification of castes or communities, in the list to be published under Article 342A (1), the Court ruled.

### Identifying Socially and Educationally Backward Classes:

- The power to identify and specify SEBCs lies with Parliament only with reference to the Central List.
- The State governments may have separate State Lists of SEBCs for providing reservation for recruitment to State services or admissions in State government educational institutions.
- Under the newly-inserted Article 342A of the 102nd Amendment Act of 2018, the President notifies the SEBCs in a State after consultation with the Governor.
- The castes or communities included in such State Lists may differ from those included in the Central List.

**Source: The Hindu**

### DAHLA DAM

#### Syllabus Section: International Relations

#### Why in News?

The Taliban has captured Afghanistan's second-biggest dam after months of fierce fighting in its former bastion of Kandahar.

#### About:

- Dahla Dam, which provides irrigation to farmers via a network of canals as well as drinking water for the provincial capital, is now under Taliban control.
- The dam's capture comes after clashes erupted in neighbouring Helmand province this week, just days after the U.S. military formally began withdrawing its remaining troops from Afghanistan.
- The Dahla Dam, also known as Arghandab Dam, is located in the Shah Wali Kot District of Kandahar Province in Afghanistan.
- Constructed in 1952, it is said to be the second largest dam in Afghanistan.
- The Dahla Dam is built on the Arghandab River.

**Source: All India Radio**

### MOUNT SINABUNG'S RECENT VOLCANIC ERUPTION,

#### Syllabus Section: Geography

#### Why in News?

Indonesia's Mount Sinabung, located in the North Sumatra province, erupted belching a massive column of volcanic ash and smoke 3,000 metres (3 km) into the sky.

#### About:

- The volcano has been active since 2010 when it erupted after nearly 400 years of inactivity.
- Indonesia is home to many active volcanoes owing to its location in the "Ring of Fire" or the Circum-Pacific Belt
- Circum-Pacific Belt — an area along the Pacific Ocean characterised by active volcanoes and frequent earthquakes.
- The Ring of Fire is home to about 75 per cent of the world's volcanoes and about 90 per cent of earthquakes also occur here.

#### Type of Volcanoes:

- Basically, there are three types of volcanoes — active, dormant or extinct.
- An eruption takes place when magma (a thick flowing substance), that is formed when the earth's mantle melts, rises to the surface.
- An eruption takes place when magma (a thick flowing substance), that is formed when the earth's mantle melts, rises to the surface.

#### Risk from These Eruptions

- The most common cause of death from a volcano is suffocation, making people with respiratory conditions such as asthma and other chronic lung diseases susceptible.
- The ash may be gritty and abrasive and small particles can scratch the surface of the eyes.
- Volcanic eruptions can result in additional threats to health such as floods, mudslides, power outages, drinking water contamination and wildfires.

**Source: Indian Express**



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## NFRA PREPARES PROVISIONAL DATABASE

### Syllabus Section: Economy

#### Why in News?

National Financial Reporting Authority (NFRA) has prepared a provisional database of companies and auditors.

#### About NFRA and its Mandate:

- The National Financial Reporting Authority is a regulatory body, set up under Section 132 of the Companies Act.
- It oversees compliance with Accounting and Auditing Standards by companies that can be described as Public Interest Entities (PIEs).
- This group includes all listed companies, and large unlisted companies.
- To discharge this mandate, NFRA is in the process of creating a verified and accurate database of companies and auditors that come under the regulatory ambit of NFRA.
- Establishment of this data base involves critical steps like identification and verification of the primary data source, and reconciliation of data (such as Company Identification Number (CIN) which is dynamic) from different sources.
- In this regard the NFRA has been engaging with the Corporate Data Management (CDM) division of Ministry of Corporate Affairs (MCA) and three recognised stock exchanges in India.
- A provisional data base of companies and their auditors as of 31st March 2019 has been compiled by the NFRA which has been published on the website of the NFRA.
- This provisional data will be updated/ revised going forward based on the collection of further data and information. Similar exercise for compilation of the data base as of 31st March 2020 will be undertaken shortly.

**Source: Economic Times**

## NPCI SCRAPS CRYPTO BAN IDEA

### Syllabus Section: Economy

#### Why in News?

- National Payments Corporation of India (NPCI) has refused to ban cryptocurrency transactions.
  - It has left the decision of banning crypto trade on banks' risk and compliance team.

#### About:

- NPCI's decision is based on the Supreme Court's March 2020 ruling which set aside a directive by the Reserve Bank of India from April 2018 to ban banks and finance companies for "dealing in virtual currencies or providing services to facilitate" anyone trading in crypto.
- NPCI has not blocked the trades given that the RBI did not come out with any directive following the Supreme Court ruling.

#### NPCI:

- It is an umbrella body for digital retail payments in India
- It was established by the Reserve Bank of India along with the Indian Bank's Association under the provisions of the Payment and Settlement Systems Act, 2007.
- Presently, NPCI is promoted by ten major promoter banks.
- It has been incorporated as a "Not for Profit" Company under the provisions of Section 25 of Companies Act 1956 (now Section 8 of Companies Act 2013), with an intention to provide infrastructure to the entire Banking system in India for physical as well as electronic payment and settlement systems.

#### Products of NPCI:

- RuPay.
- National Common Mobility Card.
- Bharat Interface for Money (BHIM).
- Unified Payments Interface (UPI).
- Bharat Bill Payment System.

#### Cryptocurrencies:

- Cryptocurrencies are digital currencies in which encryption techniques are used to regulate the generation of units of currency and verify the transfer of funds, operating independently of a central bank.
- It works on blockchain technology.

**Source: Indian Express**

## SPUTNIK LIGHT

### Syllabus Section: Science & tech

#### Why in News?

Russia authorises use of single dose vaccine Sputnik Light

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### About:

- Sovereign wealth fund Russian Direct Investment Fund (RDIF) on Thursday said the move will pave way for the immunisation of a larger number of people in a shorter time frame.
- Sputnik Light is the first component — recombinant human adenovirus serotype number 26 (rAd26) — of Sputnik V vaccine that has been approved by over 60 countries, including India.
- The results of Phase I/II Safety and Immunogenicity Study of Sputnik Light show the vaccine can elicit the development of antigen specific IgG antibodies in 96.9% of volunteers on the 28th day after immunisation.
- Virus-neutralising antibodies developed in 91.67 % of the volunteers on the 28th day post-immunisation. Cellular immune response against the S Protein of SARS-CoV-2 developed in 100% of volunteers.
- Interim results of Phase III clinical study are expected later this month, RDIF said.
- Besides Russia, Sputnik Light is to be made in at least 10 other countries where RDIF has formed manufacturing partnerships with 20 producers for Sputnik V.

**Source: All India Radio**

### 2-DEOXY-D-GLUCOSE (2-DG)

#### Syllabus Section: Science and Technology

#### Why in News?

Drugs Controller General of India (DCGI) approved anti-COVID drug developed by DRDO for emergency use.

#### About:

- The drug 2-deoxy-D-glucose (2-DG) has been developed by Institute of Nuclear Medicine and Allied Sciences (INMAS), a lab of Defence Research and Development Organisation (DRDO), in collaboration with Dr Reddy's Laboratories (DRL), Hyderabad.
- Clinical trials have shown that this molecule helps in faster recovery of hospitalised patients and reduces supplemental oxygen dependence.
- Higher proportion of patients treated with 2-DG showed RT-PCR negative conversion in COVID patients. The drug will be of immense benefit to the people suffering from COVID-19.

- The drug comes in powder form in sachet, which is taken orally by dissolving it in water.
- It accumulates in the virus infected cells and prevents virus growth by stopping viral synthesis and energy production.
- Its selective accumulation in virally infected cells makes this drug unique.

**Source: The Hindu**

### ARCTIC SCIENCE MINISTERIAL (ASM3)

#### Syllabus Section: International Relations

#### Why in News?

India participates in the 3rd Arctic Science Ministerial; shares plans for research and long-term cooperation in the Arctic.

#### About:

- ASM3, jointly organised by Iceland and Japan, is the first Ministerial meeting being held in Asia.
- The first two meetings—ASM1 and ASM2—were held in the USA in 2016 and Germany in 2018, respectively.
- The meeting is designed to provide opportunities to various stakeholders, including academia, indigenous communities, governments and policymakers, to enhance collective understanding of the Arctic region, emphasize and engage in constant monitoring, and strengthen observations.
- India shared its plans to contribute observing systems in the Arctic, both in-situ and by remote sensing.
- The country would deploy open ocean mooring in the Arctic for long-term monitoring of upper ocean variables and marine meteorological parameters.
- The launch of NISER (NASA-ISRO Synthetic Aperture Radar) satellite mission, in collaboration with the USA, is underway.
  - NISER aims to conduct global measurements of the cause and consequences of land surface changes using advanced radar imaging. India's contributions to the Sustained Arctic Observational Network (SAON) would continue.

#### Background:

- India's engagement with the Arctic dates back to 1920 with the signing of the Svalbard Treaty in Paris. Since July 2008, India has a permanent research station in the Arctic called Himadri at Ny-Alesund, Svalbard Area in Norway.



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- Since 2013, India enjoys 'Observer' status in the Arctic Council with twelve other countries (Japan, China, France, Germany, UK, Italy, Switzerland, Poland, Spain, Netherlands, Singapore, and South Korea).
- It has also deployed a multi-sensor moored observatory called IndARC in the Kongsfjorden fjord since July 2014.
- The research in the Arctic region from India is coordinated, conducted, and promoted by the National Centre for Polar and Ocean Research (NCPOR), Goa, under the Ministry of Earth Sciences, Government of India.

**Source: PIB**

### BLACK FUNGUS' IN COVID-19 PATIENTS

**Syllabus Section: Health**

#### Why in News?

Mucormycosis, a serious fungal infection but otherwise rare, has been observed in a number of Covid-19 patients recently.

#### About:

#### What is mucormycosis?

Mucormycosis, commonly called black fungus, is a rare but serious fungal infection caused by a kind of fungus called mucormycete, which is abundant in the environment. It mainly affects people who have health problems or take medicines that lower the body's ability to fight germs and sickness.

#### Symptoms

These include pain and redness around eyes and/or nose, fever, headache, coughing, shortness of breath, bloody vomits, and altered mental status. Warning signs can include toothache, loosening of teeth, blurred or double vision with pain.

#### Who is vulnerable?

Vulnerable groups include people who have health problems or take medicines that lower the body's ability to fight germs and sickness. These include those with diabetes, cancer, or those who have had an organ transplant.

#### Prevention

Use masks if you are visiting dusty construction sites. Wear shoes, long trousers, long-sleeved shirts and gloves while gardening. Maintain personal hygiene including a thorough scrub bath.

#### Diagnosis

It depends on the location of the suspected infection. A sample of fluid from your respiratory system may be collected for testing in the lab; otherwise a tissue biopsy or a CT scan of your lungs, sinuses etc may be conducted.

**Source: Indian Express**

### GREEN PANEL ALLOWS GREAT NICOBAR PLAN TO ADVANCE

**Syllabus Section: Environment and Ecology**

#### Why in News?

- Environment Appraisal Committee which flagged concerns over project has now 'recommended' it 'for grant of terms of reference' for EIA studies.
- It will include baseline studies over three months.

#### About:

- The committee has asked for an independent evaluation for the suitability of the proposed port site with a specific focus on Leatherback Turtle, Nicobar Magapod and Dugong.
- The pre-feasibility report 'Holistic Development of Great Nicobar Island at Andaman and Nicobar Islands' is prepared for the NITI Aayog by a Gurugram-based consulting agency.
  - The proposal includes an international container trans-shipment terminal, a greenfield international airport, a power plant and a township complex spread over 166 sq. km. (mainly pristine coastal systems and tropical forests), and is estimated to cost 75,000 crore.

#### Concerns on site:

- The committee's concerns were both procedural and substantive.
- The document did not include the details of the township to be developed, seismic and tsunami hazards, freshwater requirement details and details of the impact on the Giant Leatherback turtle.
- The committee also noted that there were no details of the trees to be felled.
  - The project area has some of the finest tropical forests in India.
- The committee noted that the site selection for the port had been done mainly on technical and financial criteria, ignoring the environmental aspects.

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### Action Point

The committee has highlighted the need for an independent assessment:

- of terrestrial and marine biodiversity,
- a study on the impact of dredging, reclamation and port operations
- oil spills,
- the need for studies of alternative sites for the port with a focus on environmental and ecological impact especially on turtles,
- analysis of risk-handling capabilities, a disaster management plan, an assessment of the cumulative impact, and a hydro-geological study to assess the impact on ground and surface water regimes.

### GIANT LEATHERBACK TURTLE:

- IUCN status: Vulnerable
- Schedule I of India's Wildlife Protection Act, 1972,
- Giant Leatherback turtles are the largest of the seven species of sea turtles on the planet.
- The most long-ranging leatherbacks are found in all oceans except the Arctic and the Antarctic.
- The population in A&N Islands is among the most important colonies of the Leatherback globally.
- South Bay and West Bay on Little Andaman and Galathea on Great Nicobar, along with other nesting beaches in the islands are Important Marine Turtle Habitats in India



Source: The Hindu

### INDIA-EU LEADERS' MEETING

Syllabus Section: International Relations

#### Why in News?

At the invitation of the President of the European Council Mr. Charles Michel, Prime Minister Shri Narendra Modi participated in the India-EU Leaders' Meeting.

#### About:

##### Key Highlights:

- This is the first time that the EU hosted a meeting with India in the EU+27 format.
- The meeting was the initiative of the Portuguese Presidency of the Council of the European Union.
- Strengthening of the India-EU Strategic Partnership

The leaders expressed their desire to further strengthen the India-EU Strategic Partnership based on a shared commitment to democracy, fundamental freedoms, rule of law and multilateralism.

- o They exchanged views on three key thematic areas
- foreign policy and security
- COVID-19, climate and environment; and

- trade, connectivity and technology.
- Closer cooperation on combating the COVID-19 pandemic and economic recovery, tackling climate change, and reforming multilateral institutions.
- Free Trade and Investment Agreements
  - o The leaders welcomed the decision to resume negotiations for balanced and comprehensive free trade and investment agreements.
  - o Negotiations on both the Trade and Investment Agreements will be pursued on parallel tracks with an intention to achieve early conclusion of both agreements together.
  - o This is a major outcome which will enable the two sides to realise the full potential of the economic partnership.
  - o India and the EU also announced dedicated dialogues on WTO issues, regulatory cooperation, market access issues and supply chain resilience, demonstrating the desire to deepen and further diversify economic engagement.
- 'Connectivity Partnership'
  - o India and the EU launched an ambitious and comprehensive 'Connectivity Partnership' which is focused on enhancing digital, energy, transport and people-to-people connectivity.



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- o The Partnership is based on the shared principles of social, economic, fiscal, climate and environmental sustainability, and respect for international law and commitments.
- o The Partnership will catalyse private and public financing for connectivity projects.
- o It will also foster new synergies for supporting connectivity initiatives in third countries, including in the Indo-Pacific.
- Other Issues:
  - o India and the EU leaders reiterated their commitment to achieving the goals of the Paris Agreement and agreed to strengthen joint efforts for mitigation, adaptation and resilience to the impacts of climate change.
  - o India welcomed the EU's decision to join CDRI.
  - o India and the EU also agreed to enhance bilateral cooperation on digital and emerging technologies such as 5G, AI, Quantum and High-Performance Computing including through the early operationalization of the Joint Task Force on AI and the Digital Investment Forum.
- o The leaders acknowledged the importance of a free, open, inclusive and rules-based Indo-Pacific and agreed to closely engage in the region, including in the context of India's Indo-Pacific Ocean's Initiative and the EU's new strategy on the Indo-Pacific.
- o A finance contract of Euro 150 million for the Pune Metro Rail Project was signed by the Ministry of Finance, Government of India, and European Investment Bank.
- India-EU Leaders Meeting has set a significant milestone by providing a new direction to the Strategic Partnership and giving a fresh impetus for implementing the ambitious India-EU Roadmap 2025 adopted at the 15th India-EU Summit held in July 2020.

**Source: PIB**

### DETER COMMITTEES

#### Syllabus Section: Health

#### Why in News?

To streamline Covid management at local level, Decentralized Triage and Emergency Response (DETER) Committees at ward-levels are being formed in the Karnataka capital.

