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# UPSC Monthly Current Affairs

## May 2021

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# GS PAPER-1

## (HISTORY, ART & CULTURE, SOCIAL ISSUES & GEOGRAPHY)

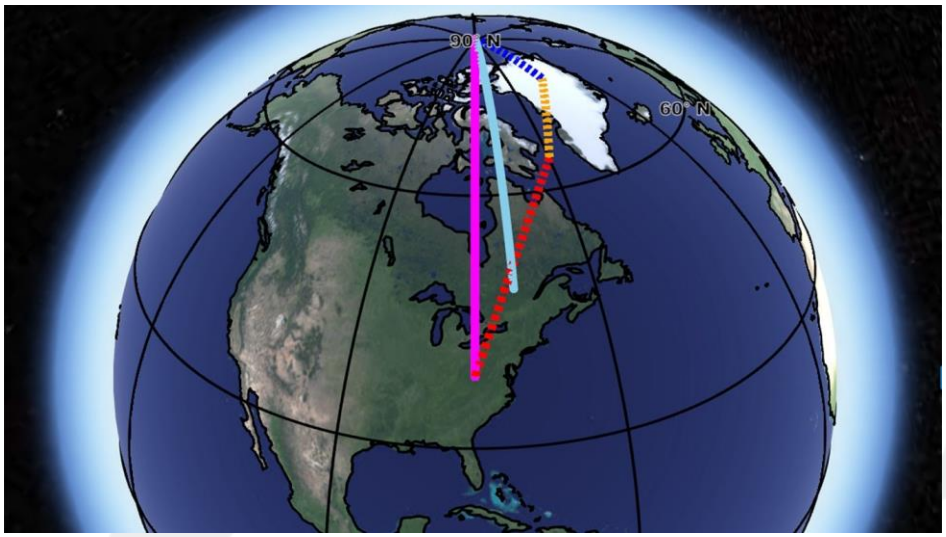
## Shift in Earth's axis due to Climate Change

**(Topic- GS Paper I–Geography, Source- Indian Express)**

**Why in the news?**

- Recently, a study published in Geophysical Research Letters of the American Geophysical Union (AGU) has stated that the planet's axis of rotation has been moving more than usual due to climate change.

**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, however, as the 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".
- According to NASA, data from the 20th century shows that the spin axis drifted about 10 centimetres per year.
- The 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.

**Key Highlights**

- The climate change has caused billions of tonnes of glacial ice to melt into oceans which 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.
- The average speed of drift was 17 times faster from 1995 to 2020 as compared to 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.

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

**About Gravity Recovery and Climate Experiment (GRACE) mission**

- It was selected as the second mission under the NASA Earth System Science Pathfinder (ESSP) Program in May 1997.
- It was launched in 2002.
- It is a joint partnership between the National Aeronautics and Space Administration (NASA) in the United States and Deutsche Forschungsanstalt für Luft und Raumfahrt (DLR) in Germany.

## Putola Nach puppetry

**(Topic- GS Paper I–Art and Culture, Source- AIR)**

**Why in the news?**

- Recently, in collaboration with the UNICEF-Assam, the Anamika Ray Memorial Trust (ARMT) has produced three short videos using string puppetry called '**Putola Nach'** for creating mass awareness on COVID appropriate behaviour.

**About Putola Nach**

- It is a string puppetry of Assam which had three distinct styles based on the area and is performed in three areas with distinct characteristics.
- These areas are Barpeta-Nalbari in western Assam, Kalaigaon in northern Assam and Majuli "island" in eastern Assam.

## Cinco de Mayo

**(Topic- GS Paper I–History and Art and Culture, Source- Indian Express)**

**Why in the news ?**

- Recently, with parties, parades and Mexican cuisine and music**, Cinco de Mayo** was celebrated on 5th May in Mexico and the United States.
- It is a day that celebrates Mexican national pride, marking Mexico's military victory on its soil over French forces in 1862.

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**Why is Cinco de Mayo celebrated?**

- In the 1860s, Mexico had been severely weakened by lengthy wars over the previous two decades **— the Mexican-American War (1846-48) and the internal Reform War (1858-61).**
- As a result, in 1861, President Benito Juárez announced a temporary moratorium of two years on repaying Mexico's foreign debts.
- In response, troops from Britain, Spain, and France invaded Mexico, demanding reimbursement.
- By April 1862, Britain and Spain negotiated with Mexico and withdrew, but France, which at the time was led by Emperor Napoleon III, decided to establish an empire in Mexican territories with the support of the local landowning classes.
- France also intended to curb US power in North America.

**The Battle of Puebla**

- In late 1861, a French fleet attacked the Mexican port of Veracruz on the country's eastern coast and landed a large army that drove the Juárez government into retreat.
- As they moved from Veracruz to the capital Mexico City, the French encountered stiff resistance from Mexican forces.
- At Puebla, over 100 km ahead of Mexico City, a poorly equipped and outnumbered Mexican force decisively defeated the advancing French troops on May 5, 1862, killing over a thousand.
- **The event marked a significant political victory of Mexican republicans and President Juárez, and helped establish a sense of national unity in the country.**

**Present-day significance in Mexico and the United States**

- In Puebla, Cinco de Mayo is celebrated annually with speeches, parades, and by reenacting episodes of the 1862 battle.
- **The city today houses a museum dedicated to the battle, and the actual battlefield is maintained as a park.**

## Dahla Dam

**(Topic- GS Paper I–Geography, Source- the Hindu)**

**Why in the news?**

- Recently, the Taliban has captured Afghanistan's second-biggest dam called **Dahla Dam** after months of fierce fighting in its former bastion of Kandahar.

**About Dahla Dam**

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- It is also known as Arghandab Dam.
- It is located in the Shah Wali Kot District of Kandahar Province in Afghanistan.
- It is said to be the second largest dam in Afghanistan.
- The Dahla Dam is built on the **Arghandab River.**
- It provides irrigation to farmers via a network of canals as well as drinking water for the provincial capital.

## Mount Sinabung's

**(Topic- GS Paper I–Geography, Source- Indian Express)**

**Why in the news ?**

- Recently, Mount Sinabung volcano has erupted belching a massive column of volcanic ash and smoke 3,000 metres (3 km) into the sky.
- The volcano had also erupted in March.

**About Mount Sinabung's**

- Mount Sinabung is a Pleistocene-to-Holocene stratovolcano of andesite and dacite in the Karo plateau of Karo Regency of North Sumatra, Indonesia.
- It is located on the seismically active zone known as the "Ring of Fire" — an arc of volcanoes and fault lines encircling the Pacific Ocean.

**About Ring of Fire**

**About Pacific Ring of Fire**

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- The Ring of Fire, also referred to as the Circum-Pacific Belt, is a path along the Pacific Ocean characterized by active volcanoes and frequent earthquakes.
- These places are dotted with 75% of Earth's all active volcanoes.
- It traces boundaries between several tectonic plates including the Pacific, Juan de Fuca, Cocos, Indian-Australian, Nazca, North American, and Philippine Plates.
- The abundance of volcanoes and earthquakes along the Ring of Fire is caused by the amount of movement of tectonic plates in the area.
- The countries affected by it are Indonesia, the Philippines, Malaysia, Japan, Australia and New Zealand, Papua New Guinea, and other island nations like the Solomon Islands, Fiji, and many more in Melanesia, Micronesia and Polynesia.

## Cyclone Tauktae

**(Topic- GS Paper I–Geography, Source- The Hindu)**

**Why in the news?**

- Recently, at least seven people were killed as Tauktae intensified into a "very severe cyclonic storm" and moved northwards towards Gujarat, leaving behind a trail of destruction – damaging houses, uprooting trees and snapping power lines – in the coastal districts of Kerala, Karnataka and Goa.

**About Cyclone Tauktae**

- It is formed over Southeast Arabian Sea.
- The word **Tauktae** has been suggested by Myanmar.
- It means 'gecko', a distinctively vocal lizard, in the Burmese language.

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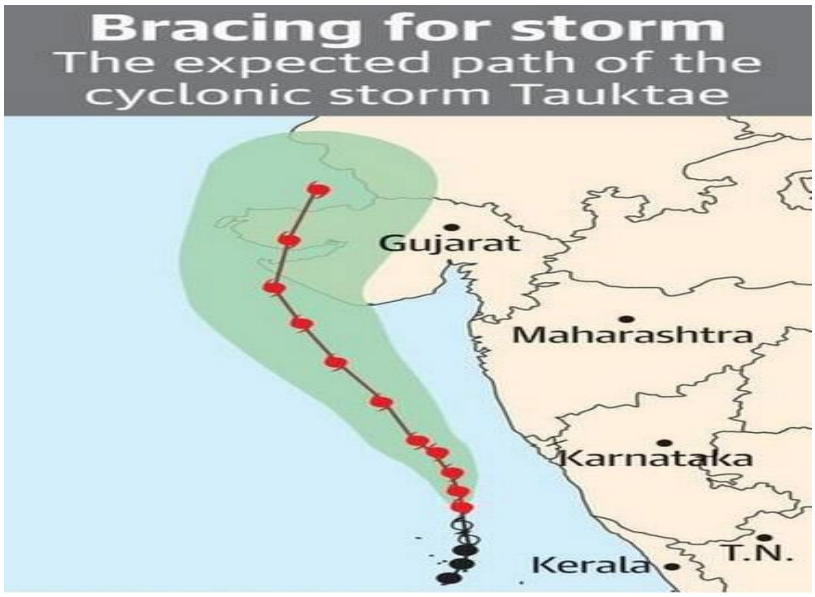


**How are Cyclones Named?**

- The World Meteorological Organisation (WMO) maintains rotating lists of names, which are appropriate for each Tropical Cyclone basin.
- If a cyclone is particularly deadly or costly, then its name is retired and replaced by another.
- The name list is proposed by the National Meteorological and Hydrological Services (NMHS) of the WMO members of a specific region and approved by the respective tropical cyclone regional bodies at their annual or biennial sessions.

**Why name cyclones?**

- Tropical cyclones are named to provide ease of communication between forecasters and the general public regarding forecasts, watches, and warnings.
- The names make it easier for the media to report on tropical cyclones and increase community preparedness.
- As per WMO, the use of short, distinctive names in written as well as spoken communications is quicker and less subject to error than the older more cumbersome latitude-longitude identification methods.