#### About:

#### What are DETER committees?

- Decentralized Triage and Emergency Response (DETER) committees have been formed across 198 wards in Bengaluru with the objective to strengthen government response and management of the coronavirus pandemic
- Also known as WDCs (Ward-level DETER Committees), these teams will emphasise on the distribution of localised action in a decentralised system of disaster response
- They will be run in synergy with BBMP officials, ward committee members, government officers, representatives of the peoples, volunteers from resident welfare associations, civil society organisations, and disaster-support initiatives.
- WDCs will function on open-source technology.

#### Major Responsibilities of WDCS:

- WDCs will emerge as the first-point contact for those infected with Covid-19.
- Entrusted with the responsibility to provide timely and accurate information to citizens on appropriate actions and behaviours that need to be taken at each stage of the Covid lifecycle.
- WDCs will also share information on triaging and take appropriate steps to enable contact tracing and testing.
- Further, grievance redressal and escalate citizen needs, if any, and mobilisation of resources and essential medical supplies in the ward will also be carried out by the WDCS.
- Achieving universal vaccination in an efficient manner is another responsibility, in an event of death, WDCs are expected to help families connect with the hearse van and the crematorium team.

#### Main Strategy to Be In Place For WDCS:

- The Karnataka government has formulated a '3E Strategy' for WDCs to micromanage Covid-19 in a comprehensive manner.
- The 3E Strategy is explained as follows:
  - o Efficient admission to hospitals facilitated by community triage services;
  - o Efficient discharge from hospitals enabling efficient bed-turnover;
  - o Empowering hospitals, doctors, and their management with supportive supervision.

**Source: Indian Express**

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### LINEAMENT AMONG ASSAM EARTHQUAKE FACTORS

**Syllabus Section: Geography**

#### Why in News?

An unfamiliar lineament is among four factors behind frequent earthquakes in northern Assam's Sonitpur area.

#### About:

- A lineament is a linear feature in a landscape dictated by an underlying geological structure such as a fault.
- Sonitpur district lies within a tectonically complex triangular area bounded by the east-west trending Atherkhet Fault, the northwest-southeast trending Kopili Fault and a north-south trending lineament.
- The two faults and the lineament, along with the oblique convergence of the Indian plate, have caused frequent earthquakes.
- The northeast is demarcated as Seismic Zone V, which indicates a zone with high vulnerability. The Indian plate is moving northeast toward the Eurasian plate in the Himalayan region, their oblique collision and release of stress and strain accumulated in the local tectonic or fault environments lead to earthquakes.

**Source: The Hindu**

### NITI AAYOG AND MASTERCARD RELEASE REPORT ON 'CONNECTED COMMERCE'

**Syllabus Section: Economy**

#### Why in News?

NITI Aayog and Mastercard today released a report titled 'Connected Commerce: Creating a Roadmap for a Digitally Inclusive Bharat'.

#### About:

The report highlights key issues and opportunities, with inferences and recommendations on policy and capacity building across agriculture, small business (MSMEs), urban mobility and cyber security.

#### Key issues addressed during the knowledge series were:

1. Acceleration of digital financial inclusion for underserved sections of Indian society.
2. Enabling SMEs to 'get paid, get capital and get digital' and access customers, and ensure their continued resilience.
3. Policy and technological interventions to foster trust and increase cyber resilience.

4. Unlocking the promise of digitization in India's agriculture sector.
5. The essential elements of a digital roadmap to make transit accessible for all citizens.

#### Key recommendations in the report include:

1. Strengthening the payment infrastructure to promote a level playing field for NBFCs and banks.
2. Digitizing registration and compliance processes and diversifying credit sources to enable growth opportunities for MSMEs.
3. Building information sharing systems, including a 'fraud repository', and ensuring that online digital commerce platforms carry warnings to alert consumers to the risk of frauds.
4. Enabling agricultural NBFCs to access low-cost capital and deploy a 'phygital' (physical + digital) model for achieving better long-term digital outcomes. Digitizing land records will also provide a major boost to the sector.
5. To make city transit seamlessly accessible to all with minimal crowding and queues, leveraging existing smartphones and contactless cards, and aim for an inclusive, interoperable, and fully open system such as that of the London 'Tube'.

**Source: PIB**

### SINOPHARM Covid-19 vaccine

**Syllabus Section: Health**

#### Why in News?

The World Health Organization approved the Sinopharm COVID-19 vaccine for emergency use — the first Chinese jab to receive the WHO's green light.

#### About:

- WHO gave emergency use listing to Sinopharm Beijing's Covid-19 vaccine, making it the sixth vaccine to receive WHO validation for safety, efficacy and quality."
- The Strategic Advisory Group of Experts on Immunisation, or SAGE, has also reviewed the available data, and recommends the vaccine for adults 18 years and older, with a two-dose schedule.

#### Significance:

- An emergency use listing by the WHO paves the way for countries worldwide to quickly approve and import a vaccine for distribution, especially those states without an international-standard regulator of their own



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- It also opens the door for the jabs to enter the Covax global vaccine-sharing scheme, which aims to provide equitable access to doses around the world and particularly in poorer countries.

### How does this vaccine work?

- The Sinopharm vaccine is an inactivated coronavirus vaccine, like Covaxin developed by Bharat Biotech India (BBIL) in collaboration with the National Institute of Virology (NIV).
- Inactivated vaccines take the disease-carrying virus (in this case SARS-CoV-2) and kill it using heat, chemicals or radiation. WHO notes that these vaccines take longer to make and might need two or three doses to be administered. The flu and polio vaccines use this approach as well.
- Out of the major vaccines being used in the world, Sinopharm, Covaxin and Sinovac (also developed by China) are the only ones that use inactivated virus. Others such as Pfizer-BioNTech and Moderna are mRNA vaccines, whereas Oxford-AstraZeneca, Sputnik and Johnson and Johnson's single-dose vaccines use a viral vector.

**Source: The Hindu**

### Amphotericin B - To Fight Mucormycosis

**Syllabus section: General Science, Science & Technology**

#### Why in news?

The Government of India is engaging with the manufacturers to ramp up production of Amphotericin B, a drug which is being actively prescribed by the physicians to patients suffering from Mucormycosis, a post COVID complication. The supply position is expected to improve with extra imports of this drug and increase in its production domestically.

#### About Amphotericin-B

- Amphotericin-B is an antifungal medication used for serious fungal infections like aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, and cryptococcosis for certain infections it is given with flucytosine.

#### About Mucormycosis

- Mucormycosis (previously called zygomycosis) is a serious but rare fungal infection caused by a group of molds called mucormycetes.

- These molds live throughout the environment. Mucormycosis mainly affects people who have health problems or take medicines that lower the body's ability to fight germs and sickness.
- It most commonly affects the sinuses or the lungs after inhaling fungal spores from the air. It can also occur on the skin after a cut, burn, or other type of skin injury.

**Source: PIB**

### NASA-Axiom: First Private Astronaut Mission to Space Station

**Syllabus Section: Science and Technology**

#### Why in news?

The National Aeronautics and Space Administration (NASA) recently signed an agreement with Axiom Space and going to launch First Private Astronaut Mission to Space Station.

#### Background

- The International Space Station is to retire by 2024 or 2028. Russia had already announced that it is moving out of International Space Station after the agreement ends in 2024. Russia is currently building its own space station.
- With the ISS retiring, NASA is to open it up for commercial activities

#### What is the Agreement?

- Under the agreement, Axiom is to send its astronauts to International Space Station. This is the first private astronaut mission to the space station. The mission has been named as Ax-1.

#### India's Own Space Station

- India is planning to launch its own space station in 2020. With this India will join the elite countries US, China and Russia. The Indian Space Station will be smaller, that is, of 20 tonnes. It will be used for performing microgravity experiments and not for space tourism.
- The Indian Space Station is to be set up at a height of 400 km. This project will be an extension of the Gaganyaan Mission.
- Space Stations are important to collect meaningful scientific data. They are used to study about the effects of long term space flight on human body.

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**Source: NASA Official Site.**

<https://www.nasa.gov/press-release/nasa-axiom-agree-to-first-private-astronaut-mission-on-space-station>

## New Commodity Super Cycle

**Syllabus Section: Economy**

### Why in news?

The steel prices have increased by 265% in 2020-21 as compared to that of 2019-20. The prices of copper have hit an all-time high since 2011. Also, the prices of palm oil, coffee, soy bean oil have been increasing. Which is indicating that there is a new commodity super cycle is prevailing.

### What is Commodity Super Cycle

The prices of commodities from corn to crude oil to rubber, rhodium, copper, soy bean has been increasing since the beginning of 2021. This is referred to as Commodity Super Cycle.

### Background & Evolution of Commodity Super cycle

- Since the beginning of nineteenth century there has been four Commodity Super Cycle.
- The first Commodity Super cycle started in the late 1890s as the United States entered into rapid industrialisation and urbanization.
- The second Commodity Super Cycle started when the weapon demand due to First World War increased exponentially. It peaked in 1917.
- The third commodity Super Cycle started as Europe and its allies got involved in the Second World War completely. The resources required for the war were huge. The cycle peaked in 1951. As it took time for the post-war growth, the cycle lasted a while and peaked in 1951.
- The third cycle started in early 1970s. As economic growth has been constantly increasing post World War II, the demand increased. However, supply was disrupted as countries nationalized extraction industries.

- The recent Commodity Super cycle started when China joined the World Trade Organisation in 2000. The rapid industrialisation in China forced mass migration of workers to the cities. As China started to spend more and more on infrastructure, it started to become the top consumer of most of the commodities. This fourth cycle was interrupted by the 2008 Financial Crisis. After this, the prices again started increasing. Now, COVID crisis is accelerating this.

### Causes of current Commodity super Cycle

- Recovery in global demand
- Supply side constraints
- Loose Monetary policy of global central banks

### Impact of commodity super cycle on India

India currently has taken up huge infrastructural plan. The sharp rise in prices of steel and cement at this point of time will affect plans of India. Apart from this, as India is marching towards self-sufficiency, the rest of the price rise will not affect India. However, oil price rise will of course be of huge concern

**Source: Indian Express**

## ANIMAL CORRIDORS IN KAZIRANGA

**Syllabus Section: Environment and Ecology**

### Why in News?

The authorities in Assam's Golaghat and Nagaon districts have begun probing cases of clearance of forest land, digging and construction activities on at least three animal corridors within the eco-sensitive zone of the Kaziranga National Park and Tiger Reserve.

### About:

#### Kaziranga Animal Corridor:

- Kaziranga National Park is located in the Golaghat, KarbiAnglong and Nagaon districts of the state of Assam
  - The sanctuary, which hosts two-thirds of the world's great one-horned rhinoceroses, is a World Heritage Site.
- A special committee formed by the Supreme Court in its report had recommended the delineation of nine animal corridors in Kaziranga National Park (KNP)
- Golaghat and Nagaon have large swathes of the 1,300-sq. km. tiger reserve that has nine identified animal corridors.



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- o Seven of these — Amguri, Bagori, Chirang, Deosur, Harmati, Hatidandi and Kanchanjuri — are in Nagaon district while Haldibari and Panbari corridors are in Golaghat district.
- The nine corridors that already exist behave as functional corridors, but according to the new recommendation, the corridors will act as both structural and functional, on the basis of need.
- The report suggested that structural corridors should be made free of all human induced disturbances except for the forestry and wildlife management practices.
- On the other hand, functional corridors can have regulated multi-use with restrictions on land use change.

## Significance of the Animal Corridor:

- These corridors are crucial for the rhinos, elephants, tigers, deer and other animals that escape a flooded Kaziranga during the monsoon months for the safety of the hills of Karbi Anglong district beyond the highway skirting the southern boundary of the tiger reserve.

## Wildlife or Animal Corridors

- Wildlife corridors are also known as habitat corridors or green corridors.
- A wildlife corridor is a suitable natural habitat that enables free movement of wildlife from one forest to another.
- Some wild animals may exhibit a one-time movement such as 'dispersal' (e.g. a tiger) while some other animals may exhibit regular (seasonal) movements (to and fro) like migration (e.g. elephant, several species of birds etc.)
- Wildlife Corridors are mainly of two types: functional and structural.

Source: The Hindu

## FOAM PATH FOR AN EMERGENCY BELLY LANDING

### Syllabus Section: Science and Technology

#### Why in News?

A flight with a Covid-19 patient made an emergency belly landing in Mumbai recently after losing one wheel.

#### About:

#### What is Belly Landing?

- A belly landing or gear-up landing occurs when an aircraft lands without its landing gear fully extended and uses its underside, or belly, as its primary landing device. As an added precaution, airport authorities had also sprayed foam on the runway.

#### Why Foam?

- A foam path is an aviation safety practice of spreading a layer of fire suppression foam on an airport runway to prepare for an emergency landing.
- In the event of crash-landing, liquids leaking from the aircraft start evaporating, resulting in an air-vapour mixture that is inflammable or even highly explosive.
- The foam carpet is expected to check the evaporation.

#### Is it effective?

- The International Civil Aviation Organization says the effectiveness of runway foaming is not fully substantiated.
- In 1987, the United States Federal Aviation Administration withdrew its 1966 recommendation on foam paths for emergency landings.
- Data from a US study of emergency landings made with, and without, the application of foam showed no significant reduction in the risk of fire.
- Although originally it was thought that foam paths would prevent fires, the practice is now discouraged.
- The United States Federal Aviation Administration (FAA) recommended foam paths for emergency landings in around 1966, but withdrew that recommendation in 1987, although not barring its use.

Source: Indian Express

## INNOVATORS GROWTH PLATFORM

### Syllabus Section: Economy

#### Why in News?

SEBI notifies relaxed rules for listing start-ups.

#### About:

- With an aim to boost listing of start-ups, markets regulator Sebi has notified a slew of relaxations to norms, including reducing holding period for pre-issue capital and allowing discretionary allotment to eligible investors.

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- The changes have been made to the framework for listing on the Innovators Growth Platform (IGP).
- This is aimed at making the platform more accessible to companies in view of the evolving start-up ecosystem.
- The regulator has reduced the period of holding of 25 per cent of pre-issue capital of the issuer company by eligible investors to one year from the current requirement of two years.
- The term 'Accredited Investor' for the purpose of IGP is renamed as 'Innovators Growth Platform Investors'.
- Because of its high carbon content, the asteroid reflects about four per cent of the light that hits it, which is very low when compared with a planet like Venus, which reflects about 65 per cent of the light that hits it.
  - Earth reflects about 30 per cent.
- There is a slight possibility that Benu, which is classified as a Near Earth Object (NEO), might strike the Earth in the next century, between the years 2175 and 2199.
- NEOs are comets and asteroids nudged by the gravitational attraction of nearby planets into orbits which allow them to enter the Earth's neighbourhood.
- Benu is believed to have been born in the Main Asteroid belt between Mars and Jupiter, because of gravitational tugs from other celestial objects and the slight push asteroids get when they release absorbed sunlight, the asteroid is coming closer to Earth.

**Source: Economic Times**

### NASA's OSIRIS-REx BEGINS JOURNEY BACK FROM ASTEROID

**Syllabus Section: Science and Technology**

#### Why in News?

- OSIRIS-REx is NASA's first mission to visit a near-Earth asteroid, survey its surface and collect a sample from it.

#### About:

- In October 2020, NASA's Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer (OSIRIS-REx) spacecraft briefly touched asteroid Benu, from where it collected samples of dust and pebbles

#### What and why is asteroid Benu?

- Asteroids are rocky objects that orbit the Sun, much smaller than planets. They are also called minor planets.
- Benu is considered to be an ancient asteroid that has not gone through a lot of composition-altering change through billions of years, which means that below its surface lie chemicals and rocks from the birth of the solar system.
- Therefore, scientists and researchers are interested in studying this asteroid as it might give them clues about the origins of the solar system
- This asteroid is about as tall as the Empire State Building, located about 200 million miles away from the Earth.

#### About Benu:

- Benu is a B-type asteroid, implying that it contains significant amounts of carbon and various other minerals.

#### What is the OSIRIS-REx mission?

- This is NASA's first mission meant to return a sample from the ancient asteroid.
- The mission promises to bring the largest amount of extra-terrestrial material back to our planet since the Apollo era.
- The mission was launched in 2016, it reached its target in 2018 and since then, the spacecraft has been trying to match the velocity of the asteroid using small rocket thrusters.
- The spacecraft contains five instruments meant to explore Benu including cameras, a spectrometer and a laser altimeter.

**Source: Indian Express**

### NATIONAL PROGRAMME ON ADVANCED CHEMISTRY CELL BATTERY STORAGE

**Syllabus Section: Government Policies and Programmes**

#### Why in News?

- Cabinet approves Production Linked Incentive scheme "National Programme on Advanced Chemistry Cell Battery Storage" for achieving manufacturing capacity of Fifty (50) Giga Watt Hour (GWh) of ACC and 5 GWh of "Niche" ACC with an outlay of Rs.18,100 crore.



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### About:

- The National Programme on Advanced Chemistry Cell (ACC) Battery Storage will reduce import dependence.
- It will also support the Atmanirbhar Bharat initiative.
- Facilitate demand creation for battery storage in India.
- Facilitate Make-In-India: Greater emphasis upon domestic value-capture and therefore reduction in import dependence.
- Impetus to Research & Development to achieve higher specific energy density and cycles in ACC.
- Promote newer and niche cell technologies.

### Advanced Chemistry Cell (ACC)

- ACCs are the new generation of advanced storage technologies that can store electric energy either as electrochemical or as chemical energy and convert it back to electric energy as and when required.
- ACC battery Storage manufacturers will be selected through a transparent competitive bidding process.
- The manufacturing facility would have to be commissioned within a period of two years.
- The incentive will be disbursed thereafter over a period of five years.
- Each selected ACC battery Storage manufacturer would have to commit to set-up an ACC manufacturing facility of minimum five (5) GWh capacity and ensure a minimum 60% domestic value addition at the Project level within five years.
- The beneficiary firms have to achieve a domestic value addition of at-least 25% and incur the mandatory investment Rs.225 crore /GWh within 2 Years (at the Mother Unit Level) and raise it to 60% domestic value addition within 5 Years, either at Mother Unit, in-case of an Integrated Unit, or at the Project Level, in-case of "Hub & Spoke" structure.

### Hurdles in the Field of Battery Manufacturing:

- There is negligible investment in manufacturing, along with value addition, of ACCs in India
- All the demand of the ACCs is currently being met through imports in India.

- It is expected that the dominant battery technologies will control some of the world's largest growth sectors.

### Source: PIB

## CHINA'S POPULATION WILL SOON START FALLING

### Syllabus Section:Society

### Why in News?

By 2025, China is set to lose its 'most populous' tag to India.

### About:

What does China's latest census data say?

- As per the 2020 national census, China's seventh since 1953, the country's population has grown from 134 crore in 2010 by 5.34 per cent over the past decade.
- In the decade up to 2020, China's population grew at its slowest rate since the 1950s, mirroring trends seen in neighbouring South Korea and Japan
- Annually, the country grew 0.53 per cent in the last 10 years, down from 0.57 per cent between 2000 and 2010, and was the slowest of any decade since the 1950s.
- The country's working population — between ages 15 and 59 — is now 89.43 crore or 63.35 per cent of the total, down by 6.79 per cent from 2010.
- The number of people above age 60 has also gone up to 26.4 crore or 18.7 per cent of the population, up 5.44 per cent from the last census.

### When the China's population start falling?

- Experts believe the country's population will soon begin to fall. The UN estimates the population will begin falling after 2030. However, some experts say a decline could start as early as next year, if births fall below 1 crore and deaths exceed 1 crore.

### Concerns related to a shrinking population for China:

- When the young population in a country declines, it creates labour shortages, which have a major detrimental impact on the economy.
- More older people also means that demands for healthcare and pensions can soar, burdening the country's social spending system further when fewer people are working and contributing to it.

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- Unlike developed countries, China still depends on labour-intensive manufacturing and farming. Thus, a drop in demographic dividend could thus hurt China and other developing nations like India more than those in the rich world

**Source: Indian Express**

### CovAID PORTAL

**Syllabus Section: Governance**

#### Why in News?

CovAid portal set up for real-time monitoring of relief.

#### About:

- The NITI Aayog has set up a dedicated portal – CovAid – for tracking all aid coming via missions or by individual organisations.
- The platform keeps an end-to-end check from initiations to distribution.
- It is important to note that all the received items are exempted from customs duties, health-cess and GST obligation, and can be received anywhere in India by the Indian Red Cross Society.
- Once verified, the donor will be prompted to share the details of donations along with the several documentations — waybill, commercial invoice and total value of donated items, packing list, donation/gift certificate or covering letter, flight or cargo details — for the Indian Red Cross Society to facilitate the process on arrival including customs and all other clearances.

**Source: Economics Time**

### INDIA'S THIRD COVID VACCINE

**Syllabus Section: Health**

#### Why in News?

Dr Reddy's Laboratories said it had launched Sputnik V in India.

#### About:

Sputnik V is a two-dose Covid-19 vaccine, which has an efficacy of over 91 per cent,

- What is Sputnik V?
  - Made by the Gamaleya Research Institute of Epidemiology and Microbiology in Moscow, Sputnik V is a two-dose Covid-19 vaccine using a similar platform to Covishield
  - Unlike Covishield, which uses a weakened common cold "adenovirus" that affects chimpanzees, Sputnik V makes use of two different human adenoviruses.

- The first dose of Sputnik V was administered in Hyderabad.
- In India, Dr Reddy's Laboratories is the local distribution partner for Sputnik V. It has received 150,000 doses of this vaccine from Russia.
- The imported vaccine has been priced at Rs 948 per dose, including GST it will cost Rs 995.40 per dose.
  - Covishield, manufactured by Serum Institute of India, is cheaper than Sputnik V at the moment.
  - Bharat Biotech's Covaxin — the other Covid vaccine supplied in India — is the most expensive Covid-19 vaccine in India's portfolio of vaccines so far

**Source: Indian Express**

### Iron Dome Air Defence System: Israel

**Syllabus Section: Defence Technology**

#### Why in News?

In the conflict between Israel and Palestine, both sides have taken to air strikes and rocket attacks. Rockets fired from Gaza being intercepted by the Israeli Iron Dome air defence system.

#### About:

##### Iron Dome

- It is a short-range, ground-to-air, air defence system that includes a radar and Tamir interceptor missiles that track and neutralise any rockets or missiles aimed at Israeli targets.
- It is used for countering rockets, artillery & mortars (C-RAM) as well as aircraft, helicopters and unmanned aerial vehicles.
- It was developed by the state-run Rafael Advanced Defense Systems and Israel Aerospace Industries and was deployed in 2011.
- Rafael claims a success rate of over 90%, with more than 2,000 interceptions, experts agree the success rate is over 80%
- It can protect deployed and manoeuvring forces, as well as the Forward Operating Base (FOB) and urban areas, against a wide range of indirect and aerial threats.

#### Components

- The Iron Dome has three main systems that work together to provide a shield over the area where it is deployed which are:
  - Radar: It has a detection and tracking radar to spot any incoming threats.



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- **Weapon Control:** It has a battle management and weapon control system (BMC),
- **Missile Fire:** It also has a missile firing unit. The BMC basically liaises between the radar and the interceptor missile.

### What kind of systems does India have?

- Israel, along with the US and Russia, is the leader
- At the moment, India has Akash short-range surface-to-air missiles, and Russian systems including Pechora
- While India is continent-sized, Israel is smaller and has to deal with threats that are relatively close around it.

**Source: Indian Express**

## SOVEREIGN GOLD BOND SCHEME 2021-22

**Syllabus Section: Economy**

### Why in News?

The Central Government in consultation with the Reserve Bank of India, has decided to issue Sovereign Gold Bonds.

### About:

- Channels through which it can be sold:
  - The Bonds will be sold through Scheduled Commercial banks (except Small Finance Banks and Payment Banks), Stock Holding Corporation of India Limited (SHCIL), designated post offices, and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange Limited.
- Features:
  - **Issuance:** To be issued by Reserve Bank of India on behalf of the Government of India
  - **Eligibility:** The Bonds will be restricted for sale to resident individuals, HUFs, Trusts, Universities and Charitable Institutions.
  - **Tenor:** The tenor of the Bond will be for a period of 8 years with exit option after 5th year to be exercised on the next interest payment dates.

- **Sales channel:** Bonds will be sold through Commercial banks, Stock Holding Corporation of India Limited (SHCIL), designated post offices (as may be notified) and recognised stock exchanges viz., National Stock Exchange of India Limited and Bombay Stock Exchange, either directly or through agents.
- **Collateral:** Bonds can be used as collateral for loans. The loan-to-value (LTV) ratio is to be set equal to ordinary gold loan mandated by the Reserve Bank from time to time.

### Background:

- The Sovereign Gold Bond (SGB) scheme was launched in November 2015 with an objective to reduce the demand for physical gold and shift a part of the domestic savings - used for the purchase of gold - into financial savings.

## SWAMIH

**Syllabus Section: Economy**

### Why in News?

Union Minister for Finance & Corporate Affairs handed over possession to homebuyers as Government of India's Special Window for Affordable & Mid-Income Housing (SWAMIH) completes its first residential project.

### About:

The residential project - Rivali Park, located in suburban Mumbai, was the first housing project in India to have received funding under the SWAMIH Fund.

### SWAMIH Fund.

- SWAMIH investment fund is an alternative investment fund which aims to provide last-mile funding to the stressed affordable and middle-income housing projects in the country. The SWAMIH Fund was launched in 2019.
- In a short time-span of 1.5 years since inception, the SWAMIH Investment Fund today is one of the largest private equity teams in India and has done commendable work despite COVID-19 related restrictions
- This Fund is bridging the trust deficit between homebuyers and developers by completing construction and delivering homes without depending on any other source of finance.

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**Source: PIB**

## INDICATIVE NOTES

**Syllabus Sections: Polity**

### Why in News?

CJI Ramana launches new SC mobile app; 'Indicative Notes'

### About:

- Chief Justice of India (CJI) NV Ramana launched a special facility for granting media access to the Supreme Court's new mobile application.
- It would aim to provide concise summaries of landmark judgments in an easy-to-understand format.
- It will serve as a useful resource for media persons and the general public who wish to be better informed about the rulings of the court.

### Significance:

- The App will provide access to online court proceedings for which journalists were dependents until now on advocates sharing video conferencing links with them.
- This facility which CJI unveils will help in keeping all safe during the time of pandemic.
- Help in ensuring transparency which is a time-honoured principle when it came to the judicial process in our country.

**Source: PIB**

## JOINT COMMITTEE TO NEGOTIATE COVID VACCINE

**Syllabus Section: Social Issues**

### Why in News?

States can bring down vaccine prices by coming together as a single buyer.

### About:

### Issue:

- In the initial phases of its vaccination programme, the government of India assumed full responsibility to inoculate the nation
- With the third phase, it has now transferred the entire responsibility of vaccinating 18- to 44-year-olds, a group that constitutes about 40 per cent of the population, to state governments.

- Now state governments have to procure vaccines directly. Further, they also need to compete with private players at the same time for a better price. As there is only a limited number of capacity and vaccine suppliers.

### How the prices can be bringing down?

- A single buyer can always negotiate a lower price for a product with one or more sellers as against a market with multiple buyers. This follows the simple logic of "buyer's power"
- According to the same logic the state governments should form a consortium without any delay and initiate pre-purchase orders with vaccine suppliers.

### Steps Needed to be done:

- Pre-Purchase Agreements: would tackle any uncertainties from the point of view of vaccine manufacturers and allow for faster expansion of production capacity.
- Price Differential: A price differential between rates negotiated by the consortium and private buyers then is likely to promote inequity and black marketing that will further widen the vaccination gap between the rich and the poor.
- Achieve prices that are affordable in a country that remains predominantly poor and adversely affected by the evolving economic impact of the Covid-19 pandemic.

**Source: Indian Express**

## MICE RAIN' IN EASTERN AUSTRALIA

**Syllabus Section: Environment**

### Why in News?

The government of New South Wales (NSW) in Australia has extended a support package of \$50 million to farmers to deal with a devastating mouse plague.

### About:

### When did the plague begin?

- The current plague is being called one of the worst plagues in decades and started being reported around mid-March in Australia's eastern states.
- The researcher at Australia's national science agency called CSIRO, attributes the plague to an unusually abundant grain harvest, which caused a surplus of mice earlier in the season.



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- o In some places, residents of affected areas reported mice falling out from roof tops causing “mice rain”.

### Effect of this large-scale Plague:

- Rodents are capable of destroying food grains and can cause widespread damage to domestic households, commercial businesses, farms, manufacturers and livestock.
- Rodents can not only gnaw through materials but can also ruin supplies by excreting on them.
- Rodents can also cause diseases such as leptospirosis and typhus fever.
- They can also carry fleas or ticks that can harm pets and humans.
- Increase in mouse-related disease.

### Control Measures:

- Increasing zinc phosphide in mouse baits will help farmers to battle the higher-than-average mouse numbers in eastern Australia.
  - o The authorities have allowed makers to double the toxicity levels in mouse baits.

**Source: Indian Express**

## VENTURE CAPITAL FUND

**Syllabus Section: Economy**

### Why in News?

India received venture capital and private equity investments worth \$7.5 billion across 67 deals in April.

- o It is a sixfold rise over the same month last year on low base effect, as per the Indian Private Equity and Venture Capital Association-EY report.

### About:

- Entrepreneurs need investments for their start-up companies. The investments that these entrepreneurs receive from wealthy investors is called Venture Capital and the investors are called Venture Capitalists.
- VC firms reduce the risk of investments by co-investing with other VC firms. Usually, there will be the main investor called the ‘lead investor’ and other investors will be called ‘followers’.

### How does Venture Capital Fund work?

- Venture Capital Fund is made up of investments from wealthy individuals or companies who give their money to a VC firm to manage their investment portfolios for them and to invest in high-risk start-ups in exchange for equity.
- The basic idea is to invest in a company’s balance sheet and infrastructure.
- Venture Capitalist nurtures the idea of an entrepreneur for a short period of time and exits with the help of an investment banker.
- In a start-up company, VC will receive an equity partnership in exchange for investments in the start-up company.
- VC’s receive liquidation preference, it means in the worst-case scenario where the company fails, VCs are given the first claim to all the company’s assets and technology.
- It also offers voting rights over key decisions like Initial Public Offer (IPO) or even sale of the company.

**Source: Economics Time**

## VULNERABLE TRIBES INFECTED IN ODISHA

**Syllabus Section: Society**

### Why in News?

- Many members of eight different Particularly Vulnerable Tribal Groups (PVTGs) got infected in the second wave of Covid-19 in Odisha.

### About:

- The infected PVTGs include the Bonda tribe of Malkangiri hills and DongariaKondh tribe of Niyamgiri hills.

### Facts:

- Odisha has the largest and most diverse tribal populations among the other states in the country.
- Of the 62 tribal groups residing in Odisha, 13 are recognised as PVTGs.
- According to the 2011 Census, Odisha’s share of the country’s total tribal population was 9%. Tribals constitute 22.85% of State’s population.

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- The PVTGs in the states are Bonda, Birhor, ChuktiaBhunja, Didayi, DongariaKandha, Hill Kharia, Juang, KutiaKondh, LanjiaSaora, Lodha, Mankirdia, PaudiBhuyan and Saora.

### Characteristics of PVTGs: The Government classifies PVTGs on their:

- Relative physical isolation,
- Stagnant or declining population,
- Low levels of literacy,
- Absence of written language,
- Pre-agricultural stage of economy, such as hunting, food gathering, shifting cultivation and terrace cultivation.

Source: The Hindu

## CHINA'S 'ZHURONG' ROVER

### Syllabus Section: Science and Technology

#### Why in News?

- China has successfully landed uncrewed 'Tianwen-1' spacecraft on Mars.

#### About:

- China making the country only the second, after US, in the world to send a rover to explore the mysterious Red Planet

#### China's Mars mission

- Launched by the China National Space Administration from southern China in July 2020.
- The mission named Tianwen-1 mission.
  - Tianwen-1, or "Questions to Heaven", after a Chinese poem written two millennia ago, is China's first independent mission to Mars
- Mission consists of an orbiter, a lander and a golf cart-sized rover called 'Zhurong'
- Aim: The mission aims to make full use of the window that emerges once every two years, when Earth and Mars are closest together during their journey around the sun.