**Naming cyclones in the Bay of Bengal and Arabian Sea**

- The World Meteorological Organisation/United Nations Economic and Social Commission for Asia and the Pacific (WMO/UNESCAP) Panel on Tropical Cyclones agreed in principle to assign names to the tropical cyclones in the Bay of Bengal and the Arabian Sea.
- It was decided to name cyclones in Bay of Bengal and Arabian Sea during WMO/ESCAP's 27th session held in Muscat, Sultanate of Oman, in 2000.
- The naming of the tropical cyclones over the north Indian Ocean commenced from September 2004, with names provided by eight members.
- The members are Bangladesh, India, Myanmar, Maldives, Oman, Pakistan, Sri Lanka and Thailand.
- In September 2018, it was decided to prepare a fresh list of names of tropical cyclones including representation from five new member countries, viz., Iran, Qatar, Saudi Arabia, United Arab Emirates and Yemen.

**About Colour- Coded Weather Warning**

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- The India Meteorological Department issues colour-coded warnings to alert the public ahead of severe or hazardous weather conditions that can cause disruption or damage.

**Different Colour Codes**

a. **Green means No warning –**
   - In this there is no advisory is issued in such cases.

b. **Yellow means Be updated -**
   - It indicates severely bad weather panning across several days.
   - It also suggests that the weather could change for the worse causing disruption in day-to-day activities.

c. **Orange/ Amber means Be prepared**
   - It is issued as a warning of extremely bad weather with the potential of disruption.
   - It is also a sign for people to prepare for evacuation and protect themselves from bad weather.

d. **Red means Take action**
   - It is issued when the extremely bad weather conditions are certainly going to disrupt life.
   - In this case, people must take all measures to protect their families and follow the instructions of local authorities and disaster-response teams.

## Rock art of Sulawes

**(Topic- GS Paper I – Geography + Art and Culture, Source- The Hindu)**

**Why in the news?**

- Researchers have recently reported that Pleistocene-era rock paintings dating back to 45,000-20,000 years ago in cave sites in southern Sulawesi, on the Indonesian island of Sulawesi, are weathering at an alarming rate in his report ‘‘**The effects of climate change on the Pleistocene rock art of Sulawesi’.**

**Key findings of the study**

- The researchers studied flakes of rock that have begun to detach from cave surfaces to find that salts in three of the samples comprise calcium sulphate and sodium chloride, which are known to form crystals on rock surfaces, causing them to break.
- The artwork made with pigments was decaying due to a process known as haloclasty, which is triggered by the growth of salt crystals due to repeated changes in temperature and humidity, caused by alternating wet and dry weather in the region.

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- Indonesia has also experienced several natural disasters in recent years, which have quickened the process of deterioration.

**Significance of the cave paintings**

- A team of Australian and Indonesian archaeological scientists, conservation specialists, and heritage managers examined 11 caves and rock-shelters in the **Maros-Pangkep region in Sulawesi.**
- The artwork in the area includes what is believed to be the world's oldest hand stencil (almost 40,000 years ago), created by pressing the hand on a cave wall, and spraying wet red-mulberry pigments over it.
- A nearby cave features the world's oldest depiction of an animal, a warty pig painted on the wall 45,500 years ago.
- The cave art of Sulawesi is much older than the prehistoric cave art of Europe.

## UNESCO heritage sites added in India

**(Topic- GS Paper I –Art and Culture, Source- The Hindu)**

**Why in the news?**

- Recently, six sites have been added to India's tentative list of UNESCO world heritage sites.

These sites includes

a. Ganga ghats in Varanasi, Uttar Pradesh
b. Temples of Kancheepuram, Tamil Nadu
c. The Satpura Tiger Reserve in Madhya Pradesh
d. The Maratha military architecture in Maharashtra
e. The Hire Bengal megalithic site in Karnataka
f. Bhedaghat-Lametaghat of Narmada Valley in Madhya Pradesh

According to the UNESCO World Heritage Centre, the six proposals were included in the list on April 13 2021.

**About World Heritage Site**

- UNESCO World Heritage Sites are designated specific locations such as forest areas, mountains, lakes, deserts, monuments, buildings, or cities, etc.
- These sites are officially recognised by the UN and the United Nations Educational Scientific and Cultural Organisation, also known as UNESCO.
- The list of World Heritage sites is maintained by World Heritage Programme which is administered by the UNESCO World Heritage Committee

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- This committee oversees these sites with the help of UNESCO.
- The objective of this program is to select and preserve such places of the world which are important for humanity in terms of world culture.
- UNESCO provides financial assistance to such sites under certain circumstances.

**About UNESCO World Heritage Committee**

- It is composed of 21 UNESCO member states which are elected by the UN General Assembly.
- These are areas of importance of cultural or natural heritage as described in the UNESCO World Heritage Convention, 1972.

**Criteria for Selection of World Heritage Sites**

- These criteria are explained in the World Heritage Convention, 1972.
- These criteria are regularly revised by the World Heritage Committee to reflect the evolution of the World Heritage concept itself.
- Before the revised Operational Guidelines, World Heritage sites were selected based on six cultural and four natural criteria.
- With the adoption of the revised Operational Guidelines, only one set **of ten criteria.**

**Tentative lists of Heritage Sites**

- All countries are required to submit their Tentative Lists of places which they consider to be a cultural or natural heritage of outstanding universal value and therefore suitable for inscription on the World Heritage List.
- Tentative Lists is not considered exhaustive and need to submit one year prior to the submission of any nomination.
- Countries are required to re-examine and re-submit their Tentative List at least every ten years.
- If any site is listed in World Heritage Sites, then it must be removed from the tentative list.

**Related Information**

- Recently, Jaipur received the UNESCO World Heritage City certificate

**Benefits of a World Heritage City Certificate**

- The status of World Heritage City boosts domestic and international tourism, strengthens the local economy and also provides employment to the people.
- The income of the handicrafts and handloom industry also gets the benefits of tourism.
- The government of India sent a proposal in August 2018 to declare Pink City as a UNESCO World Heritage Site.

**Note:**

- At present, India has 38 World Heritage Properties.
- Besides, India has 42(48 now) sites listed under Tentative List which is a prerequisite condition for inscription as World Heritage Site.
- **Italy has the highest numbers of World Heritage Sites in the world.**

## U.S. to waive sanctions on firm behind Russia's Nord Stream 2

**(Topic- GS Paper I –Geography, Source- The Hindu)**

**Why in the news?**

- Recently, the U.S. government will waive sanctions on the company behind Russia's Nord Stream 2 pipeline to Europe and its Chief Executive.

**What is Nord Stream 2?**

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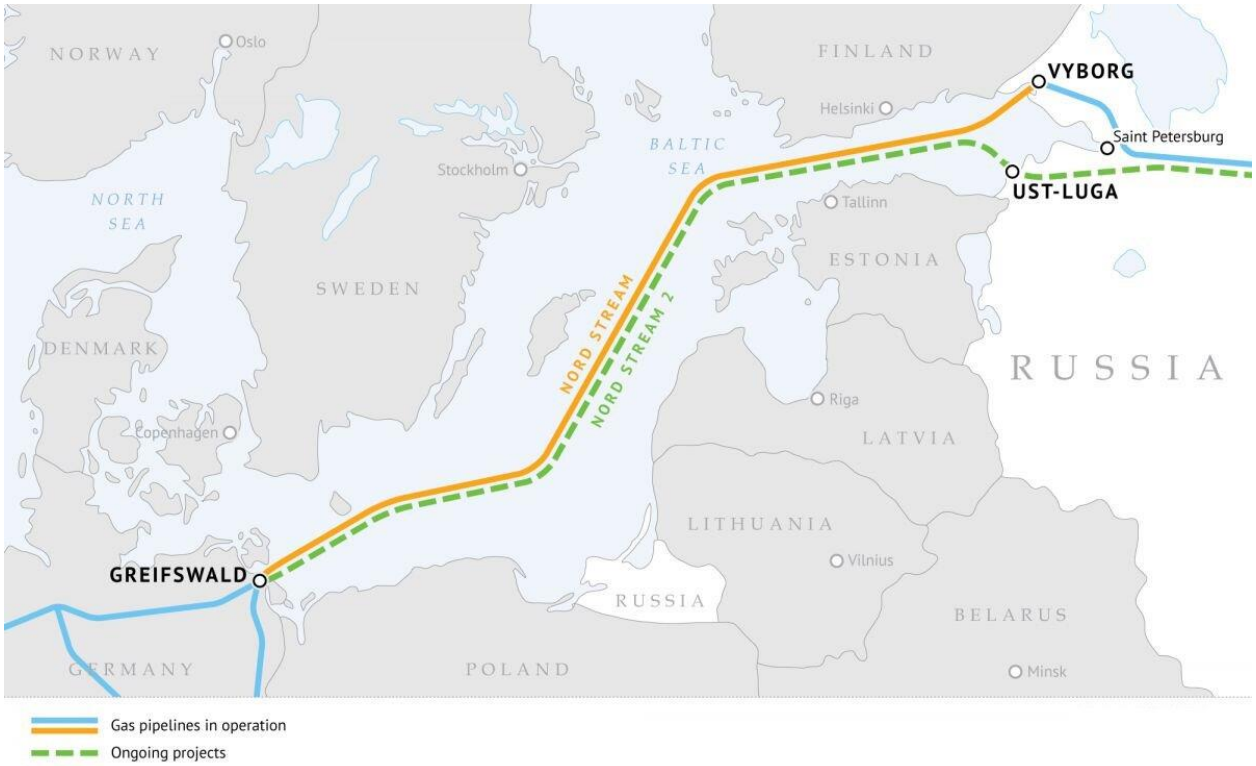


- It is a nearly constructed 1,200-kilometre pipeline from Russia to Germany via the Baltic Sea.
- It will run alongside the already constructed Nord Stream and will double the amount of gas being funnelled through the Baltics to 110 billion cubic meters per year.

**Benefits**

- It is intended to provide Europe with a sustainable gas supply while providing Russia with more direct access to the European gas market.
- Its proposed route enters the territorial waters and Exclusive Economic Zone (EEZ) of three other countries: Finland, Sweden and Denmark.
- National governments and local authorities will benefit economically from investment and employment in the pipeline.

**Related Information**

**About Baltic members**

- The Baltic States, also known as the Baltic countries, are the three countries in northern Europe on the eastern coast of the Baltic Sea: Estonia, Latvia and Lithuania.
- The Baltic States cooperate on a regional level in several intergovernmental organizations, principally through the Baltic Assembly.
- All three countries are members of the European Union, NATO and the Eurozone.
- Estonia and Latvia are also members of the OECD.

## Rain record in Delhi reason

**(Topic- GS Paper I –Geography, Source- The Hindu)**

**Why in the news?**

- The National Capita has recently recorded 60 mm rainfall in a 24-hour period on May 24 in 1976 under the impact of cyclonic storm 'Tauktae' and a western disturbance.

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- Normally, Delhi gets maximum of 30 mm or 40 mm (24-hour rainfall) in this month. The rain lasts only an hour or less.

**Related Information**

- **Light Rainfall** - Rainfall recorded below 15 mm is considered light.
- **Moderate Rainfall**- Rainfall recorded between 15 and 64.5 mm is moderate
- **Heavy Rainfall**- Rainfall recorded between 64.5 mm and 115.5 mm is heavy
- **Very heavy rainfall** - Rainfall recorded between 115.6 and 204.4 is very heavy.
- **Extremely heavy rainfall** - Anything above 204.4 mm is considered extremely heavy rainfall.

## Cyclone Yaas

**(Topic- GS Paper I –Geography, Source- TOI)**

**Why in the news?**

- Recently, the India Meteorological Department (IMD) has said that a low-pressure system could take birth within the next 48 hours and it holds the potential to intensify into a cyclone **'Yaas'** in the Bay of Bengal.
- This system will develop close to the north Andaman Sea around May 22 and reach either Odisha or West Bengal by the evening of May 26.

**About Cyclone Yaas**

- This cyclone will be the second to form in 2021 and the first over **the Bay of Bengal this year.**
- **Once the cyclone forms, it will acquire the name Yaas, given by Oman.**

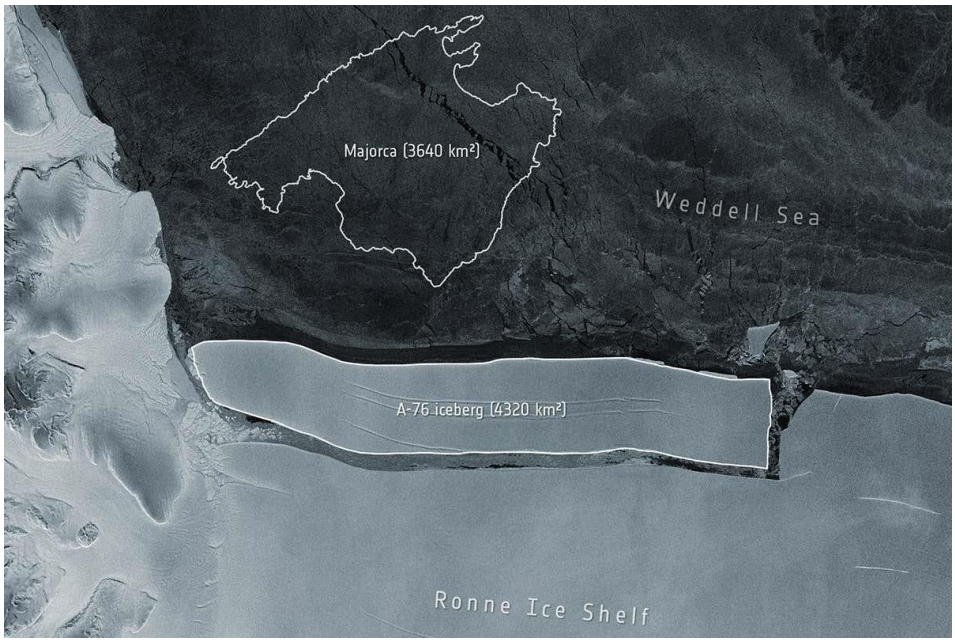
## A-76: World's largest iceberg breaks off from Antarctica

**(Topic- GS Paper I – Geography, Source- The Hindu)**

**Why in the news?**

- Recently, A-76- a huge ice block has broken off from western Antarctica into the Weddell Sea, becoming the largest iceberg in the world.
- It is the latest in a series of large ice blocks to dislodge in a region acutely vulnerable to climate change; although scientists said in this case it appeared to be part of a natural polar cycle.

**About A-76**

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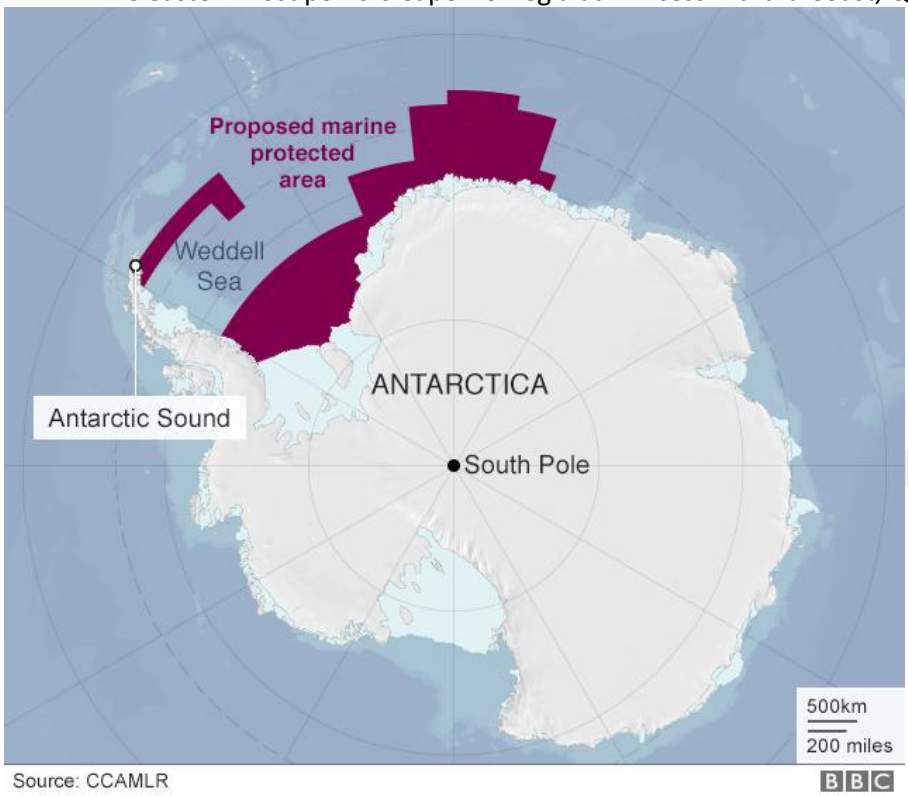
- A-76 was originally spotted by the British Antarctic Survey and the calving - the term used when an iceberg breaks off - was confirmed using images from the Copernicus satellite.
- It is slightly larger than the Spanish island of Majorca.
- The iceberg, measuring around 170 km long and 25 km wide, with an area of 4,320 sq km is now floating in the Weddell Sea.
- It joins previous world's largest title holder A-23A - approximately 3,880 sq. km. in size - which has remained in the same area since 1986.

**About Weddell Sea**

- The Weddell Sea is part of the Southern Ocean and contains the Weddell Gyre.
- Its land boundaries are defined by the bay formed from the coasts of Coats Land and the Antarctic Peninsula.
- The easternmost point is Cape Norvegia at Princess Martha Coast, Queen Maud Land.




Note:

- Icebergs form when hunks of ice break off from ice shelves or glaciers and begin to float in open water.

## Mount Nyiragongo

**(Topic- GS Paper I –Geography, Source- The Hindu)**

**Why in the news?**

- Recently the active volcano in Congo, Mount Nyaragongo has been erupted.
- The Indian Army contingent under the United Nations peace keeping mission (MONUSCO) assisted in protecting civilians and U.N. officials as well as assets during the evacuation.

**About Mount Nyiragongo**

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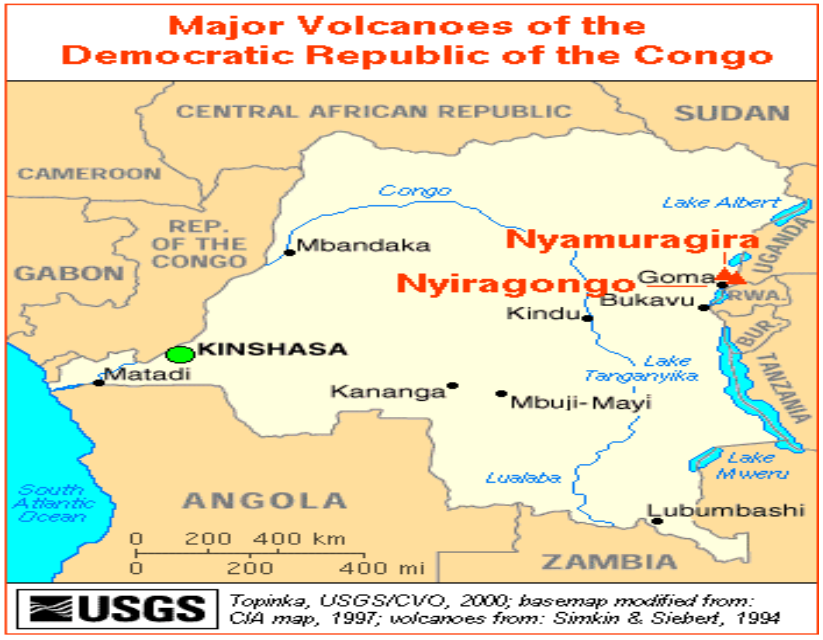