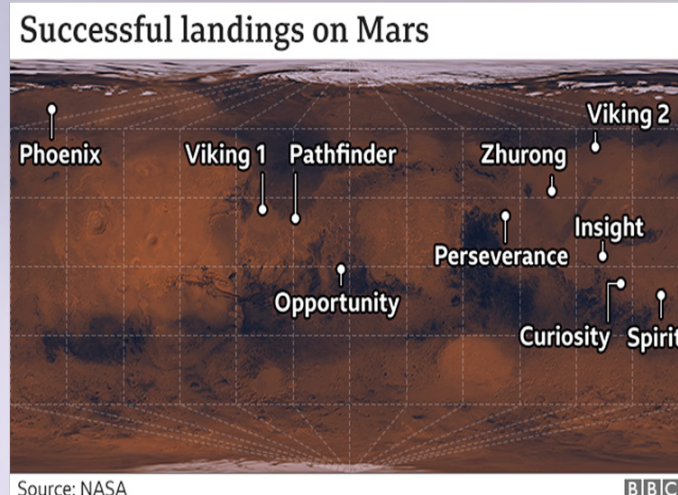
#### 'Zhurong' Rover:

- The Chinese rover is powered by retractable solar panels and fitted with seven primary instruments — cameras, ground-penetrating radar, a magnetic field detector and a weather station.
- The purpose of the radar is to look for signs of ancient life as well as subsurface water.

- The 'Zhurong' rover (240 kilograms) is slightly heavier than NASA's Spirit and Opportunity rovers, but only one-fourth the weight of Perseverance and Curiosity,
- The rover will not immediately be offloaded from the lander.
- The probe will first survey the Utopia plane and take several high-resolution images to locate the safest spot to put the rover down.
  - Utopia Planitia — which is also where NASA's Viking-2 touched down in 1976.
- The aim is to find a stretch of land devoid of craters or large boulders.
- If 'Zhurong' is deployed without a hitch, China will become the first country to successfully orbit, land and offload a rover during its maiden Mars mission.

#### Other countries which have managed to send rovers to Mars:

- Only the United States has been able to deploy rovers to study the surface of the Red Planet.
  - The first successful landing was made by NASA's Viking 1 rover in July 1976,
  - Viking 2 arrived on the Red Planet shortly after the Viking 1.
  - In the decades that followed, the US successfully sent the Opportunity and Spirit rovers to explore Mars.
  - In February, 2021, NASA's Perseverance rover landed at the Jezero Crater on the Red Planet, after which it resumed work to look for signs of past life.
- In 1971, the former Soviet Union managed to launch a Mars probe, however, communication was lost within seconds of it landing.



Source: NASA

BBC



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- Ten years ago, China launched the Yinghuo-1 mission, which ultimately failed after the spacecraft burnt while still in the Earth's atmosphere after the Russian rocket that was carrying it failed in flight.

**Source: Indian Express**

### DOOMSDAY SCROLLING / SURFING

**Syllabus Section: Science & tech**

#### Why in News?

- Many people are finding themselves continuously reading bad news about Covid-19 without being able to stop, even sacrificing their crucial sleep time or working hours in the process.

#### About:

- As Covid-19 has struck back to ravage our surroundings, most of us find ourselves continuously scrolling through pandemic-related news and social media feed — almost compulsively. That is what is called “doomscrolling” or “doomsday scrolling”.
- It is the tendency to scroll through bad news even though the news is saddening or depressing.
- The term Domsday Surfing is one of the new lexicon of words the COVID-19 has introduced into the daily lives of man.
- This is done by almost every human being on the earth. People in the age group of 15 years to 30 years are surfing to seek help.
- On the one hand, the people in the age group of 30 years to 45 years are blaming others on social media, but on the brighter side, the senior age people are trying to spread positivity and spirituality.
- It has become a behavioural addiction. As people become more and more addictive, the social media algorithms designed to feed to the addictions serve up fulfilling the interests. This becomes a vicious cycle.

#### Dopamine and Domsday Surfing

- Both positive and negative news gives dopamine high. Thus, Domsday Surfing increases dopamine levels.
- Dopamine is a chemical compound found naturally in human body. It is a neuro transmitter. It controls the movements of the person. The right balance of dopamine is important for both physical and mental

wellbeing.

- High Dopamine levels lead to difficulty in sleeping, increased energy levels, anxiety, and stress. On the other hand, it also gives improved ability to focus and learn.

**Source: Indian Express**

### HAPPY HYPOXIA

**Syllabus: Health Issues**

#### Why in News?

In the second wave of Corona infection, Happy Hypoxia is playing a crucial role in causing deaths in the younger generation

#### About:

- Hypoxia refers to very low oxygen levels in the blood.
- Hypoxia is a warning signal for imminent failure of vital body organs.
- Happy hypoxia does not prompt any such obvious external signs, in the initial stages of sickness, the COVID-19 patient, on the outside, appears to be alright and “happy”.
- In younger generation, patients do not realize that their oxygen level is going low, and they continue their normal activities without any intervention. Suddenly the oxygen level drops down and the patient becomes unstable. This condition is known as “Happy Hypoxia”.

#### How to identify happy hypoxia in patients who have mild symptoms?

If a person has happy hypoxia, they might experience

- Change of the colour of lips from natural tone to blue,
- Skin discolouration to red or purple tone or
- Profuse sweating even when not doing arduous physical work

#### Impact of Happy Hypoxia

- The condition of Happy Hypoxia results in the progression of Covid, thereby causing even deaths in the younger generation.

### LIGHTNING AND ANIMAL DEATHS

**Syllabus Section: Environment**

#### Why in News?

Recently, 18 elephants died on a hilltop in Assam. The preliminary post-mortem report indicates they had been struck by lightning.

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## About:

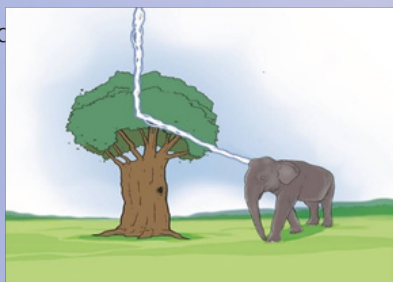
### How does lightning kill animals?

Lightning may injure or kill animals in a number of ways. Some of these ways are:

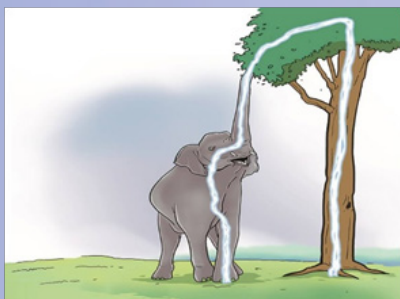
**DIRECT FLASH:** An animal in an open field may be struck directly by lightning if part of its body protrudes over other objects in the vicinity. Taller animals are more vulnerable.

**SIDE FLASH:** When lightning strikes a tall object such as a tree, it may generate a side flash that can strike an animal standing underneath the tree

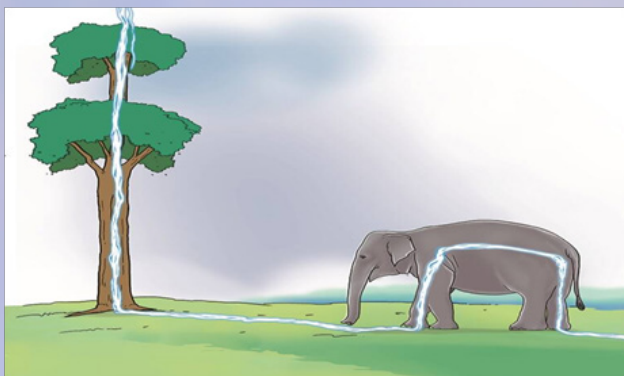
- According to a research team that



**TOUCH POTENTIAL:** If one part of a tall animal's body is in contact with the ground while another part, at a higher elevation, comes in contact with a lightning-struck object, a partial current may pass through its body



**STEP POTENTIAL:** The most common lightning hazard among four-legged animals. When an animal's front and hind feet are far enough apart, a partial current may pass through the body in certain circumstances.



conducted the post-mortem, it is possible that the elephants were killed by current flowing through the ground. That would be 'step potential'

- Since an elephant's front and hind feet are wide apart, it would appear to make it more vulnerable than a smaller animal, such as a rat.

Are multiple animal deaths such as these common?

- In 2007, five elephants were killed in a similar incident in Buxa Tiger Reserve in West Bengal.
- In 2016, over 300 reindeer were killed on Norway's Hardangervidda plateau following thunderstorms.
- In 1972, 53 reindeer were killed in a lightning strike in Alaska.

**Source: Indian Express**

## NEW APPROACH TO DRUG DELIVERY

### Syllabus Section: Science and Technology

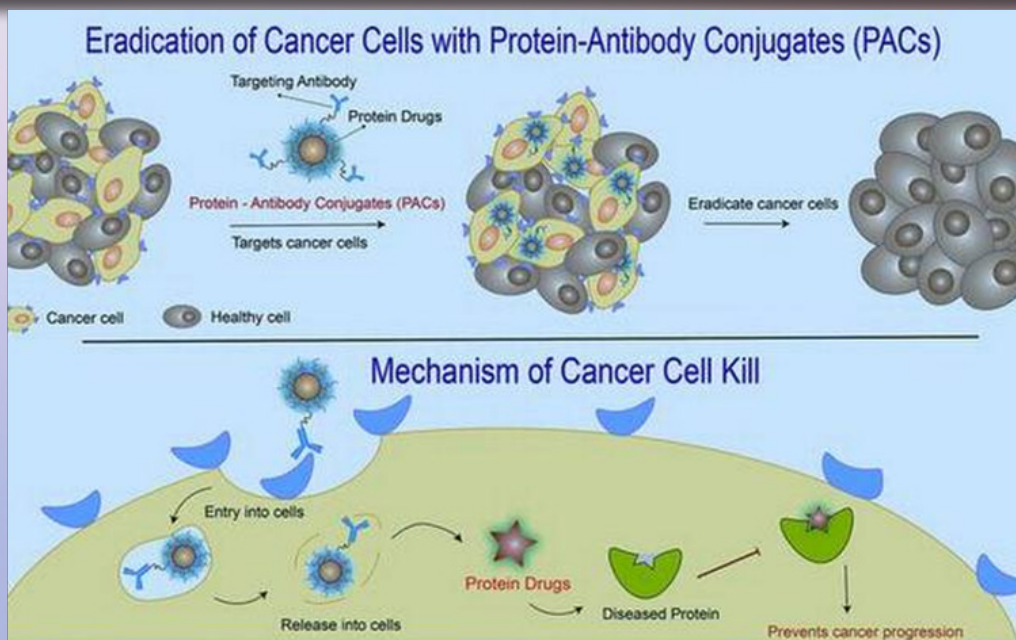
#### Why in News?

A nanoparticle designed by researchers from University of Massachusetts, Amherst, in the U.S., offers a new, potentially revolutionary approach to treating diseases.

#### About:

- The new concept, called Protein–Antibody Conjugates or PACs, combines two different approaches to drug delivery.
- One is biologics, where the idea is to target a defective protein in the system by delivering proteins to it.
  - An example of this is the case of insulin treatment. If a person is short of insulin, which is a protein, they are given a shot of this to balance the system.
- The other approach is to use antibodies for drug delivery. Antibodies are something the body produces to detect a foreign substance inside the body.



**Significance of this new Approach:**

- This could have impact on incurable diseases, so-called undruggable ones like pancreatic cancer.

**Source: The Hindu****COLOMBO PORT CITY****Syllabus Section: International Issues****Why in News?**

A Chinese-funded tax-free enclave billed as Sri Lanka's answer to Dubai and Singapore cleared the final legal hurdle as the Supreme Court in Colombo ruled it could go ahead with only minor tweaks.

**About:**

- Sri Lanka's top court rejected 19 petitions challenging the "Colombo Port City Economic Commission" bill and approved the \$1.4-billion project subject to minor amendments which the government immediately said it accepted.
- Named "Colombo Port City" because of its proximity to Colombo's main harbour, the sea reclamation -- carried out with considerable Chinese labour -- completed in 2019 has doubled the size of Colombo's financial district by adding 269 hectares (665 acres).
- The Port City will be administered by a commission with unprecedented powers to fast-track investment approvals. All transactions within the Port City will be denominated in foreign currency and all salaries earned by any worker will be tax-exempt.

- All transactions within the Port City will be denominated in foreign Currency and all salaries earned by any worker will be tax-exempt.

**International Response:**

- Western countries, as well as regional power India, have long expressed concern over growing Chinese influence in strategically placed Sri Lanka.
- U.S. ambassador said that an unintended consequence of the Port City could be a haven for money launderers and other sorts of nefarious actors.

**Source: The Hindu****VIRTUAL IMPOSTERS BEWARE OF 'FAKEBUSTER'****Syllabus Section: Science and Technology****Why in News?**

Researchers at the Indian Institute of Technology, Ropar in Punjab and Monash University, Australia have developed a unique detector named 'FakeBuster' to identify imposters attending a virtual conference without anybody's knowledge.

**About:**

- Sophisticated artificial intelligence techniques have spurred a dramatic increase in manipulation of media contents. These techniques are keep evolving and become more realistic and making detection difficult which could have far reaching security implications such as:

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- o spreading fake news, pornography and other such online content has been widely observed with major repercussions.
- These manipulations have recently found their way into video-calling platforms through spoofing tools based on transfer of facial expressions. These fake facial expressions are often convincing to human eye and can have serious implications
- These real time mimicked visuals (videos) known as 'Deepfakes' can even be used during online examinations and job interviews.
- Importers who do not have any manufacturing facility can now avail the IGCR, 2017 to import goods at concessional Customs duty and get the final goods manufactured entirely on job work basis.
- Some sectors such as jewellery, gold, precious stones, and metals have been excluded.
- Another significant incentive now provided is allowing those who import capital goods at a concessional Customs duty to clear them in the domestic market on the payment of duty and interest, at a depreciated value.

### Significance of FakeBuster:

- The Deepfake detection tool-'FakeBuster' works in both online and offline modes.
- 'FakeBuster' is one of the first tools to detect imposters during live video conferencing using DeepFake detection technology.
- The device has already been tested and would hit the market soon.

**Source: PIB**

### CUSTOMS (IMPORT OF GOODS AT CONCESSIONAL RATE OF DUTY) AMENDMENT RULES, 2021

**Syllabus Section: Economy**

#### Why in News?

- The Government has brought changes in the existing Customs (Import of Goods at Concessional Rate of Duty) Rules, IGCR 2017 to boost trade facilitation.

#### About:

- The IGCR, 2017 lay down the procedures and manner in which an importer can avail the benefit of a concessional Customs duty on import of goods required for domestic production of goods or providing services.

#### Changes:

- One major change that accommodates the needs of trade and industry is that the imported goods have been permitted to be sent out for job work.
- The absence of this facility had earlier constrained the industry especially those in the Micro, Small and Medium Enterprises sector which did not have the complete manufacturing capability in-house.

**Source: All India Radio**

### WHO-ILO STUDY LINKS LONG WORK HOURS TO MORE DEATHS

**Syllabus Section: Social Issues**

#### Why in News?

- With working long hours now known to be responsible for about one-third of the total estimated work-related burden of disease, it is established as the risk factor with the largest occupational disease burden.
  - o The study covered global, regional and national levels, and was based on data from more than 2,300 surveys collected in 154 countries from 1970-2018.

#### About:

According to latest estimates by the World Health Organization (WHO) and the International Labour Organization (ILO) published in Environment International, long working hours leading to:

- Increase in Deaths from Stroke and Ischemic Heart Disease: long working hours led to 7.45 lakh deaths from stroke and ischemic heart disease in 2016, a 29% increase since 2000.
  - o Between 2000 and 2016, the number of deaths from heart disease due to working long hours increased by 42%, and from stroke by 19%.
- Men are More Vulnerable: This work-related disease burden is particularly significant in men (72% of deaths occurred among males), people living in the Western Pacific and South-East Asia regions, and middle-aged or older workers.



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- o Most of the deaths recorded were among people dying aged 60-79 years, who had worked for 55 hours or more per week between the ages of 45 and 74 years.
- Risk of Largest Occupational Disease: With working long hours now known to be responsible for about one-third of the total estimated work-related burden of disease, it is established as the risk factor with the largest occupational disease burden.
- Longer Hours, Higher Chances of Heart Disease: The study concludes that working 55 or more hours per week is associated with an estimated 35% higher risk of a stroke and a 17% higher risk of dying from ischemic heart disease, compared to working 35-40 hours a week.