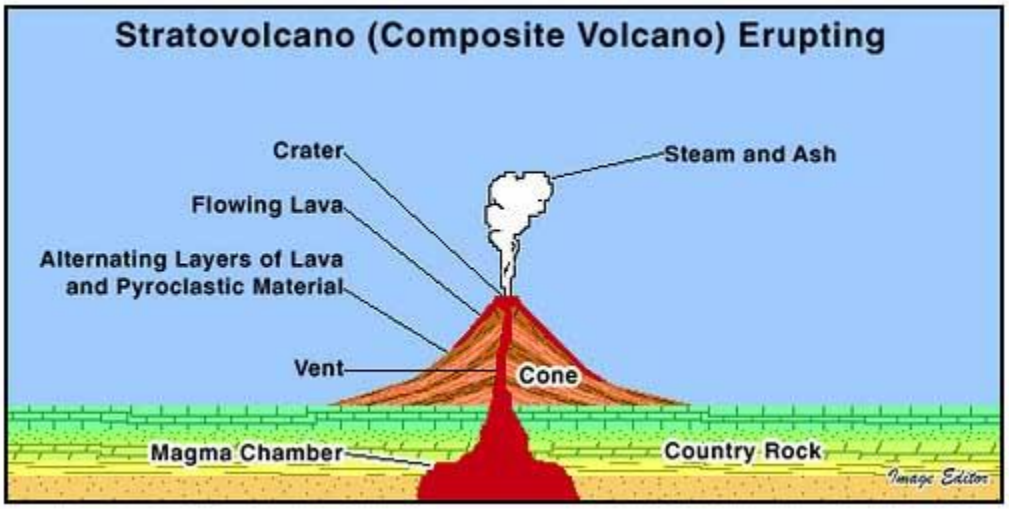

- It is an active stratovolcano with an elevation of 3,470 m in the Virunga Mountains associated with the Albertine Rift.
- It is located inside Virunga National Park, in the Democratic Republic of the Congo, about 12 km north of the town of Goma and Lake Kivu.
- **Mount Goma, the highest elevation point**.
- Nyiragongo and nearby Nyamuragira are together responsible for 40 per cent of Africa's historical volcanic eruptions.

**About Goma**

- Goma is a regional hub for many humanitarian agencies in the region, as well as the UN peacekeeping mission.
- Goma is home to many UN peacekeepers and aid workers, much of surrounding eastern Congo is under threat from myriad armed groups vying for control of the region's mineral resources.

**Related Information**

**About Stratovolcano**

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- It is a tall, conical volcano composed of one layer of hardened lava, tephra, and volcanic ash.
- These volcanoes are characterized by a steep profile and periodic, explosive eruptions.
- The lava that flows from them is highly viscous, and cools and hardens before spreading very far.

## Belarus

**(Topic- GS Paper I – Geography, Source- The Hindu)**

**Why in the news?**

- Recently the European Union is considering shunning Belarus's airspace and banning national carrier Belavia from EU airports after Belarusian authorities scrambled a warplane and forced a Ryanair jetliner to land in Minsk.

**About Belarus**

- It is a country of Eastern Europe.
- Until it became independent in 1991, Belarus, formerly known as Belorussia or White Russia, was the smallest of the three Slavic republics included in the Soviet Union (the larger two being Russia and Ukraine).

## Iran inspection agreement extended by one month: IAEA

**(Topic- GS Paper II –International Organisation, Source- The Hindu)**

**Why in the news?**

- The UN nuclear watchdog (IAEA) and Iran have agreed to extend an understanding to monitor Tehran's activities by one month while talks in Vienna try to save the 2015 nuclear deal.

**More on the news**

- According to the International Atomic Energy Agency (IAEA) Director General Rafael Grossi , the equipment and the verification and the monitoring activities that we agreed will continue as they are now for one month expiring on June 24th, 2021.
- Iran in late February limited the IAEA's access to nuclear sites it has been monitoring as part of the 2015 landmark deal.

**About the International Atomic Energy Agency (IAEA)**

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- It is an international organization that seeks to promote the peaceful use of nuclear energy and to inhibit its use for any military purpose, including nuclear weapons.
- It is entrusted with the task of upholding the principles of the Nuclear Non-Proliferation Treaty of 1970.

**Establishment**

- It was established as an autonomous organisation on July 29, 1957, at the height of the Cold War between the U.S. and the Soviet Union.

**Headquarter**

- It headquarter is at **Vienna, Austria**.

**Objective**

- The Agency works with its Member States and multiple partners worldwide to promote safe, secure and peaceful use of nuclear technologies.
- In 2005, it was awarded the Nobel Peace Prize for their work for a safe and peaceful world.

## Why Bay of Bengal is warmer by 2 degree ?

**(Topic- GS Paper I – Geography, Source- The Hindu)**

**Why in the news?**

- Recently, Climate scientists said that the Bay of Bengal, where Cyclone 'Yaas' has formed, is at least two degrees warmer than what is normal for this time of the year.
- The north Bay of Bengal is exceptionally warm with temperatures up to 32 degrees Celsius.

**More on the news**

- Cyclones in the Bay of Bengal are not unexpected in May and result from increased ocean surface temperatures.
- The formation of storms in this period is favourable for drawing in the monsoon into the Andamans and subsequently to the Kerala coast.
- Researchers have pointed to trends that suggest a relative decrease in the number of cyclones in the Bay of Bengal and a rise in the Arabian Sea.
- Tropical cyclones in the Indian neighbourhood begin as depressions or a gradual build-up of warm air and pockets of low pressure.
- About 35% of such formations intensify to cyclones and only 7% intensify to very severe cyclones.

**Reasons Behind this temperature Increase**

- Sea surface temperatures and humidity both directly correlate with chances of cyclone formation; the Bay of Bengal is a more likely target because it gets higher rainfall, and because the sluggish winds around it keep temperatures relatively high.
- Warm air currents enhance this surface temperature and aid the formation of cyclones.

**About Cyclone Yaas**

- This cyclone is the second to form in 2021 and the first over **the Bay of Bengal this year.**
- **Cyclone Yaas name has been given by Oman.**

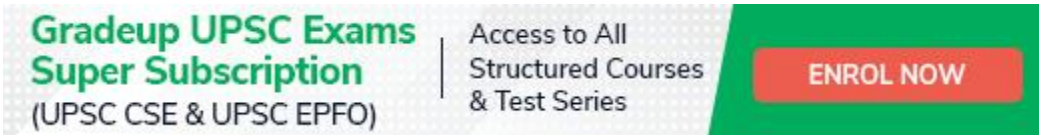
**Previous Cyclone in West Bengal**

**Fani**

- Cyclone Fani was a super cyclone that ravaged Odisha coast in 2019.
- It is not just a severe cyclone but an "extremely severe cyclone"which was the first severe, cyclonic storm to have formed in April in India's oceanic neighbourhood since 1976.

**Amphan**

- Amphan was a super cyclone that ravaged West Bengal in March 2020.



- It was the strongest storm that hit India's eastern coast since the super cyclone of 1999, which struck Paradip, Odisha.

## Tulsa race massacre

**(Topic- GS Paper I – World History, Source- Indian Express)**

**Why in the news?**

- US President Joe Biden will next week visit the city of **Tulsa in Oklahoma state**, in honour of the 100th anniversary of the Tulsa race massacre, known among the worst incidents of racial strife in American history.

**About the Tulsa race massacre**

- The massacre took place in Greenwood, a thriving Black-dominated neighbourhood that had sprung up at the start of the 20th century on the northern side of Tulsa, separated by a railroad track from the city's White-dominated part on the south.
- Greenwood is known as the "**Black Wall Street"**.
- Greenwood was a favoured destination for African Americans from the Southern US states– where laws actively upheld racism and disempowered Black people– to come and seek upward mobility.

**What triggered the violence?**

- On May 30, 1921, a Black man named Dick Rowland was imprisoned for allegedly assaulting a White woman.
- After his arrest, an "inflammatory report" published in the May 31 edition of the Tulsa Tribune spurred a confrontation between Black and White armed mobs, as per the museum's website.
- Some of the members of the mobs armed themselves to protect Rowland, while others wanted to lynch him.
- By the morning of June 1, 1921, heavily armed White rioters looted and burned down the Greenwood area, leaving over 300 dead in the violence.

**Note:** Greenwood is a historic freedom colony in Tulsa, Oklahoma.

## Van Gujjars Tribes

**(Topic- GS Paper I – Art and Culture, Source- The Hindu)**

**Why in the news ?**

- Recently, the Uttarakhand High Court has reprimanded the State government for stopping some Van Gujjar families on the way to Govind Pashu Vihar National Park in Uttarkashi district.

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**About Van Gujjars Tribes**

- They are the forest-dwelling nomadic community inhabiting the foothills of Himalayan States such as Uttarakhand, Himachal Pradesh and Jammu and Kashmir.
- They usually migrate to grasslands in the upper Himalayas during summers to feed their cattle, their primary source of livelihood and subsistence.

**Related Information**

**About Govind Pashu Vihar National Park**

- It is located in the Uttarkashi district of the state of Uttarakhand.
- The park lies in the higher reaches of the Garhwal Himalayas.
- The park was established as a Wildlife Sanctuary in the year of 1955.
- It was declared as National Park in the year of 1990.
- The park was established to protect the **endangered species of Snow Leopards.**
- The park outlines the higher catchments of River Tons that is the mainly significant branch of Yamuna River in its higher reaches.

## Mandovi river

**(Topic- GS Paper I – Geography, Source- The Hindu)**

**Why in the news?**

- Recently, National Institute of Oceanography has found that river showed significant improvement during the Covid-19 lockdown in 2020 in term of Colored dissolved organic matter (CDOM) absorption when the anthropogenic activities were minimal.

**About Mandovi River**

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- The Mandovi River is also known as Mahadayi or Mhadei River.
- It is described as the lifeline of the Indian state of Goa.
- It is a west-flowing river, originates in Bhimgad Wildlife Sanctuary (Western Ghats), Belagavi district of Karnataka.
- It is joined by a number of streams to form the Mandovi which is one of two major rivers (the other one is Zuari River) that flows through Goa.
- Mandovi joins with the Zuari at a common creek at Cabo Aguada, forming the Mormugao harbour.

**Kalasa-Banduri Nala Project**

- It is undertaken by the Government of Karnataka to improve drinking water supply to the three districts of Belagavi, Dharwad, and Gadag.
- It involves building across Kalasa and Banduri, two tributaries of the Mahadayi River to divert water to the Malaprabha River.

**Related Information**

**About Colored Dissolved Organic Matter (CDOM)**

- It is also known as chromophoric dissolved organic matter or colored dissolved organic matter.
- It cover the parameter that can be measured in aquatic environments as a product of decaying material.
- It is largely a subset of **Dissolved Organic Matter.**

**Significance of Colored Dissolved Organic Matter in water bodies**

- It is measured because of its value as an indicator of all the constituents floating around water bodies, regardless of their size or location.
- It can have effects on all aquatic life in a water body.
- It reduces transparency, traps heat, binds with metals and fuels respiration.
- It impacts on levels of dissolved oxygen in a water body.

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# GS PAPER-2
## (POLITY & GOVERNANCE & INTERNATIONAL ISSUES)

### Congo president declares state of siege
**(Topic- GS Paper II–International Relation, Source- The Hindu)**

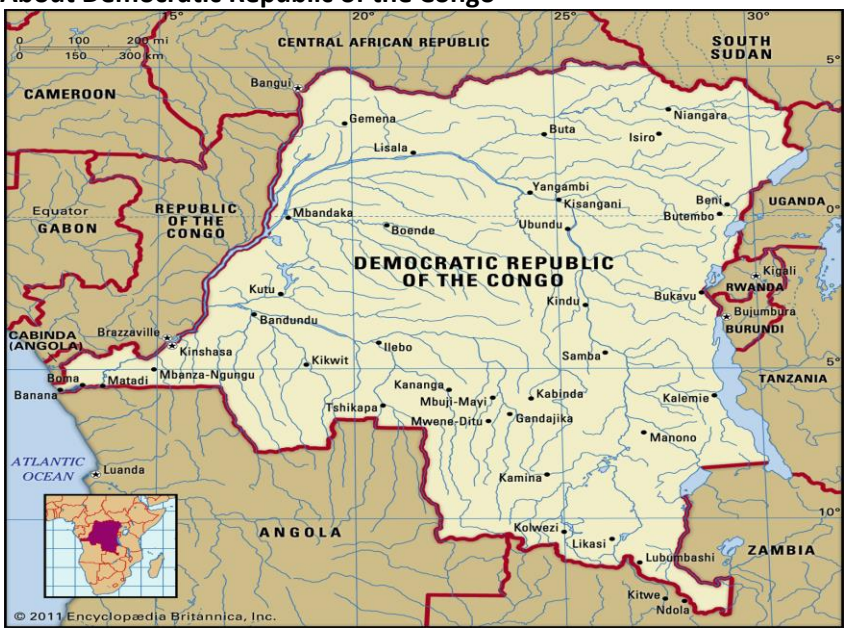
**Why in the news?**

- Recently Congolese President Felix Tshisekedi has declared a state of siege over the worsening violence in the eastern provinces of Ituri and North Kivu.

**More on the news**

- A Ugandan insurgent faction active in eastern Congo since the 1990s called the Allied Democratic Forces (ADF) is believed to be responsible for much of the recent bloodshed.
- A surge in attacks by armed militias and inter-communal violence in eastern Democratic Republic of Congo have killed over 300 people since the start of the year as government troops and U.N. peacekeepers struggle to stabilize the mineral-rich territory.
- The violence has fuelled a humanitarian crisis with more than 1.6 million people displaced in Ituri out of a total population of 5.7 million people, UNICEF.

**About Democratic Republic of the Congo**




- The Democratic Republic of the Congo is also known as Congo-Kinshasa a country in Central Africa.
- It is the second-largest in all of Africa (after Algeria), and the 11th-largest in the world.
- It is a member of the United Nations, Non-Aligned Movement, African Union, and COMESA.

### Inter-ministerial Empowered Group (EG2)
**(Topic- GS Paper II–Governance, Source- Indian Express)**

**Why in the news?**

- Recently the consignment of about 28 tonnes of equipment sent by the French government to India was delivered to the Indian Red Cross Society at the Delhi airport and then transferred to the Centre.

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- The process on how to route the funding, which is handed over by the foreign governments through the Indian Red Cross to the Ministry of Health, is being coordinated by an **Empowered Group of Ministers** and officials, which is fielding the requests from the various State governments.

**About the inter-ministerial Empowered Group (EG2)**

- It was constituted during the Covid pandemic in March - 2020 to ensure the availability of essential medical equipment including medical oxygen to the affected states.

**Members**

- Currently it works under the chairmanship of Dr Guruprasad Mohapatra, Secretary, Department for Promotion of Industries and Internal Trade (DPIIT).
- It also consisting of senior officers from various ministries and departments including the (MOHFW), Ministry of Textiles, Ministry of AYUSH, Ministry of MSME, etc.

**Significance**

- For the past year, the EG2 has been continuously monitoring and facilitating the smooth supply of essential medical equipment including medical oxygen to the affected states and addressing challenges that arise from time to time.
- The Empowered Group is monitoring the situation of demand and supply of medical oxygen continuously to ensure that all necessary steps are taken to support the uninterrupted supply of medical oxygen.

## Chief Minister Chiranjeevi Health Insurance Scheme

**(Topic- GS Paper II–Governance, Source- AIR)**

**Why in the new?**

- Recently, the Rajasthan government has announced that implementation of the Chief Minister Chiranjeevi Health Insurance Scheme.

**About Mukhyamantri Chiranjeevi Swasthya Bima Yojana**

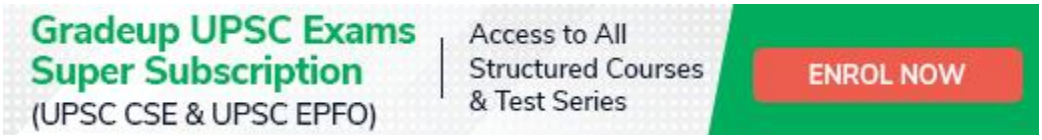
- It is an ambitious health insurance scheme of the Rajasthan government.
- It is the first health insurance initiative from the Rajasthan Government that gives cashless treatment in the registered hospitals.
- It aims to provide annual cashless insurance cover of Rs 5 lakh to every family of the state.
- The registration is free for those who are covered under the National Food Security Act (NFSA), Socio Economic Caste Census (SECC), Small and marginal farmers, contractual workers and those who have received COVID-19 ex-gratia.
- The applicants who do not fall in these categories will have to pay Rs 850 as 50 per cent of the annual premium.

**Main Eligibility**

- The main eligibility criterion is to be a permanent resident of the Rajasthan state.

**Significance**

- The cost of tests, medical expenses, and a related package of 15 days after getting discharged from the hospital is also covered under the scheme.
- The health insurance cover is provided to all the families under Below-Poverty Line, NFSA, and Socio Economic and Caste **Census** 2011 (SECC) categories.
- The beneficiaries of Ayushman Bharat Mahatma Gandhi Rajasthan Swasthya Bima Yojana can also get covered under the scheme.
- The small/marginal farmers and contractual workers can also get covered free of cost



## Myanmar refugees can approach UNHCR

**(Topic- GS Paper II–International Organisation, Source- The Hindu)**

**Why in the news?**

- Recently, the High Court of Manipur allowed seven Myanmar nationals, who entered India secretly following the February military coup, to travel to New Delhi to seek protection from the United Nations High Commissioner for Refugees (UNHCR).

**India's Refugee Policy**

- India lacks specific legislation to address the problem of refugees, in spite of their increasing inflow.
- **The Foreigners Act, 1946,** fails to address the peculiar problems faced by refugees as a class.
- It also gives unbridled power to the Central government to deport any foreign citizen.
- India is not a party to the 1951 Refugee Convention and its 1967 Protocol, the key legal documents pertaining to refugee protection.

**About United Nations Refugee Convention 1951**

- It is a United Nations multilateral treaty that defines who is a refugee, and sets out the rights of individuals who are granted asylum and the responsibilities of nations that grant asylum.
- It also set out which people do not qualify as refugees, such as war criminals.
- It grants certain rights to people fleeing persecution because of race, religion, nationality, affiliation to a particular social group, or political opinion.
- The Convention also provides for some visa-free travel for holders of travel documents issued under the convention.
- The Convention builds on Article 14 of the Universal Declaration of Human Rights 1948, which recognizes the right of persons to seek asylum from persecution in other countries.
- **India is not a member of this convention.**

**About United Nations High Commissioner for Refugees**

- United Nations High Commissioner for Refugees (UNHCR) is a UN Refugee Agency and a global organization dedicated to saving lives, protecting the rights and building a better future for refugees, forcibly displaced communities and stateless people.
- It was created in 1950 to help millions of Europeans who had fled or lost their homes.
- It is headquartered at **Geneva, Switzerland**.

## Operation Samudra Setu-II

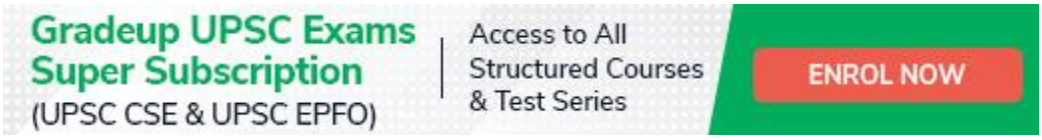
**(Topic- GS Paper II–International Relations, Source- The Hindu)**

**Why in the news?**

- The Indian Navy has recently launched operation 'Samudra Setu-II.

**About Operation Samudra Setu-II**

- The operation is carried out for shipment of liquid medical oxygen-filled cryogenic containers and associated medical equipment from various countries.
- As a part of operation 'Samudra Setu II', seven Indian Naval ships viz. Kolkata, Kochi, Talwar, Tabar, Trikand, Jalashwa, and Airavat have been deployed for shipment of liquid medical oxygen-filled cryogenic containers and associated medical equipment from various countries."
- **INS Kolkata and INS Talwar** were the first batch of ships that were immediately diverted for the task and entered the port of Manama in Bahrain on April 30.
- **INS Kolkata** has proceeded to Doha, Qatar, for embarking medical supplies and will subsequently head to Kuwait for embarking Liquid Oxygen tanks.



- **INS Airavat** is scheduled to enter Singapore for embarking Liquid oxygen tanks and INS Jalashwa is standing by in the region to embark medical stores at short notice.
- The second batch of ships comprising Kochi, Trikand and Tabar missions deployed in Arabian Sea has also been diverted to join the national effort.