**Source: Indian Express**

## VIRTUAL IMPOSTERS BEWARE OF 'FAKEBUSTER'

**Syllabus Section: Science and Technology**

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Researchers at the Indian Institute of Technology, Ropar in Punjab and Monash University, Australia have developed a unique detector named 'FakeBuster' to identify imposters attending a virtual conference without anybody's knowledge.

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  - o spreading fake news, pornography and other such online content has been widely observed with major repercussions.
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**Source: PIB**

## ADVANCED TRAFFIC MANAGEMENT SYSTEM (ATMS)

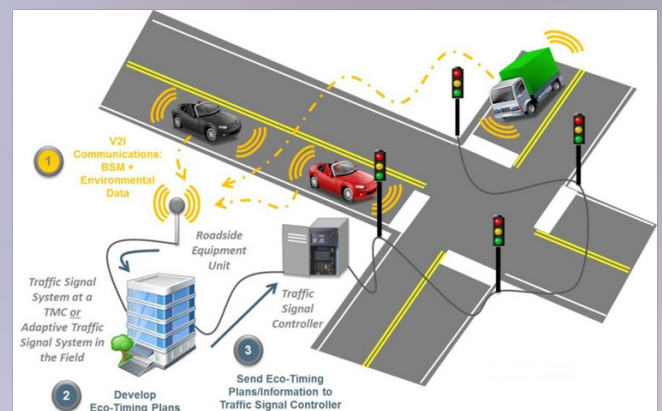
**Syllabus Section: Science and Technology**

### Why in News?

- To improve road safety, all new national highways will have an Advanced Traffic Management System (ATMS).

### About:

- National Highway Authority of India (NHAI) has come up with a tech-aid solution called Advanced Traffic Management System (ATMS), to improve the situation of the mercilessly congested roads
- This will be implemented along all the new road projects developed under NHAI.



### Advanced Traffic Management System

- The Advanced Traffic Management System will include:
  - o immediate location identification of areas where traffic bottlenecks occur due to accidents or other reasons,
  - o provision of information to motorists on that stretch immediately,
  - o meteorological systems,
  - o speed detection systems,
  - o mobile radio communication systems including base and repeater stations,
  - o vehicle-mounted and hand-held units and

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- o transmission towers in addition to CCTV units at strategic locations to ensure immediate access to information in emergencies,”
- Advance Traffic Management System (ATMS) has the following objectives:
  - o Smooth and uninterrupted traffic flow
  - o Enhance road safety
  - o Real-time information and guidance to users
  - o 24X7 - Emergency assistance
  - o Alerts for abnormal road and weather conditions
  - o Reduced journey time and inconvenience
- This will provide the facilities like ambulance, crane, GPS monitored patrolling vehicle and more. The target is to provide the required facilities within 15 minutes on the highways in case of emergencies.

**Source: Business Standard**

### Community Based Inclusive Development (CBID) Program

**Syllabus Section: Society Issue**

#### Why in News?

Union Minister of Social Justice & Empowerment Dr Thaawarchand Gehlot virtually launched a 6- month Community Based Inclusive Development (CBID) Program on rehabilitation of Divyangjan.

#### About:

- This program will be first of its kind which will create trained manpower in identifying risk cases, apprising the parents/guardians about the nearest early intervention centres, and guiding them for availing Government benefits for Divyangjan.
- Initially the programme will be available in English, Hindi and 7 regional languages, namely, Gujarati, Marathi, Odiya, Bengali, Telugu, Tamil and Garo.
- A MoU signed with the Government of Australia for cooperation in disability sector is a step in this direction.
- Need to Design the Course: At present there is a shortage of trained manpower to serve as a link between the PwDs, their parents and the community for Government Schemes and Programmes and CBID programme will go a long way in generating trained human resource to carry out the important task

- CBID course has been co-designed by Rehabilitation Council of India and University of Melbourne as a joint initiative under the Memorandum of Understanding signed between the Government of Australia and the Government of India on 22nd November, 2018 for cooperation in disability sector.

**Source: DD News**

### INDIA ADHERING TO QUALITY, FOOD SAFETY AND ENVIRONMENT MANAGEMENT SYSTEMS REGARDING BUFFALO MEAT

**Syllabus Section: Agriculture and Animal Husbandry**

#### Why in News?

Indian origin frozen boneless Buffalo meat is safe, says APEDA.

#### About:

- India is one of the world's leading exporters of buffalo meat.
- Despite Covid -19 Pandemic for over a year now, India has been able to achieve its exports valued at USD 3.17 billion in the year 2020-21 which is at the previous year's level of exports (2019-20).
- Top Indian buffalo meat importing countries are Hong Kong, Vietnam, Malaysia, Egypt, Indonesia, Iraq, Saudi Arabia, Philippines and UAE.
  - o The nutritious and risk-free Buffalo meat is very popular in more than 70 countries across the world.
- Only boneless buffalo meat is allowed for export from India which is safe and risk free.
- The Buffalo meat is prepared and exported in accordance with OIE guidelines for any risk mitigation.

#### Interventions by The Government Of India for the Promotion:

- There have been several interventions by the Government of India to control and eradicate various livestock diseases.

#### National Animal Disease Control Programme (NADCP):

- The Launching of National Animal Disease Control Programme (NADCP) in June, 2019 to control Foot & Mouth Disease (FMD) and Brucellosis by 2025 with vaccination and eradication of disease by 2030 is one of the flagship schemes of GOI.



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- 100% cost of vaccine is borne by the Central Government .
- Under this programme all vaccinated animals are ear tagged and a complete traceability is maintained.
- In addition, the Govt. of India has also been implementing several schemes for prevention, control and containment of Livestock diseases of economic importance such as FMD. India's official FMD Control Programme received OIE's endorsement, as per the provisions of the OIE Terrestrial Animal Health Code.
- World class meat processing infrastructure is available in India which is certified for Quality Management, Food Safety Management and Environment management systems.

**Source: PIB**

### INFRASTRUCTURE' STATUS FOR CONVENTION CENTRES

**Syllabus Section: Economics**

**Why in News?**

- The Finance Ministry has granted 'Infrastructure' status for exhibition and convention centres, a move that is expected to ease bank financing for such projects.

**About:**

- Exhibition-cum-Convention Centre is included in the Harmonised Master List of Infrastructure sub-sectors by insertion of a new item in the category of Social and Commercial Infrastructure,
- The benefits available as 'infrastructure' projects would only be available for projects with a minimum built-up floor area of 1,00,000 square metres of exclusive exhibition space or convention space or both combined.
- This includes primary facilities such as exhibition centres, convention halls, auditoriums, plenary halls, business centres, meeting halls etc.
- The infrastructure tag does not involve significant tax breaks but would help such projects get easier financing from banks, said experts. However, restrictions on size may be a dampener.
- India doesn't have large convention centres or single halls with capacities to hold 7,000 to 10,000 people, unlike countries like Thailand that is a major global MICE destination.

- Becoming a MICE (Meetings, Incentives, Conferences and Exhibitions) destination can generate significant revenue with several global firms active in India but it will take time to become a preferred destination.

**Source: TheHindu**

### GHOLVAD SAPOTA

**Syllabus Section: Economy**

**Why in News?**

In a major boost to exports of Geographical Indication (GI) certified products, a consignment of Dahanu Gholvad Sapota (chikoo) from Palghar district of Maharashtra was today shipped to the United Kingdom.

**About:**

- GI certification of Ghovad Sapota is held by Maharashtra Rajya ChikooUtpadak Sangh and the fruit is known for its sweet and unique taste. It is believed that the unique taste is derived from calcium rich soil of Gholvad village.
- Currently in the Palgahr district, around 5000 hectares of land is under sapota or plantation. Out of 5000 farmers who grow Sapota, 147 farmers are authorized GI users.
- Sapota is grown in many states- Karnataka, Gujarat, Maharashtra, Tamil Nadu, West Bengal and Andhra Pradesh. Karnataka is known to be the highest grower of the fruit, followed by Maharashtra.

**Source: PIB**

### UNESCO WORLD HERITAGE SITES

**Syllabus Section: Culture**

**Why in News?**

Six sites have been added to India's tentative list of UNESCO world heritage sites.

**About:**

- Six of the nine sites submitted by the Archaeological Survey of India had been accepted by UNESCO for inclusion in the tentative list, which is a mandatory requirement before a site is finally nominated.
- The recently-included proposals are the
  - Maratha military architecture in Maharashtra,
  - Hire Bengal megalithic site in Karnataka,
  - Bhedaghat-Lametaghat of Narmada Valley in Madhya Pradesh.

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- o Ganga ghats in Varanasi,
- o Temples of Kancheepuram and
- o Satpura Tiger Reserve in Madhya Pradesh.
- These proposals will remain in tentative list for a year after which the government will decide which one of them to push for in their final dossier to UNESCO.
- With the addition of these six sites, the UNESCO has 48 proposals in tentative list of India.

**Source: Times of India**

### BEIJING'S NEW CRACKDOWN FOR CRYPTOCURRENCIES

**Syllabus Section: Economics**

#### Why in News?

- Chinese regulators have tightened restrictions that ban financial institutions and payment companies from providing services related to cryptocurrencies, marking a fresh crackdown on digital money.

#### About:

- Compared with a previous ban issued in 2017, the new rules greatly expanded the scope of prohibited services, and judged that “virtual currencies are not supported by any real value”.

#### Changes in New Ban:

- Institutions must not accept virtual currencies, or use them as a means of payment and settlement.
- Institutions cannot provide exchange services between cryptocurrencies and the yuan or foreign currencies.
- Institutions were prohibited from providing cryptocurrency saving, trust or pledging services and issuing crypto-related financial products.
- Virtual currencies must not be used as investment targets by trust and fund products.
- Banks and payment companies were also urged to step up monitoring of money flows involved in cryptocurrency trading, and coordinate more closely in identifying such risks.

#### Earlier rules in China against cryptocurrencies:

- China does not recognise cryptocurrencies as legal tender and the banking system does not accept cryptocurrencies or provide relevant services.

- In 2013, the government defined bitcoin as a virtual commodity and said individuals were allowed to freely participate in its online trade.
  - o Later that year, financial regulators, including the PBOC, banned banks and payment companies from providing bitcoin-related services.
- In September 2017, China banned Initial Coin Offerings (ICOs) in a bid to protect investors and curb financial risks.
  - o The ICO rules also banned cryptocurrency trading platforms from converting legal tender into cryptocurrencies and vice versa.
  - o The ICO rules also barred financial firms and payment companies from providing services for ICOs and cryptocurrencies, including account openings, registration, trading, clearing or liquidation services.

#### Why has China tightened regulation?

- The global bitcoin bull run has revived cryptocurrency trading in China.
- Industry directive warned speculative bitcoin trading had rebounded, infringing the safety of people's property and disrupting the normal economic and financial order.

#### Impact of the crackdown

- Crackdown makes it more difficult for individuals to buy cryptocurrencies using various payment channels, and could impact miners' business by making it harder for them to exchange cryptocurrencies for yuan.

### VIRTUAL BUYER SELLER MEET FOR BOOSTING MANGO EXPORTS

**Syllabus Section: Agriculture**

#### Why in News?

In a bid to increase mangoes exports to South Korea, APEDA in collaboration with Indian embassy, Seoul and Indian Chamber of Commerce in Korea (ICCK), organised a Virtual Buyer Seller Meet (VBSM).

#### About:

- Earlier this month, for the first time in this season, India has shipped a consignment of 2.5 Metric Tonne (MTs) of Geographical Indication (GI) certified Banganapalli & other variety Survarnakha mangoes sourced from farmers in Krishna & Chittoor districts of Andhra Pradesh



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- The mangoes exported to South Korea, were treated, cleaned & shipped from the APEDA assisted and registered packhouse & vapor heat treatment facility at Tirupati, Andhra Pradesh and exported by IFFCO Kisan SEZ (IKSEZ).
- This was the first export consignment sent by IKSEZ, which is a subsidiary of IFFCO, a multi-state cooperative. There is possibility of more exports of mangoes to South Korea this season.
- Mango in India is also referred as 'king of fruits' and referred as Kalpavriksha (wish granting tree) in ancient scriptures.
- While most of the states in India have mango plantations, Uttar Pradesh, Bihar, Andhra Pradesh, Telangana, Karnataka have major share in total production of the fruit.
- Alphonso, Kesar, Totapuri and Banganpalli are leading export varieties from India.
- Mango exports primarily take place in three forms: fresh mango, mango pulp, and mango slice.

**Source: PIB**

### GOVT ADVISORY ON AIRBORNE TRANSMISSION

**Syllabus Section: Health Issues**

#### Why in News?

The government has warned the SARS-CoV-2 virus can be transported through air as well in the form of aerosols, and infect people up to 10 metres away,

#### About:

- It was initially suggested that the virus spreads predominantly through large droplets that come out when a person is talking, sneezing or coughing.
  - These droplets, because of their large size, were supposed to travel only short distances before falling on the ground. A person 6 feet (2 metres) away was considered safe from infection.
- Scientists have been finding increasing evidence of the virus travelling through aerosols as well.
  - Aerosols are small solid particles suspended in the air. Relatively light, aerosols can carry the virus to much larger distances.
  - They can remain suspended in the air for several minutes, or even hours, thereby greatly increasing the chance of the infecting a nearby person.

**Source: Indian Express**

### ECMO IN COVID-19 CARE

**Syllabus Section: Science and Technology**

#### Why in News?

- The second wave of Covid-19 has devastated India and patients have struggled against an acute shortage of medical oxygen and ICU beds, a clinical intervention technique known as 'ECMO' has entered the vocabulary of common conversation.

#### About:

- In critically ill patients, whose heart and lungs are too weak or diseased to carry out the exchange of gases that is needed to stay alive, ECMO acts as an artificial heart and pair of artificial lungs outside the body which removes carbon dioxide from the patient's blood and adds oxygen to it.
  - Originally developed in the 1960s to support new-borns and infants with respiratory distress syndrome and cardiac abnormalities, ECMO has been widely adapted for use in adults only over the last five years.

#### How ECMO Machine Works?

- The ECMO machine works by inserting a plastic tube into a large vein and/or artery through the neck, chest or groin of the patient
- The tube allows the patient's blood to flow out into an oxygenator, or artificial lung.
- The oxygenator adds oxygen and removes carbon dioxide from the blood, before a pump sends this blood back into the patient through a different tube, at the same frequency and force as that of the patient's heart.
- The machine is used when all other medical options have been exhausted for patients whose lungs can't provide enough oxygen to their body or rid themselves of carbon dioxide.
- It can also be used for patients whose heart can't pump enough blood to the body, and for those waiting to either get a heart or lung transplant.

#### How does ECMO work for Covid-19 patients?

- Studies have revealed that unlike pneumonia or influenza A or B, Covid-19 affects all five lobes of the lungs. they can't properly exchange oxygen and carbon dioxide.

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- This allows for blood to be taken out of the right atrium and sent to the ECMO machine. There, it's filtered, temperature-modulated and oxygenated, and the carbon dioxide is removed. This blood then re-enters the body through a tube placed in the pulmonary artery.
- Benefits Covid Patients Get:
- One, it takes the load off the right side of the heart, as it is essentially bypassed.
- Two, by increasing the level of oxygen going into the lungs, it decreases pulmonary vascular resistance and reduces the pressure it takes to push blood through the lungs

### What risks are involved in the ECMO procedure?

- Bleeding: Because of the blood thinning medication that patients need while on ECMO, they can start bleeding at different places in their body.
- Kidney Failure: Patients who are on ECMO sometimes do not get enough blood flow to their kidneys. This can cause their kidneys to stop working, a condition known as acute renal failure.
- Infections: Infection is a very real and major threat. Tubes from the ECMO machine go from outside the patient's body directly into their bloodstream. This makes the patient extremely vulnerable to germs entering the body.

**Source: Indian Express**

### PREPAID PAYMENT INSTRUMENTS (PPIs)

**Syllabus Section: Economy**

#### Why in News?

Now Money kept in various online wallets like Amazon pay, Ola money, Mobikwik, Phone pe, Delhi Metro Card etc. can be withdrawn using an ATM or Point of Sale Terminal.

#### About:

- Reserve bank of India in a notification has permitted cash withdrawal of Rs. 2,000 per transaction with maximum limit of Rs. 10,000 per month.
- All non-bank Payment prepaid instruments can provide this service. But, for such transaction using card or wallet PIN or other additional authentication will be mandatory.

- Till date RBI has permitted 37 Prepaid Payment Instruments (PPIs) in country. Now maximum two lakh rupee can be kept in various wallets after completion of full KYC.
- RBI has also asked all payment instruments providers to ensure interoperability by 31st of March next year.

**Source: All India News**

### KHARIF STRATEGY 2021 TO ACHIEVE SELF-SUFFICIENCY IN EDIBLE OILS

**Syllabus Section: Agriculture**

#### Why in News?

- To achieve self-sufficiency in edible oils Union Government formulates Kharif Strategy 2021.

#### About:

- The Government of India has approved an ambitious plan for the free distribution of high yielding varieties of seeds to the farmers for the Kharif season 2021 in the form of mini-kits, under the strategy.
- Emphasis has been put on enhancing the productivity of oilseeds by increasing the availability of high yielding varieties of seeds for the farmers to use on their fields, to become Aatmanirbhar in oilseeds production
- Both area and productivity enhancement has been formulated for soybean and groundnut with a focus on high yielding varieties of seeds to be provided free of cost under the National Food Security Mission (Oil Seeds and Oil Palm) Mission. Following actions will be taken under the mission.
  - o Distribution of soybean seeds for intercropping for 41 districts in the 6 states of Madhya Pradesh, Maharashtra, Rajasthan, Gujarat, Karnataka, Telangana and Chhattisgarh will be done.
  - o Distribution of soybean seeds for high potential districts in 73 districts of the 8 states of Madhya Pradesh, Maharashtra, Rajasthan, Telangana, Karnataka, UP, Chhattisgarh and Gujarat will be done.
  - o Distribution of mini kits in 90 districts of the 9 states of Madhya Pradesh, Maharashtra, Rajasthan, Karnataka, Telangana Chhattisgarh, Gujarat, UP and Bihar will be done



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- o Distribution of 74,000 Groundnut seed mini kits in the 7 states of Gujarat, AP, Rajasthan, Karnataka, Maharashtra, Madhya Pradesh and Tamil Nadu will be done.

### Significance of the Strategy:

- It will bring an additional 6.37 lakh hectare area under oilseeds
- It is likely to produce 120.26 lakh quintals of oilseeds and edible oil amounting to 24.36 lakh quintals.
- It will help in providing self sufficiency in production of oil seeds.

### National Mission on Oilseeds and Oil Palm

- Objective: To augment the availability of edible oils and reduce the import of edible oils by increasing the production and productivity of oilseeds and oil palm.
- To this end a multi-pronged strategy is being adopted which includes the following:
  - o Increasing the seed replacement ratio with focus on varietal replacement
  - o Increasing irrigation coverage
  - o Nutrient management
  - o Intercropping with cereals/pulses/ sugarcane
  - o Productivity improvement and adoption of proven and climate-resilient technologies
  - o Area expansion through diversification of low yielding food grains.
  - o Targeting rice fallow areas and high potential districts
  - o Promotion in non-traditional states
  - o Encouraging mechanization
  - o Research projects
  - o Training of farmers and extension officials
  - o Supporting cluster demonstrations for the adoption of good agricultural practices
  - o Creation of 36 oilseed hubs with a focus on regional approach for larger availability of quality seeds
  - o Post-harvest management at farm and village level
  - o Formation of Farmer Producer Organisations

Source: PIB

## THEORY BY INDIAN SCIENTISTS TO SHED LIGHT ON MYSTERY BEHIND COMPLEX PHENOMENA IN PLASMA

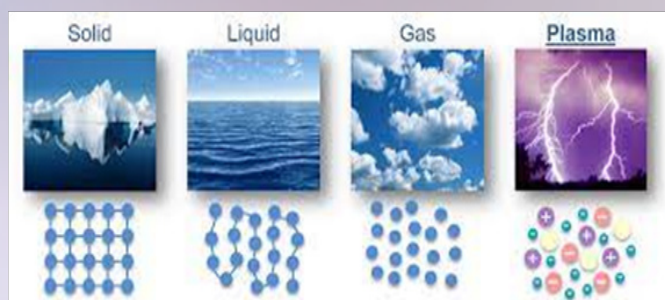
### Syllabus Section: Science and Technology

#### Why in News?

- Indian Scientists have recently developed a theory that helps understand the complicated nature of Sun-Earth interaction's happening in the magnetosphere.

#### About:

- This new theory has opened up a plethora of opportunities to unlock the mysteries of the ion-hole structures (a localized plasma region where the ion density is lower than the surrounding plasma).
- They have completely ruled out the necessity of the upper limit in the temperature ratio between ions and electrons for the generation of a special kind of wave called Bernstein Green Kruskal (BGK) waves, named after the scientists who predicted this wave.
- They revealed that the electrons that are not part of ion hole dynamics also play a vital role.
- The new theory developed by the Indian Institute of Geomagnetism (IIG) team provides a better understanding of their characteristics and sheds light on the generation of these structures leading to the unravelling of nature's greatest mystery that causes phenomena --- plasma transport and heating of plasma -- the fourth state of matter after solid, liquid, and gas, which is the most natural and widely observed state of matter in the entire universe.
- Plasma is a state of matter that is similar to gas, but the atomic particles are charged rather than neutral.



Source: PIB

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### NEW RULES UNDER THE INSURANCE ACT

#### Syllabus Section: Economy

#### Why in News?

- Indian promoters of insurance joint ventures with foreign partners will no longer be able to nominate a majority of the board members, as per the new rules notified under the Insurance Act.

#### About:

- This follows the recent amendments to enhance the foreign direct investment (FDI) limit in the sector to 74% from 49%.
- This new norm will apply to all insurers, irrespective of the stake held by the foreign partner.
- However, a majority of board members, key management persons (KMP) need to be resident Indian citizens, as should at least one of the three top positions — the chairperson of the board, the MD and CEO.

#### Source: The Hindu

### GUARANTORS FOR LOANS LIABLE UNDER IBC PROCEEDINGS

#### Syllabus Section: Economy

#### Why in News?

- The Supreme Court on Friday affirmed the Central government's November 15, 2019 notification.

#### About:

- The Supreme Court ruled that personal assets of chairpersons and directors, who stood guarantee for corporate loans from banks that turned into bad debts would face liability in the resolution process under IBC.
- The court said there was an "intrinsic connection" between personal guarantors and their corporate debtors. It was this "intimate" connection that made the government recognise personal guarantors as a "separate species" under the IBC.
- It was again this intimacy that made the government decide that corporate debtors and their personal guarantors should be dealt with by a common forum — National Company Law Tribunal (NCLT) — through the same adjudicatory process.

- Section 60(2) of the Code had required the bankruptcy proceedings of corporate debtors and their personal guarantors to be held before a common forum — the NCLT.

#### Significance:

- It will make the promoters accountable and they will be extremely careful in giving personal guarantees
- The personal guarantor's judgment in essence has also decided the issue with respect to corporate guarantors as well.
- Earlier, no remedy being in sight for the lenders to go after the personal guarantors, provided an easy escape route to the promoters and at times used to act as a roadblock in the Corporate Insolvency Resolution Process.

#### Source: Business Standard

### VACCINE TOURISM

#### Syllabus Section: International Issues

#### Why in News?

Recently a report emerged of a Dubai-based tour operator offering a 24-day package tour from Delhi to Moscow, which included two shots of the Russian Sputnik-V vaccine.

#### About

- Vaccine tourism is an emerging trend in countries where vaccines are in short supply, or where certain groups are still restricted from being inoculated.
  - There are only a few countries in the world (parts of the US, Russia, Slovakia, Zimbabwe etc) that don't restrict their vaccination policy to local residents.
- European republic of San Marino welcomed its first vaccine tourists – a group of four from Latvia, where they became the first visitors to take advantage of the microstate's Sputnik V Covid-19 vaccine holiday package
- In India, the term "vaccine tourism" became popular late last year when reports emerged of several tour operators offering packages to the US with the additional benefit of a vaccine shot.
  - It is said that Russia and the Maldives are already working on programmes to offer people abroad the chance to get vaccinated during a visit.
- Currently, it is not illegal to travel to a foreign country to get vaccinated if air travel is allowed.



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## Vaccine Tourism and Vaccine Passport

- Sometimes, vaccine tourism is confused with vaccine passport, which is a more regulated practice gaining currency around the world.
  - A vaccination pass or passport is documentation proving that you have been vaccinated against Covid-19. Some versions will also allow people to show that they have tested negative for the virus, and therefore can more easily travel.
- Recently, Seychelles announced that only vaccinated visitors from India, Pakistan and Bangladesh who have completed two weeks after their second dose are permitted to travel to and enter the island nation, with proof of COVID-19 vaccination
- The 27-member European Union (EU) has also decided to allow entry to fully vaccinated travellers from countries with low infection rates
- The EU allows non-essential travel only from seven countries – Australia, New Zealand, South Korea, Thailand, Israel, Rwanda and China.
  - Earlier, a country had to report under-25 infections per 100,000 people over two weeks to be green-listed, now the limit has been increased to 75 infections per 100,000.

**Source: Indian Express**

## WHITE FUNGUS

### Syllabus Section: Health Issues

#### Why in News?

- An infection called white fungus has been found to affect some people.
  - Covid-19 patients are more prone to white fungus as it affects the lungs and similar symptoms are created like that of coronavirus.

#### About:

- White Fungus or Candidiasis is a fungal infection caused by a yeast (a type of fungus) called Candida.
- Candida normally lives on the skin and inside the body, in places such as the mouth, throat, gut, and vagina, without causing any problems.
- Candida can cause infections if it grows out of control or if it enters deep into the body (for example, the bloodstream or internal organs like the kidney, heart, or brain).

#### Causes:

- This infection can be caused due to low immunity, or if people come in contact with things that contain these moulds like water, etc.
- Those who have weak immunity like diabetes, cancer patients, and those who are taking steroids for a long period of time must take special care as they are more at risk

#### Symptoms:

- Patients of white fungus show Covid-like symptoms but test negative; the infection can be diagnosed through CT-Scan or X-ray.
- Cough
- Fever
- Diarrhea
- Dark spots on lungs, reduced oxygen level

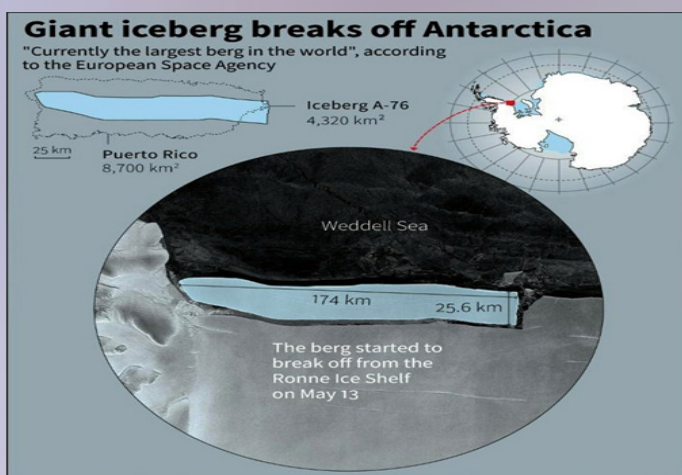
**Source: Indian Express**

## A-76 (WORLD'S LARGEST ICEBERG)

### Syllabus Section: Environment

#### Why in News?

A giant slab of ice bigger than the Spanish island of Majorca has sheared off from the frozen edge of Antarctica into the Weddell Sea, becoming the largest iceberg currently afloat in the world, the European Space Agency said.



#### About A-76:

- The newly calved berg 'A-76' was spotted in recent satellite images captured by the Copernicus Sentinel-1 mission.
- Sentinel-1 is one of the missions of the European Space Agency (ESA) under Copernicus initiative (an earth observation programme).
- It has surpassed the now second-place A-23A, about 3,380 sq km in size and also floating in the Weddell Sea.

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## Iceberg:

- An iceberg is ice that broke off from glaciers or shelf ice and is floating in open water.
- The US National Ice Center (USNIC) is the only organisation that names and tracks Antarctic Icebergs.
- Icebergs are named according to the Antarctic quadrant in which they are spotted.

**Source: The Hindu**

## E-way BILL INTEGRATION WITH FASTag, RFID

**Syllabus Section: Economy**

### Why in News?

- E-way bill integration with RFID, FASTag to deliver real-time commercial vehicle data.

### About:

#### The new system:

- From January 1, 2021, RFID/FASTag has been integrated with the e-way bill system.
- When a vehicle passes the RFID tag reader on the highway, the details fed into the device get uploaded on the government portal.
  - The information is later used by revenue authorities to validate the supplies made by a GST registered person.
- Tax officers can now access reports about vehicles that have passed the selected tolls without e-way bills in the past few minutes.

### Benefits of the New System:

- **Curb Tax Evasion:** The new system allows live vigilance for e-way bill compliances by businesses and help prevent revenue leakage by real-time identification of cases of recycling of e-way bills or non-generation of e-way bills.
- **Help in identify fraudulent transactions:** officers of the audit and enforcement wing can use reports to identify fraudulent transactions like bill trading, recycling of e-way bills.
- Tax officers can view details of any suspicious vehicles and vehicles of e-way bills generated by suspicious taxpayer GST identification numbers (GSTINs) that have passed the selected toll on a near real-time basis.

## E-way bills:

- E-way Bill is an Electronic Way bill for movement of goods to be generated on the eWay Bill Portal.
- E-way bills have been made mandatory for inter-state transportation of goods valued over Rs 50,000 from April 2018, with exemption to precious item such as gold.

**Source: Indian Express**

## e-COURTS SERVICES MOBILE APP

**Syllabus Section: Polity and Governance**

### Why in News?

- Supreme Court's E-Committee releases Manual for its free "e-Courts Services Mobile App" in 14 languages

### About:

- The app is available in English, Hindi, Assamese, Bengali, Gujarati, Kannada, Khasi, Malayalam, Marathi, Nepali, Odia, Punjabi, Tamil, Telugu.
- The app is aimed to benefit litigants, citizens, lawyers, law firms, police, government agencies and other institutional litigants has so far crossed 57 lakh downloads.
- Using the eCourts services mobile application, one can get various citizen-centric services like search for cases with case numbers, CNR numbers, filing numbers, party names, FIR number, advocate details, Acts, etc. case type.
- The e-Committee of the Supreme Court has been at the forefront of introducing digital reforms in the field of law.

**Source: PIB**

## MOUNT NYIRAGONGO

**Syllabus Section: Geography**

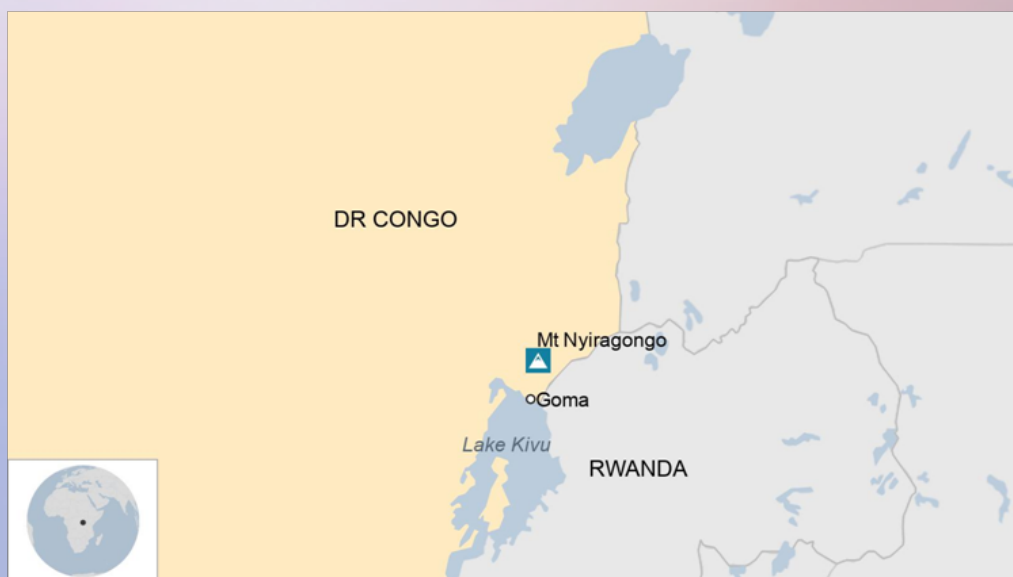
### Why in News?