## Local issues crucial to voters across States: survey

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently a special post-poll survey conducted by the Lokniti-CSDS, according to which the "local" was of utmost importance in the decision-making of voters in the Assembly elections.

**Key highlights of the reports**

- Each of the surveyed States had specific local variables that swayed and determined the choices of the respondents.
- The voters were determining their electoral choice for State and national elections distinctly.
- One national issue was particularly resonant across States - the Citizenship Amendment Act.
- In all four States, the opposition to the CAA was higher than support for it.

**Methodology used**

- The findings presented here are from post-poll surveys conducted in Assam, Kerala, Tamil Nadu and West Bengal by the Lokniti programme of CSDS, Delhi.

**Sampling design**

- The sampling design adopted was multi-stage systematic random sampling.
- The Assembly constituencies were randomly selected using the probability proportional to size method.
- Thereafter, four polling stations within each of the sampled constituencies were selected using the systematic random sampling method.
- Within each polling station, 40 voters were randomly sampled from the electoral roll using the systematic random sampling method.
- The interviews of electors were conducted face-to-face at their homes after voting had taken place in their area.
- The questionnaire designed for conducting the interview was a standardised semi-structured one and was translated into the local language/s.
- In Assam, the interviews were conducted in Assamese and Bengali, in Kerala in Malayalam, in Tamil Nadu in Tamil, and in West Bengal in Bengali.

## India's Oil Imports From OPEC Down To 20-Year Low

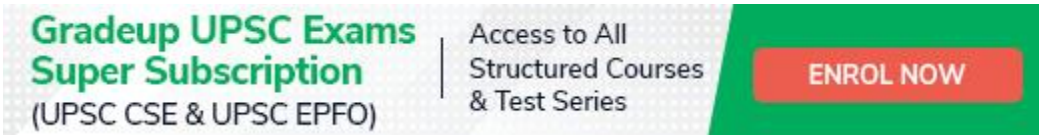
**(Topic- GS Paper II–International Organisation, Source- Indian Express)**

**Why in the news?**

- Recently, the share of India's oil imports from OPEC countries dropped to its lowest in at least 20 years in the fiscal year ending March 2021.

**India's Oil Imports:**

- India's overall oil imports fell by nearly 12% in the Fiscal Year 2021 compared to the previous fiscal year.
- Of all those imports, the share of OPEC reduced to 72% from 80%.
- It is the lowest share of crude oil imports from OPEC since at least Fiscal Year (FY)-2002.
- Further, India has bought more US and Canadian oil at the expense of reduction from Organization of the Petroleum Exporting Countries (OPEC) countries.



- US and Canadian oil accounted for about 7% and 1.3% respectively of India's imports compared to 4.5% and 0.60% a year earlier.

**About Organisation of the Petroleum Exporting Countries (OPEC)**

- It is a permanent, intergovernmental organization, headquartered in Vienna, Austria.

**Founding Members**

- The Organization of the Petroleum Exporting Countries (OPEC) was founded in Baghdad, Iraq, with the signing of an agreement in September 1960 by five countries namely Islamic Republic of Iran, Iraq, Kuwait, Saudi Arabia and Venezuela. They were to become the Founder Members of the Organization.
- Currently, the **Organization has a total of 14 Member Countries**.

**Objective**

- To coordinate and unify petroleum policies among Member Countries, in order to secure fair and stable prices for petroleum producers;
- An efficient, economic and regular supply of petroleum to consuming nations; and
- OPEC membership is open to any country that is a substantial exporter of oil and which shares the ideals of the organization.

**About OPEC+**

- OPEC+ refers to the alliance of crude producers, who have been undertaking corrections in supply in the oil markets since 2017.
- OPEC plus countries include Azerbaijan, Bahrain, Brunei, Kazakhstan, Malaysia, Mexico, Oman, Russia, South Sudan and Sudan.
- The OPEC and non-OPEC producers first formed the alliance at a historic meeting in Algiers in 2016.
- The aim was to undertake production restrictions to help revive a swinging market.

## India –UK virtual Summit

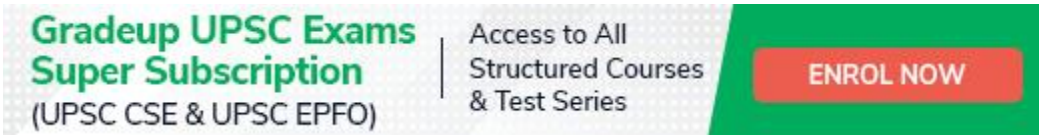
**(Topic- GS Paper II–International Relation, Source- The Hindu)**

**Why in the news?**

- Recently India and the UK have adopted an ambitious '**Roadmap 2030'** during the virtual bilateral summit.

**Key highlights of the Summit**

- The '**Roadmap 2030'** will provide a framework for UK-India relations across health, climate, trade, education, science and technology, and defence.
- It will also elevate bilateral ties to a "Comprehensive Strategic Partnership"
- Launched Enhanced Trade Partnership and announced plans to negotiate a comprehensive Free Trade Agreement (FTA), including consideration of an interim trade agreement to deliver early gains.
- The UK's Prime Minister announced a series of commercial trade and investment deals to create 6,500 jobs in his country.
- The UK's Prime Minister also declared £1 billion worth trade and investment deals between the two sides that also included software giant Infosys.
- Both sides agreed to significant new cooperation on Maritime Domain Awareness, which includes new agreements on maritime information sharing, an invitation to the UK to join India's Information Fusion Centre in Gurgaon.
- The two countries are also working to conclude a Logistics Memorandum of Understanding that will enhance joint ability to tackle shared challenges.



**Related Information**

**About Indian Information Fusion Center - Indian Ocean Region (IFC-IOR)**

- It was set up within the premises of the IMAC to coordinate with regional countries on maritime security and act as a regional repository of maritime data.

## Maratha quota unconstitutional, violates right to equality, says SC

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently, a five-judge Constitution Bench of the Supreme Court has unanimously declared a Maharashtra law, which provides reservation benefits to the Maratha community taking the quota limit in the State in excess of 50%, unconstitutional.

**More on the news**

- The Bench, led by Justice Ashok Bhushan, found there was no "exceptional circumstances" or "extraordinary situation" in Maharashtra, which required the State government to break the 50% ceiling limit to bestow quota benefits on the Maratha community.
- The Supreme Court held that a separate reservation for the Maratha community violated Articles 14 (right to equality) and 21 (due process of law).

**Sets aside HC verdict**

- The Supreme Court struck down the findings of the **Justice M.G. Gaikwad Commissio**n, which led to the enactment of the Maratha quota law, and set aside the Bombay High Court judgment which validated the Maharashtra State Reservation for Socially and Educationally Backward Classes (SEBC) Act of 2018.
- The High Court, in June 2019, reduced the quantum of reservation for Marathas from the 16% recommended by the Gaikwad Commission to 12% in education and 13% in employment.
- **The Supreme Court concluded that even the reduced percentages were ultra vires.**

**Related Information**

**Indra Sawhney V/s Union of India (1992)**

- In this case, the Supreme Court examined the scope and extent of Article 16(4).
- The court sustained the constitutional validity of 27% reservation for the OBCs with certain conditions (like total reservation should not exceed 50%, exclusion of creamy layer, no reservation in promotion).
- **In this case, 'Rule of Law' was added to the basic features of the constitution.**
- The Indira Sawhney judgment had categorically said "50% shall be the rule, and only in certain exceptional and extraordinary situations for bringing far-flung and remote areas population into mainstream the said 50% rule can be relaxed".

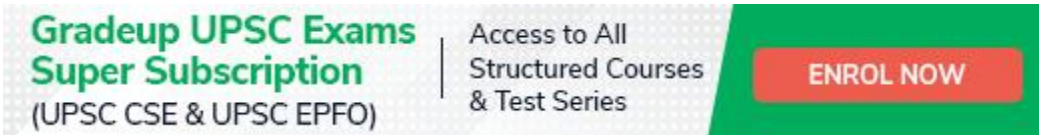
**Related Information**

**National Commission for Backward Classes**

- Recently, the bench also asked states to respond to a 2018 Constitution (102nd amendment) Act brought about by Parliament, which gave constitutional recognition to National Commission for Backward Classes.

**About National Commission for Backward Classes (NCBC)**

- National Commission for Backward Classes (NCBC) established on August 14, 1993, as a statutory body.
- But now, the 102nd Constitution Amendment Act, 2018 provides constitutional status to the National Commission for Backward Classes (NCBC).
- This Commission was formed as an initiative to investigate the conditions and difficulties of the socially and educationally backward classes and thus make appropriate recommendations.



**Background**

- The National Commission for Backward Classes (NCBC) was an **outcome of the Indra Sawhney case (Mandal Commission) of 1992.**
- In Indra Sawhney case of 1992, the Supreme Court had directed the government to create a permanent body to entertain, examine and recommend the inclusion and exclusion of various Backward Classes for benefits and protection.
- Previously the two Backward Class Commissions were appointed in the 1950s and 1970s under Kaka Kalelkar and B.P. Mandal respectively.

**Constitutional Provision**

- 102nd Constitution Amendment Act inserted **new Articles 338 B and 342 A.**
- The amendment also brings about changes in Article 366.
- Article 338B provides authority to NCBC to examine complaints and welfare measures regarding socially and educationally backward classes.
- Article 342(A) introduces greater transparency as it is made mandatory to take the concurrence of Parliament for adding or deleting any community in the backward list.

**Composition**

- The National Commission for Backward Classes consists of five regulatory members: the Chairperson, Vice-Chairperson and three other members with a tenure period of three years.
- The conditions of service and tenure of office of the Chairperson, Vice Chairperson and other Members are determined by the President.