DR Congo orders Goma evacuation after Mount Nyiragongo erupts.



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## About:



- Mount Nyiragongo is an active stratovolcano with an elevation of 3,470 m in the Virunga Mountains associated with the Albertine Rift.
  - Nyiragongo's last eruption in 2002 killed 250 people and left 120,000 homeless.
- It is one of the world's most active volcanoes and is considered among the most dangerous.
- It is located inside Virunga National Park, in the Democratic Republic of the Congo, about 12 km north of the town of Goma and Lake Kivu.
- The main crater is about two kilometres (1 mi) wide and usually contains a lava lake. Nyiragongo's lava lake has at times been the most voluminous known lava lake in recent history.
- Nyiragongo and nearby Nyamuragira are together responsible for 40 per cent of Africa's historical volcanic eruptions.

## SEMICONDUCTOR CHIPS SHORTAGE AND CARMAKERS

### Syllabus Section: Economy

#### Why in News?

- A protracted shortage of inputs, especially semiconductor chips, has made India-based car manufacturers and premium bike makers curtail production across categories.

## About:

### Reason behind the Shortage:

- The trigger point was the beginning of the Covid-19 pandemic and the subsequent lockdowns across the world that forced shut crucial chip-making facilities in countries including Japan, South Korea, China and the US
- Key feature in a chip shortage is that it almost always causes cascading effects.
- Electronic parts and components today account for 40% of the cost of a new internal combustion engine car, up from less than 20% two decades ago. Chips account for a bulk of this increase.

### Impact of this Shortage:

- Delaying vehicle deliveries
- Supply demand mismatch
- Discarding high-end electronic capabilities on a temporary basis to deal with the chip shortage. E.g., Nissan is said to be leaving navigation systems out of thousands of vehicles.
- Creates pent-up demand that becomes the cause for the follow-up famine.
- Blow to the auto sector production and revenue generation.

**Source: Indian Express**

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### DATA BREACH HAS HIT AIR INDIA CUSTOMERS:

#### Syllabus Section: International Relations

##### Why in News?

National carrier Air India has notified its passengers of a data breach that occurred in February at the SITA passenger service system.

##### About:

- SITA is a Switzerland-based technology company specialising in air transport communications and information technology.
- SITA offers services such as passenger processing, reservation systems, etc.
- Air India had entered into a deal with SITA in 2017 to upgrade its IT infrastructure to enable it to join Star Alliance.
- At Air India, SITA also implemented an online booking engine, departure control system, check-in and automated boarding control, baggage reconciliation system and the frequent flyer programme.
- SITA had flagged a cyber-attack it was subjected to in the last week of February and said it led to the leak of personal data of some of the airline's passengers.

Source: Indian Express

### NATIONAL MISSION ON USE OF BIOMASS IN COAL BASED THERMAL POWER PLANTS

#### Syllabus Section: Environment

##### Why in News?

Ministry of Power decides to set up a National Mission on use of Biomass in coal based thermal power plants

##### About:

- In order to address the issue of air pollution due to farm stubble burning and to reduce carbon footprints of thermal power generation, Ministry of Power has decided to set up a National Mission on use of Biomass in coal based thermal power plants
- Objectives of "National Mission on use of biomass in thermal power plants:
  - To increase the level of co-firing from present 5% to higher levels to have a larger share of carbon neutral power generation from the thermal power plants.
  - To take up R&D activity in boiler design to handle the higher amount of silica, alkalis in the biomass pellets.

- To facilitate overcoming the constraints in supply chain of bio mass pellets and agro- residue and its transport upto to the power plants.
- To consider regulatory issues in biomass co-firing.

- The modalities of operation and structure of the Nation Mission are under process.
- The following Sub-Groups are also proposed to be formed under the Mission:
  - (i) Sub-Group 1 : to be responsible to carry out research on properties/ characteristics of biomass.
  - (ii) Sub-Group 2 : to carry out technical specification and safety aspects including research in boiler design etc. to handle the pilot project for higher amount of co-firing of biomass with coal in pulverized coal (PC) fired boilers.
  - (iii). Sub-Group 3: for resolving the issues of supply chain during the mission period and sensitization programme.
  - (iv). Sub-Group 4 : to select designated labs and certification bodies for testing of Agro-based biomass pellets and Municipal Solid Waste (MSW) pellets
  - (v). Sub-Group 5: be formed on regulatory framework and economics of biomass co-firing in coal based Thermal power plants.

##### Significance of the Mission:

- It will contribute in the National Clean Air Programme (NCAP)
- This would further support the energy transition in the country and our targets to move towards cleaner energy sources.
- Help in addressing the issue of air pollution.

Source: PIB

### LITHUANIA QUILTS 'DIVISIVE' CHINA GROUP

#### Syllabus Section: International Relations

##### Why in News?

- Lithuania said it is quitting China's 17+1 cooperation forum with central and eastern European states that includes other EU members, calling it "divisive".

##### About:

- Lithuania's move is the latest indication of the deteriorating relationship between China and the European Union.



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Cooperation between China and Central and Eastern European Countries (China-CEE, China-CEEC)

- It is an initiative by the Chinese Ministry of Foreign Affairs to promote business and investment relations between China and 16 countries of Central and Eastern Europe Countries (CEEC).
- The format was founded in 2012 in Warsaw.
- Earlier it was known as 17+1, but after Lithuania quits it in May 2021 it is known as 16+1.
- Central and Eastern European Countries (CEECs) is an OECD term for the group of countries comprising Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia and Lithuania.

**Source: The Hindu**



### LIVE-IN COUPLES DESERVE SAME PROTECTION AS MARRIED ONES

**Syllabus Section: Society Issues**

#### Why in News?

Live-in couples deserve same protection as married ones, says Punjab and Haryana high court.

#### About:

- The high court also clarified that a couple living in a live-in relationship has the same right of protection that a married couple had.
- The high court held that the “life and liberty of every individual is precious and must be protected irrespective of individual views.

- Such a relationship is not prohibited under the law nor does it amount to commission of any offence.

#### Dissenting Views:

- If directions for the protection of a runaway couple in a “live-in relationship” are granted, the social fabric of the society would get disturbed.

**Source: Times of India**

### SHAHI LITCHI FROM BIHAR EXPORTED

**Syllabus Section: Agriculture**

#### Why in News?

First consignment of GI certified Shahi Litchi from Bihar exported to the U.K.

#### About:

- India is the second largest producer of litchi (Litchi chin) in the world, after China.
  - o Bihar tops in terms of production of litchi.
- Shahi litchi was the fourth agricultural products to get GI certification from Bihar in 2018, after Jardalu mango, Katarni rice and Magahi paan.
  - o GI registration for Shahi Litchi is held with the Muzaffarpur-based Litchi Growers Association of Bihar.
- Muzzafarpur, Vaishali, Samastipur, Champaran, Begusarai districts and adjoining areas of Bihar have favorable climate for growing Shahi Litchi.

#### Steps to Promote the Export

- Efforts by APEDA: APEDA has been facilitating Bihar government in formulating State agri-export plan which would provide road-map for boosting agricultural and processed food products exports from the State.
- State agri-export Plan: After the finalisation of State agri-export plan, the export potential of Makhana, mango, litchi and other fruits and vegetables can be harnessed.
- Infrastructure Creation: Bihar government is making efforts in association with APEDA and other agencies for creating required infrastructures such as customs clearance facility, laboratory testing facility, pack-houses, pre-cooling facilities, which would harness and boost agricultural exports potential of the State.

**Source: PIB**

## EDEN IAS - Educational Development & Enrichment Network

### INDIA AND ISRAEL SIGN A THREE-YEAR WORK PROGRAM FOR COOPERATION IN AGRICULTURE

#### Syllabus Section: Bilateral Relations

#### Why in News?

The two governments have agreed to enhance their cooperation in agriculture and signed a three-year work program agreement for development in Agriculture cooperation.

#### About:

- India and Israel are implementing the “INDO-ISRAEL Agricultural Project Centres of Excellence” and “INDO-ISRAEL Villages of Excellence”.
- The Indo-Israeli Agriculture Project is based on the concept of establishing Centers of Excellence which provide a platform for a rapid transfer of technology to the farmers with the aim of increasing productivity and improving the quality of produce.
- MIDH, Ministry of Agriculture & Farmer's Welfare, (GoI), and MASHAV - Israel's Agency for International Development Cooperation - are leading Israel's largest G2G cooperation, with 29 operational Centres of Excellence (COEs) across India in 12 States, implementing Advanced-Intensive agriculture farms with Israeli Agro-Technology tailored to local conditions.

#### INDO-ISRAELI AGRICULTURE PROJECT:

- The first stage of the Indo-Israeli Agricultural Cooperation Project started in 2008 following the signing of a three-year Action Plan based on a Government-to-Government Agreement.
- The plan was later on extended to include the 2012-2015 period.
- This is the 5th IIAP.
- Four such Agriculture Action Plans have been successfully completed so far: First IIAP (2008-10), Second IIAP (2012-15), Third IIAP (2015-18), and Fourth IIAP (2018-20).

#### INDO-ISRAEL Villages of Excellence:

- This is a new concept aimed at creating a model ecosystem in agriculture across eight states, alongside 13 Centers of Excellence within 75 villages.

- The program will promote the increase of net income and better the livelihood of the individual farmer, transforming traditional farms into modern-intensive farms based on IIAP standards.
- Large-scale and complete value chain approach with economic sustainability, embedded with Israeli novel technologies and methodologies will be tailored to local conditions.
- It will focus on:
  - Modern Agriculture infrastructure,
  - Capacity Building,
  - Market linkage.

#### Source: PIB

### HIGHEST EVER TOTAL FDI INFLOW

#### Syllabus Section: Economy

#### Why in News?

- India attracted highest ever total FDI inflow of US\$ 81.72 billion during 2020-21, 10% more than the last financial year

#### About:

- Measures taken by the Government on the fronts of Foreign Direct Investment (FDI) policy reforms, investment facilitation and ease of doing business have resulted in increased FDI inflows into the country.
- The following trends in India's Foreign Direct Investment are an endorsement of its status as a preferred investment destination amongst global investors:
  - India has attracted highest ever total FDI inflow of US\$ 81.72 billion during the financial year 2020-21 and it is 10% higher as compared to the last financial year 2019-20 (US\$ 74.39 billion).
  - FDI equity inflow grew by 19% in the F.Y. 2020-21 (US\$ 59.64 billion) compared to the previous year F.Y. 2019-20 (US\$ 49.98 billion).
  - In terms of top investor countries, 'Singapore' is at the apex with 29%, followed by the U.S.A (23%) and Mauritius (9%) for the F.Y. 2020-21.
  - 'Computer Software & Hardware' has emerged as the top sector during F.Y. 2020-21 with around 44% share of the total FDI Equity inflow followed by Construction (Infrastructure) Activities (13%) and Services Sector (8%) respectively.



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- o Under the sector 'Computer Software & Hardware', the major recipient states are Gujarat (78%), Karnataka (9%) and Delhi (5%) in F.Y. 2020-21.
- o Gujarat is the top recipient state during the F.Y. 2020-21 with 37% share of the total FDI Equity inflows followed by Maharashtra (27%) and Karnataka (13%).
- o Majority of the equity inflow of Gujarat has been reported in the sectors 'Computer Software & Hardware' (94%) and 'Construction (Infrastructure) Activities' (2%) during the F.Y. 2020-21.
- o The major sectors, namely Construction (Infrastructure) Activities, Computer Software & Hardware, Rubber Goods, Retail Trading, Drugs & Pharmaceuticals and Electrical Equipment have recorded more than 100% jump in equity during the F.Y. 2020-21 as compared to the previous year.
- o Out of top 10 countries, Saudi Arabia is the top investor in terms of percentage increase during F.Y. 2020-21. It invested US\$ 2816.08 million in comparison to US\$ 89.93 million reported in the previous financial year.
- o 227% and 44% increase recorded in FDI equity inflow from the USA & the UK respectively, during the F.Y. 2020-21 compared to F.Y.2019-20.

**Source: PIB**

### SeHAT OPD PORTAL

**Syllabus Section: Science and Technology/ Governance**

**Why in News?**

- Defence Minister Rajnath Singh launches SeHAT OPD Portal.

**About:**

- SeHAT is Health Assistance and Tele-Consultation Portal.
- The Portal will help the Armed Forces in providing tele-medicine services.
- This shows government's commitment to e-governance and digital India.
- For Persons aged 75 and above there is no need to wait, they can consult without waiting.

**Source: All India Radio**

### ASSETS UNDER MANAGEMENT UNDER PENSION FUND REGULATORY AND DEVELOPMENT AUTHORITY CROSS RS 6 TRILLION

**Syllabus Section: Economy**

**Why in News?**

The Pension Fund Regulatory and Development Authority (PFRDA) announced that Assets Under Management (AUM) under the National Pension System (NPS) and Atal Pension Yojana (APY), crossed the milestone of Rs. 6 trillion.

**About:**

- PFRDA has witnessed remarkable growth in NPS subscribers over the years with 74.10 lakh government employees in the scheme and 28.37 lakh individuals joining from the non-government sector.

**PFRDA**

- Pension Fund Regulatory and Development Authority (PFRDA) is the statutory authority.
- It was established by an enactment of the Parliament, to regulate, promote and ensure orderly growth of the National Pension System (NPS) and pension schemes to which this Act applies.

**National Pension System (NPS):**

- NPS is a government-sponsored pension scheme.
- It was launched in January 2004 for government employees.
- In 2009, it was opened for all sections.
- The scheme allows subscribers to contribute regularly in a pension account during their working life.
- On retirement, subscribers can withdraw a part of the corpus in a lumpsum and use the remaining corpus to buy an annuity to secure a regular income after retirement.
- Any Indian citizen between 18 and 60 years can join NPS.
- However, OCI (Overseas Citizens of India) and PIO (Person of Indian Origin) card holders and Hindu Undivided Family (HUFs) are not eligible for opening of NPS accounts.

**Atal Pension Yojana:**

- The scheme was launched in May, 2015, with the objective of creating a universal social security system for all Indians, especially the poor, the under-privileged and the workers in the unorganised sector.

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- The scheme has been implemented comprehensively across the country covering all states and Union Territories with male to female subscription ratio of 57:43.
- Any citizen of India can join the APY scheme. The age of the subscriber should be between 18-40 years.
- The contribution levels would vary and would be low if a subscriber joins early and increases if she joins late.

**Source: PIB**

### UN BODY ASKED TO UP SCRUTINY OF ISRAEL'S HUMAN RIGHTS RECORD

**Syllabus Section: International Relation**

#### Why in News?

- o Member states of the Organization of Islamic Cooperation are calling on the U.N. Human Rights Council to set up a permanent commission to report on human rights violations in Israel, Gaza and the West Bank.

**About:**

#### Permanent Commission

- It will be an independent, international commission of inquiry appointed by the UNHRC president.
- It will investigate violations of international humanitarian and human rights law in Israel and Palestinian areas.
- The commission would also investigate all underlying root causes of recurrent tensions, instability and protraction of conflict including discrimination and repression.
  - o A commission of inquiry (COI) is the highest level of scrutiny that the council can authorize.
  - o Another COI, for example, has been regularly reporting on Syria's war nearly since its inception a decade ago – partially in hopes of collecting evidence that could be used in court one day.

**Source: Indian Express**

### GROWTH OF YOUNG SMOKERS IN INDIA AND THE WORLD

**Syllabus Section: Health Issues**

#### Why in News?

Ahead of World No Tobacco Day (May 31), the Global Burden of Disease collaboration has published three new studies in The Lancet and The Lancet Public Health journals.

**About:**

- Globally, the number of smokers increased to 1.1 billion in 2019, with tobacco smoking causing 7.7 million deaths — including 1 in 5 deaths in males worldwide.
  - o Among new smokers, 89% become addicted by age 25.

**Prevalence:**

- 1) Top Countries: The 10 countries with the largest number of tobacco smokers in 2019, are China, India, Indonesia, the USA, Russia, Bangladesh, Japan, Turkey, Vietnam, and the Philippines.
- 2) 15-24 Age Group: In the 15-24 age group, China (26.5 million), India (19.8 million), and Indonesia (9.91 million) had the largest numbers of tobacco smokers in 2019.
  - Globally, there were 155 million smokers in this age group.
- 3) Absolute Increase in Male Smokers: India (4.67 million), Egypt (1.24 million) and Indonesia (1.22 million) had the largest absolute increases in the number of male smokers aged 15-24.
- 4) Absolute Increase in Female Smokers: The largest increases in female smokers aged 15-24 were in Turkey (4.6 lakh) Jordan (1.1 lakh) and Zambia (1.1 lakh).

**Deaths:**

- Studies have shown that smokers have an average life expectancy ten years lower than never-smokers.
- In 2019, smoking was associated with 1.7 million deaths from ischaemic heart disease, 1.6 million deaths from COPD, 1.3 million deaths from tracheal, bronchus, and lung cancer, and nearly 1 million deaths from stroke

**India and Smoking:**

- India had the second highest number of tobacco smokers aged 15-24 in 2019 (nearly 2 crore)
- India witnessed the highest increase of male smokers in this age group since 1990.
- In India, there has been largest absolute increase in number of young male smokers.

**How to Reduce Prevalence of Smoking?**

- Any country requires two-pronged strategy



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- o First is to step up cessation services to help current users quit
- o Second approach has to focus on preventing initiation among adolescents and youth,
- India has already enforced policies in favour of protecting youth from new emerging tobacco and nicotine products by banning gutkha/smokeless tobacco in some states and e-cigarettes.
- o Project MYTRI (Mobilising Youth for Tobacco Related Initiatives in India) is also for the same purpose.

**Source: Indian Express**

### UAE'S GOLDEN VISA

#### Syllabus Section: International Relation

#### Why in News?

Bollywood actor Sanjay Dutt received his golden visa from the UAE government on Wednesday.

#### About:

- United Arab Emirates (UAE), in 2019, implemented a new system for long-term residence visas, thereby enabling foreigners to live, work and study in the UAE without the need of a national sponsor and with 100 per cent ownership of their business.
- The Golden Visa system essentially offers long-term residency (5 and 10 years) to people belonging to the following groups: investors, entrepreneurs, individuals with outstanding talents the likes of researchers, medical professionals and those within the scientific and knowledge fields, and remarkable students.

#### Who are eligible to apply?

##### 10-year visa

- Investors having no less than AED 10 million worth of public investment, either in the form of an investment fund or a company, can apply.
- At least 60 per cent of the total investment must not be in the form of real estate and the invested amount must not be loaned, or in case of assets, investors must assume full ownership.
- The investor must be able to retain the investment for a minimum of three years as well.
- This 10-year long visa may be extended to include business partners, providing that each partner contributes AED 10 million.

- The long-term visa can also include the holder's spouse and children, as well as one executive director and one advisor.
- Besides entrepreneurs, individuals with specialised talent can also apply for the visa. They include doctors, researchers, scientists, investors and artists.

##### 5-year visa:

- The norms are largely similar for investors with the only difference being the amount of investment required is set at AED 5 million.
- Exceptional high school and university students are eligible for a 5-year residency visa in the UAE.
- Foreign nationals who are looking to set up their business in the UAE may also apply for permanent residency (5 years) through the Golden Business Visa scheme.

#### Conditions for People with Specialised Talents

- Scientists: must be accredited by the Emirates Scientists Council or holders of the Mohammed Bin Rashid Medal for Scientific Excellence.
- Creative Individuals in Culture and Art: must be accredited by the Ministry of Culture and Knowledge Development.
- Doctors and specialists: meet at least two of the following conditions:
  - o "A PhD degree from one of the top 500 universities in the world, an award or certificates of appreciation in the field of the applicant's work, contribution to a major scientific research in the respective field of work, published articles or scientific books in distinguished publications in the respective field of work, membership in an organisation related to the field, a PhD degree, in addition to 10 years of professional experience in his field or specialisation in areas of priority to the UAE.

**Source: Indian Express**

### BANGLADESH 200-MILLION CURRENCY SWAP

#### Syllabus Section: International Relation

#### Why in News?

- Bangladesh's central bank has approved a \$200 million currency swap facility to Sri Lanka.

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### About:

- Sri Lanka, staring at an external debt repayment schedule of \$4.05 million this year, is in urgent need of foreign exchange
- Bangladesh Bank, Bangladesh's central bank, has in principle approved a \$200 million currency swap agreement with Sri Lanka, which will help Colombo tide over its foreign exchange crisis.
- A currency swap is effectively a loan that Bangladesh will give to Sri Lanka in dollars, with an agreement that the debt will be repaid with interest in Sri Lankan rupees
- For Sri Lanka, this is cheaper than borrowing from the market, and a lifeline as it struggles to maintain adequate forex reserves even as repayment of its external debts looms.

### How usual for Bangladesh to do this?

- Bangladesh has not been viewed so far as a provider of financial assistance to other countries. But over the last two decades, its economy has pulled itself up .
- Bangladesh's economy grew by 5.2 per cent in 2020, and is expected to grow by 6.8 per cent in 2021.
- The country has managed to pull millions out of poverty. Its per capita income just overtook India's.
- In 2020, despite fears that the pandemic would hit remittances, Bangladeshis living abroad sent over \$21 billion. It is also the first time that Sri Lanka is borrowing from a SAARC country other than India.

### Why didn't Sri Lanka approach India?

- Sri Lanka asked for a \$1 billion credit swap, and separately, a moratorium on debts that the country has to repay to India. But it did not get any reply.
- India-Sri Lanka relations have been tense over Colombo's decision to cancel a valued container terminal project at Colombo Port.
- Last July, the Reserve Bank of India did extend a \$400 million credit swap facility to Sri Lanka, which Central Bank of Sri Lanka settled in February.
- The arrangement was not extended.
- RBI has a framework under which it can offer credit swap facilities to SAARC countries within an overall corpus of \$2 billion.
- The SAARC currency swap facility came into operation in November 2012.

**Source: Indian Express**

### ACCR Portal and 3rd version of AyushSanjivani App

**Syllabus Section: Government Policies and Interventions.**

### Why in News?

Recently, the Ministry of Ayush launched its Ayush Clinical Case Repository (ACCR) portal and the third version of AyushSanjivani App in a virtual event.

### About:

- It is developed by the Ministry of Ayush as a platform to support both Ayush practitioners and the public.
- It welcomes Ayush practitioners from all over the world to enrol and share information about successfully treated cases for the benefit of all.
- Cases whose details are posted here will be screened by experts, and will be uploaded for all to read/view subject to their review.
- Aim: To portray the strengths of Ayush systems for treatment of various disease conditions.

### AYUSH Sanjivani App Third Version:

- It is developed by the Ministry of Ayush and the Ministry of Electronics and Information Technology (MeitY).
- The app intends to generate data on usage of AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha, Sowa-rigpa and Homoeopathy) advocacies and measures among the population and its impact in prevention of Covid-19.
- It aims to understand the measures adopted by the public for enhancing immunity and keeping themselves healthy in difficult Covid-19 situations.

**Source: PIB**

### NATIONAL DIGITAL HEALTH MISSION (NDHM)

**Syllabus Section: Health**

### Why in News?

Prime Minister Narendra Modi chaired a high-level meeting to review the National Digital Health Mission (NDHM).

### About:

- On 15th Aug 2020, during his Independence Day address, Prime Minister had announced the launch of NDHM.



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- The mission has been rolled out in six Union Territories. So far, nearly 11.9 lakh Health IDs have been generated and 3106 doctors and 1490 facilities have registered on the platform.
- It has been envisaged that Unified Health Interface (UHI) - an open and interoperable IT network for digital health should soon be rolled out.
- This interface shall enable public and private solutions and apps to plug in and be a part of National Digital Health Ecosystem.
- The concept of UPI e-Voucher developed by National Payment Corporation of India (NPCI) was also discussed.
- This digital payment option will enable financial transactions linked to specific purpose which can be used only by the intended user.

**Source: The Hindu**

### WORLD HEALTH ASSEMBLY ADOPTS NEW RESOLUTION

**Syllabus Section: Health Issues**

#### Why in News?

The ongoing 74th World Health Assembly (WHA) — the main governing body of the World Health Organization (WHO) comprising 194 member states — has adopted a new resolution to accelerate efforts to end malaria.

#### About:

- Malaria is caused by parasites that are transmitted to people through the bites of infected female Anopheles mosquitoes — claims more than 400,000 lives annually.
- The WHO said an estimated 7.6 million deaths and 1.5 billion cases had been averted since 2000, but the global gains in combatting malaria have levelled off in recent years.
- Aim of the resolution: To urge Member States to step up progress on containing the disease, in line with WHO's updated global malaria strategy and the WHO Guidelines for malaria.
- It called countries to expand investment, scale up funding for global response and boost investment in research and development of new tools.

#### WHO Global Malaria Programme:

- It is responsible for coordinating WHO's global efforts to control and eliminate malaria.
- Its work is guided by the "Global technical strategy for malaria 2016–2030" adopted by the WHA in May 2015.
- WHO's global technical strategy provides a technical framework for all malaria-endemic countries working towards malaria control and elimination.
- Its global targets for 2030 include:
  - Reducing malaria case incidence by at least 90 per cent
  - Reducing malaria mortality rates by at least 90 per cent
  - Eliminating malaria in at least 35 countries
  - Preventing a resurgence of malaria in all countries that are malaria-free

**Source: Down to Earth**

### EMERGENCY CREDIT LINE GUARANTEE SCHEME (ECLGS)

**Syllabus Section: Economy**

#### Why in News?

On account of the disruptions caused by the second wave of COVID 19 pandemic to businesses across various sectors of the economy, Government has further enlarged the scope of Emergency Credit Line Guarantee Scheme as under.

#### About:

- ECLGS 4.0:100% guarantee cover to loans up to Rs.2 crore to hospitals/nursing homes/clinics/medical colleges for setting up on-site oxygen generation plants, interest rate capped at 7.5%;
- Borrowers who are eligible for restructuring as per RBI guidelines of May 05, 2021 and had availed loans under ECLGS 1.0 of overall tenure of four years comprising of repayment of interest only during the first 12 months with repayment of principal and interest in 36 months thereafter will now be able to avail a tenure of five years for their ECLGS loan i.e. repayment of interest only for the first 24 months with repayment of principal and interest in 36 months thereafter;
- Additional ECLGS assistance of upto 10% of the outstanding as on February 29, 2020 to borrowers covered under ECLGS 1.0, in tandem with restructuring as per RBI guidelines of May 05, 2021;

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- (iv) Current ceiling of Rs. 500 Cr. of loan outstanding for eligibility under ECLGS 3.0 to be removed, subject to maximum additional ECLGS assistance to each borrower being limited to 40% or Rs.200 crore, whichever is lower;
- (v) Civil Aviation sector to be eligible under ECLGS 3.0
- (vi) Validity of ECLGS extended to 30.09.2021 or till guarantees for an amount of Rs.3 lakh crore are issued. Disbursement under the scheme permitted up to 31.12.2021.

Purpose of the Emergency Credit Line Guarantee Scheme:

The ECLGS aims to provide 100 percent guaranteed coverage to the banks, non-banking financial institutions (NBFCs) and other lending institutions in order to enable them to extend emergency credit to business entities that have suffered due to the Covid-19 pandemic and are struggling to meet their working capital requirements.

### ECLGS 1.0:

- It was launched as part of the Rs 20 lakh crore Covid-19 relief package called the Aatmanirbhar Bharat Abhiyan.
- The scheme aimed to provide Rs 3 lakh crore worth of collateral-free, government-guaranteed loans to micro, small and medium enterprises (MSMEs) across India to mitigate the distress caused by the coronavirus-induced lockdown.
- ECLGS 1.0 had a 1-year moratorium period and a 4-year repayment period.
- The scheme was envisaged to provide collateral-free and fully guaranteed credit to entities that had outstanding credit of up to Rs 25 crore as of February 29, 2020, with an annual turnover cap of Rs 100 crore for the financial year 2019-2020.
- The scheme was valid till October 2020 but was later extended till November end.

### ECLGS 2.0:

- Finance Minister Nirmala Sitharaman announced the launch of ECLGS 2.0 by extending the Rs 3 lakh crore scheme to support 26 stressed sectors identified by the Kamath Committee and the healthcare sector.

- The scheme was valid till March 31, 2021.
- These sectors included power, construction, iron and steel manufacturing, roads, real estate, textiles, chemicals, consumer durables, non-ferrous metals, pharma manufacturing, logistics, gems and jewellery, cement, auto components, hotels-restaurants-tourism, mining, plastic product manufacturing, automobile manufacturing, auto dealerships, aviation, sugar, ports and port services, shipping, building materials, and corporate retail outlets.
- The tenor of the credit under ECLGS 2.0 was five years, including a one-year moratorium. Companies with dues of Rs 50-500 crore as on February 29, 2020 were eligible, as announced by Sitharaman.
- The ceiling for outstanding credit was increased from Rs 25 crore to Rs 50 crore under ECLGS 2.0.
- The ECLGS 1.0 and ECLGS 2.0 would be valid till March 31, 2020.

### ECLGS 3.0:

- In order to support the Hospitality, Travel and Tourism, Leisure, and Sporting sectors, which are among those most affected by the Covid-19 pandemic, the government on March 31 widened the scope of the Rs 3 lakh crore scheme by announcing ECLGS 3.0.
- Under ECLGS 3.0, business enterprises in the hospitality, travel and tourism, leisure and sporting sectors would be able to avail credit under the scheme.
- It also extended ECLGS 1.0 and ECLGS 2.0 by another 3 months, along with ECLGS 3.0, to June 30, 2021.

Source: PIB

## HORTICULTURE CLUSTER DEVELOPMENT PROGRAMME

### Syllabus Section: Agriculture

#### Why in News?

To ensure holistic growth of horticulture, Union Minister of Agriculture and Farmers' Welfare Shri Narendra Singh Tomar virtually launched the Horticulture Cluster Development Programme (CDP)

#### About:

- Implementing Agency: It is a, central sector programme will be implemented by the National Horticulture Board (NHB) of the Ministry of Agriculture and Farmers' Welfare.



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- Aim: CDP aims at growing and developing identified horticulture clusters to make them globally competitive.

In a pilot phase, the programme will be implemented in 12 horticulture clusters out of the total 53 clusters selected for the programme.

- o Based on the learnings from the pilot project, the programme will be scaled up to cover all the identified clusters.
- The clusters of the pilot phase include Shopian (J&K) and Kinnaur (H.P.) for Apple, Lucknow (U.P.), Kutch (Gujarat) and Mahbubnagar (Telangana) for Mango, Anantpur (A.P.) and Theni (T.N.) for Banana, Nasik (Maharashtra) for Grapes, Siphahijala (Tripura) for Pineapple, Solapur (Maharashtra) and Chitradurga (Karnataka) for Pomegranate and West Jaintia Hills (Meghalaya) for Turmeric
- These clusters will be implemented through Cluster Development Agencies (CDAs) which are appointed on the recommendations of the respective State/ UT Government.
- The programme is expected to converge with other initiatives of the Government such as the Agriculture Infrastructure Fund and community farming assets and will leverage the central sector scheme of the Ministry for Formation and Promotion of 10,000 Farmers Producer Organisations (FPOs).
- o Agriculture Infrastructure Fund is a medium - long term financing facility for investment in projects for post-harvest management infrastructure.

### Expected Benefits from the Programme:

- It will address all major issues related to the Indian horticulture sector including pre-production, production, post-harvest management, logistics, marketing and branding.
- It will help in leveraging geographical specialisation and promote integrated and market-led development of horticulture clusters.
- It has a huge potential to transform the entire horticulture ecosystem improving its global competitiveness by building last-mile connectivity with the use of multimodal transport for the efficient and timely evacuation and transport of horticulture produce.
- back down.
- A Bench of Justice L Nageswara Rao and Justice S Ravindra Bhat did not find any merit in the petition.

### Centre vs State - Not the First Time

- In December last year, the Union Home had attached three IPS officers West Bengal cadre — Rajeev Mishra, Praveen Kumar Tripathi and Bholanath Pandey — but the Mamata Banerjee-led state government did not relieve them.
- In a similar case in 2014, IPS officer Archana Ramasundaram was deputed to the CBI in 2014, but the Tamil Nadu government refused to release her.
- o TN Gove suspended her when she defied the state's order.
- o Ramasundaram, however, joined the CBI and the suspension order was nullified since she had joined the central deputation.

**Source: Indian Express**