## Tamil Nadu: New Assembly will have more MLAs facing criminal cases

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently the Association for Democratic Reforms has released a data on the average worth of the assets of Members of the Legislative Assembly and the percentage of legislators with criminal cases of **Tamil Nadu.**

**Key findings**

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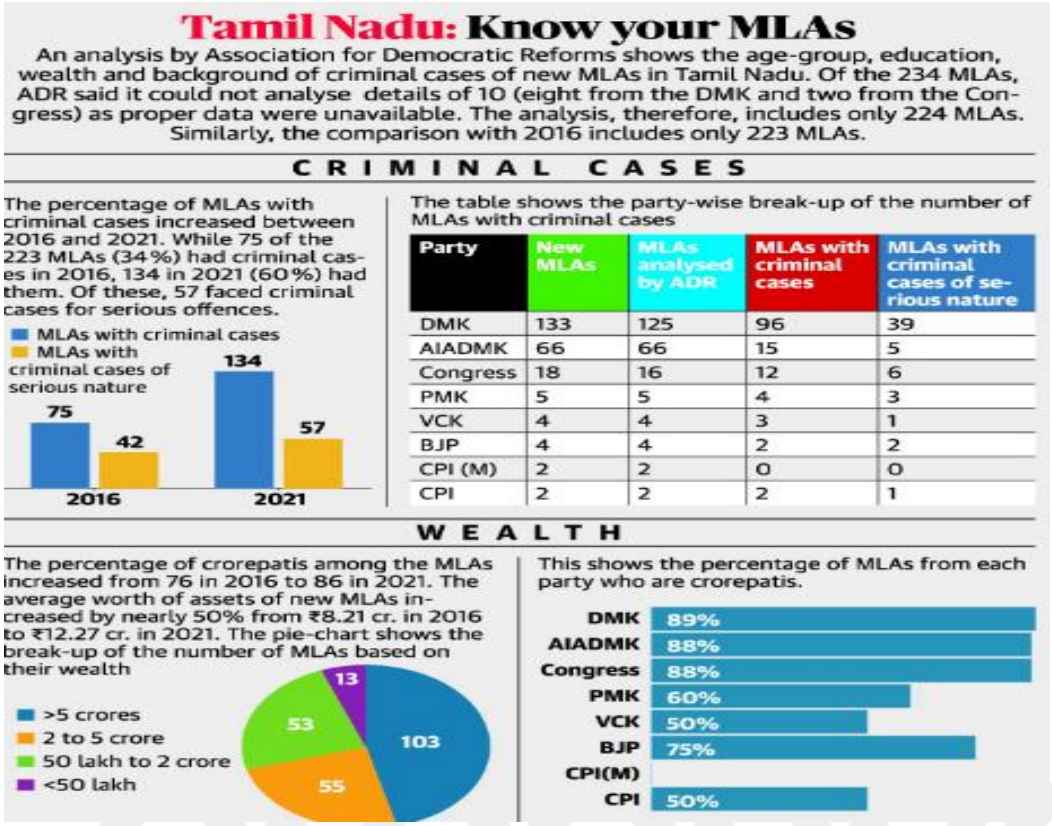


- According to the analysis, while 34% of the elected MLAs were facing criminal cases in 2016, it increased to 60% in 2021.
- In absolute numbers, at least 134 MLAs elected in 2021 faced criminal cases, of which 57 had criminal cases for offences of a serious nature.
- ADR's analysis included only 224 of the 234 MLAs. Details of eight MLAs from the DMK and two from the Congress were not included in the analysis due to lack of availability of proper data.

**85% crorepatis**

- More than 85% of the elected MLAs are crorepatis, compared to 76% in 2016. Consequently, the analysis showed that the average worth of assets of MLAs increased by nearly 50% from ₹8.21 crore in 2016 to ₹12.27 crore in 2021.

**Legal Aspect of Disqualification of Criminal Candidates**

- In this regard, Indian Constitution does not specify as to what disqualifies a person from contesting elections for the Parliament, Legislative assembly or any other legislature.
- The **Representation of Peoples Act 1951** mentions the criteria for disqualifying a person for contesting an election of the legislature.
- **Section 8** of the act, i.e. disqualification on conviction for certain offences, according to which an individual punished with a jail term of more than two years cannot stand in an election for six years after the jail term has ended.
- The law does not bar individuals who have criminal cases pending against them from contesting elections therefore the disqualification of candidates with criminal cases depends on their conviction in these cases.

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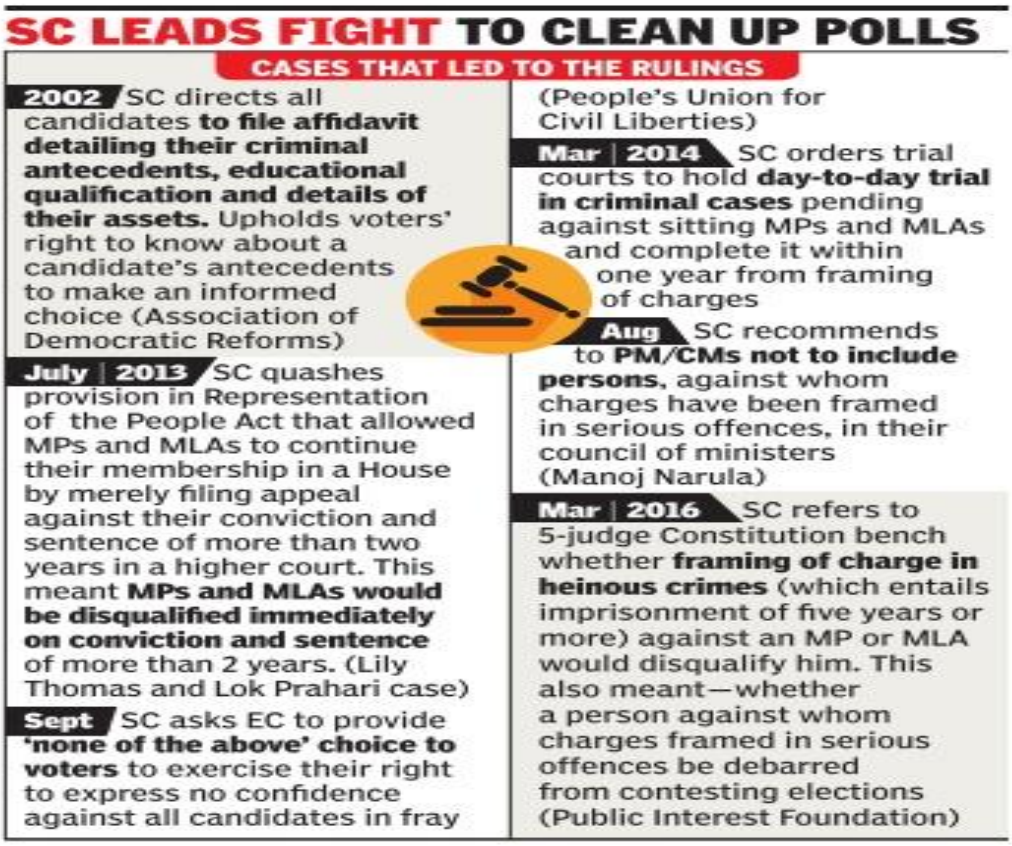


## Only President can pick backward classes, says SC, upholds 102nd amendment

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently, the Supreme Court by a majority declared that only the President (read the Centre) can take decisions on declaring socially and educationally backward communities for granting reservation and upheld the 102nd constitutional amendment denuding the power of states in this regard.
- A five-judge Constitution bench was unanimous on the validity of the 102nd constitutional amendment but differed on its implication for recognising socially and educationally backward classes (SEBCs).

**Observation of Court**

- State governments have been expanding the list of SEBCs, the official jargon for "OBC status", which entitles the recipient community to quota benefits, and the verdict means states will now be restricted to making recommendations to the Centre in favour of the "aspiring" backwards.
- The response of the Centre to the verdict could be interesting.
- It had said the power to identify SEBCs lies with Parliament only with reference to the central list and states can have separate lists.
- "By introduction of Articles 366 (26C) and 342A through the 102nd amendment, the President alone, to the exclusion of all other authorities, is empowered to identify SEBCs.
- It also included them in a list to be published under Article 342A (1), which shall be deemed to include SEBCs in relation to each state and Union territory for the purposes of the Constitution.

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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.
- The 102nd amendment was brought to give constitutional status to the National Commission for Backward Classes and Article 366(26C) and 342-A was introduced as per which the President can notify a class as SEBC.

**For More Information Refer DCA - 06-05-2021**

## Permanent Structured Cooperation (PESCO) defense initiative.

**(Topic- GS Paper II–International relation, Source- Indian Express)**

**Why in the news?**

- Recently, the Council of the European Union has approved inviting the United States, Canada and Norway to participate in the bloc's Permanent Structured Cooperation (PESCO) defense initiative.
- Canada, Norway and the United States of America will be the first third states to be invited to participate in a PESCO project.

**About Permanent Structured Cooperation**

- The Permanent Structured Cooperation (PESCO) in the area of security and defence policy was established by a Council decision on 11 December 2017, with 25 EU Member States.
- It offers a legal framework to jointly plan, develop and invest in shared capability projects, and enhance the operational readiness and contribution of armed forces.

**Aims**

- The participating Member States' aim is to collaboratively develop a coherent full spectrum force package and make the capabilities available to the following Member States for national and multinational (EU CSDP, NATO, UN, etc.) missions and operations.

**Secretariat**

- **European Defence Agency (EDA) i**s part of the PESCO secretariat (together with the European External Action Service, including the European Union Military Staff)

**Funding**

- PESCO projects are eligible for co-funding from the EU's budget – through the European Defence Fund (EDF) which serves as an incentive for cooperation.

**Significance**

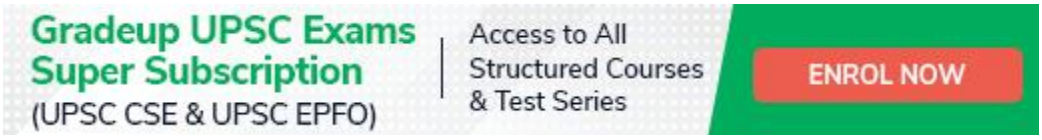
- It serves as a platform where PESCO participating Member States nations can identify, assess and consolidate possible projects to make sure they respond to capability gaps and priorities identified in the Capability Development Plan (CDP).
- **European Defence Agency** also facilitates and supports the PESCO project implementation, at the request of Member States, and ensures there is no duplication of efforts, including with NATO.
- Furthermore, it plays a leading role in the annual assessment of PESCO nations' contributions and respect of the binding commitments.

## Union Cabinet approves India-UK migration and mobility partnership

**(Topic- GS Paper II–International relation, Source- Hindustan Times)**

**Why in the news?**

- The Union Cabinet has recently approved memorandum of understanding (MoU) between India and the United Kingdom on migration and mobility partnership.



**Key highlights**

- The MoU is aimed at liberalising issuance of visas promoting mobility of students, researchers and skilled professionals and strengthen cooperation on issues related to irregular migration and human trafficking between the two sides, read an official release.
- It would benefit Indian students, academics, and researchers, migrants for professional and economic reasons and those willing to contribute through various projects to the economic development of both countries.
- It can support the innovation ecosystem in both countries by facilitating free flow of talent.

**Increase Employment**

- The new migration partnership will see both countries benefit from a new scheme for young Indian and British professionals to live and work in one another's countries, thereby boosting work visas for Indian nationals and enhancing migration cooperation between the two nations.
- The agreement will allow thousands of those aged between 18 and 30 years old in India and the UK to work and live in each other's country for up to two years.

## Global Report on Food Crises

**(Topic- GS Paper II–Social Issue ( Important Report), Source- Indian Express)**

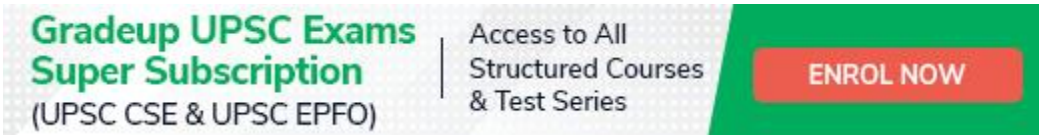
**Why in the news?**

- Recently, the United Nation has released the report of **Global Report on Food Crises.**

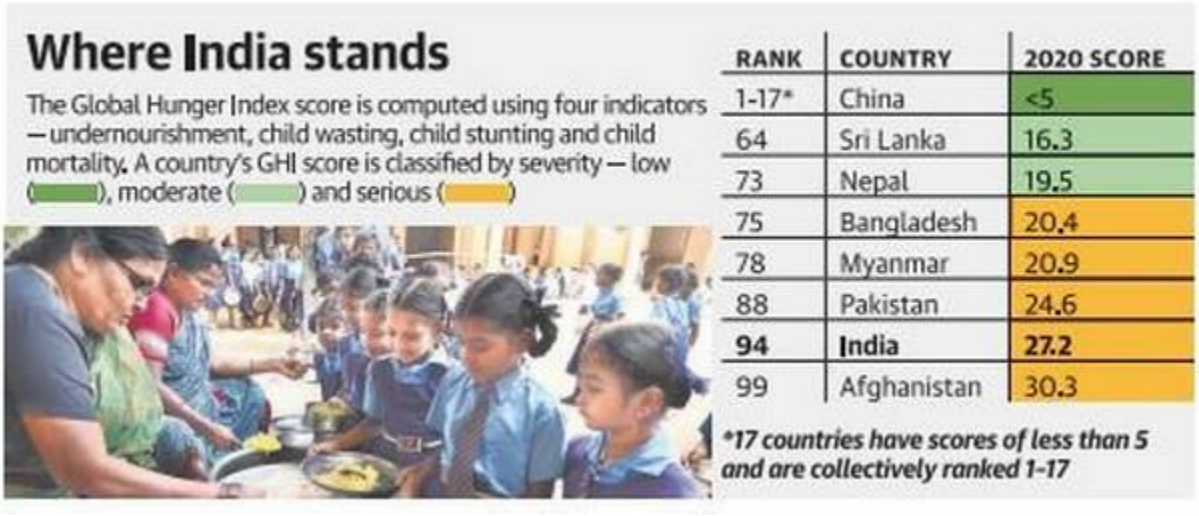
**Key findings**

- The report focuses on 55 countries that account for 97% of humanitarian assistance, said the magnitude and severity of food crises last year worsened as a result of protracted conflicts, the economic fallout of the COVID-19 pandemic, and weather extremes that exacerbated pre-existing fragilities.
- At least 155 million people faced acute hunger in 2020, including 133,000 that needed urgent food to prevent widespread death from starvation -- and the outlook for 2021 is equally grim or worse.
- According to the report, two-thirds of the people in those crisis levels were in 10 countries -- Congo, Yemen, Afghanistan, Syria, Sudan, northern Nigeria, Ethiopia, South Sudan, Zimbabwe and Haiti.
- The 133,000 facing starvation, death and destitution were in Burkina Faso, South Sudan and Yemen.
- **In terms of the prevalence of people facing crisis, emergency or famine levels of food needs,** the report said Central African Republic, South Sudan and Syria had more than half their analyzed populations at the crisis level or worse.
- The five countries -- Afghanistan, Haiti, Lesotho, Yemen and Zimbabwe -- had between 40% and 45% of their populations at those levels.
- According to the report, 40.5 million people in 17 countries faced acute food insecurity last year because of economic shocks including the fallout from the pandemic.
- **Dominique Burgeon, director of the UN Food and Agriculture Organization's office in Geneva, said 60% to 80% of the 155 million people facing acute food insecurity depend on agriculture, but last year FAO was able to assist only about 30%.**
- The report presented some other grim statistics from 2020: 75.2 million children under 5 years old living in the 55 countries were stunted in their growth and 15.8 million were wasted, or underweight for their height.

**India and Global Hunger Index 2020**



- India has the highest prevalence of wasted children under five years in the world, which reflects acute undernutrition.
- India ranks 94 out of 107 countries in the Index, lower than her neighbours such as Bangladesh (75) and Pakistan (88).




- **In 2019 Indian ranked 102 Global Hunger Index**
- The report put India under serious category with the score of 27.2.
- The child stunting rate in India was 37.4 %.
- The child wasting was at 17.3 %.
- The undernourishment rate of India was at 14% and child mortality at 3.7 %.

**Note:**

- SDG 2 deals with End hunger, achieve food security and improved nutrition and promote sustainable agriculture.

## For Anamalai tribes, it's still an urban blight

**(Topic- GS Paper II–Social Issue, Source- the Hindu)**

**Why in the news?**

- Recently, the residents of two tribal settlements within the limits of the Anamalai Tiger Reserve (ATR), around 100 km from Coimbatore city, were gearing up for the annual festival of their local deity, Vairapattan.

**More on the news**

- The Kattupatti and Kuzhipatti settlements of the Pulayar community, together having 150 families, have barely heard of COVID-19.
- But residents are aware that people living outside the forests, especially in cities, have been affected by a disease called "corona".
- Though the tribal families live a secluded life, the fear of the pandemic has gripped them, too.

**Concern for the Tribal People**

- The residents of remote tribal settlements lack awareness about COVID-19.
- Lack of healthcare facilities and testing kits.
- Food Insecurity, Loss of livelihood and Unemployment.
- Loss of livelihoods from Minor Forest Produce (MFP) and Non Timber Forest Produce.
- Tenurial insecurity and non-recognition of forest rights.

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**Related Information**

- In 2020, six members of two Particularly Vulnerable Tribal Groups (Bondas and Didiayis) in Odisha contracted Covid-19; the National Commission for Scheduled Tribes had sought a report from the state government and has termed it a “matter of grave concern”.
- Also, Particularly Vulnerable Tribal Groups (PVTGs) from Andaman contracted Covid-19

**About Anamalai Tiger Reserve**

- It is earlier known as Indira Gandhi Wildlife Sanctuary and National Park and previously as Aanaimalai Wildlife Sanctuary.
- It is a protected area located in the Anaimalai Hills of Pollachi and Valparai taluks of Coimbatore District and Udumalaipettai taluk in Tiruppur District, Tamil Nadu.
- Major reservoirs like Parambikulam Reservoir, Aliyar Reservoir, Thirumurthi Reservoir, Upper Aliyar Reservoir, Kadambarai, Sholayar Dam and Amaravathi Dam are fed by the perennial rivers which originate from the Sanctuary.
- The tribes are the Kadars, Malasars, Malaimalasar s, Pulaiyars, Muduvars and the Eravallan (Eravalar).

## China shuts down channel for diplomatic dialogue in ongoing row with Australia

**(Topic- GS Paper II–International Relations, Source- the Hindu)**

**Why in the news?**

- China has recently cut off a channel for diplomatic and trade talks with Australia in a largely symbolic act of fury, following clashes over a wide range of issues including human rights, espionage and the origins of Covid-19.

**More on the news**

- Recently, some Australian Commonwealth Government officials launched a series of measures to disrupt the normal exchanges and cooperation between China and Australia out of Cold War mindset and ideological discrimination.
- **Canberra has previously described the China-Australia Strategic Economic Dialogue as one of the "premier bilateral economic meetings with China".**
- China had previously already informally stopped ministerial-level communication between the two countries.

**China and Australia Trade**

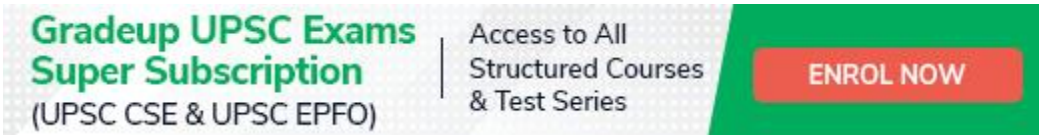
- According to the Department of Foreign Affairs and Trade, China is Australia's biggest trading partner, accounting for 29 per cent of Australia's trade with the world in 2019.
- Chinese investment in Australia plummeted 61% in 2020, the lowest number in six years, according to the Australian National University's Chinese Investment in Australia Database.
- China -- Australia's biggest trading partner -- has already imposed tariffs or disrupted more than a dozen key industries, including wine, barley and coal, decimating exports.
- In the latest volley, the China-Australia Strategic Economic Dialogue was pulled "based on the current attitude" of the Australian government.

## Mandatory online certification of disability through UDID portal

**(Topic- GS Paper II–Governance, Source-PIB)**

**Why in the news?**

- The Department of Empowerment of Persons with Disabilities (DEPwD) has recently issued a Gazette notification for all States/UTs to grant certificate of disability through online mode only using UDID portal.



- The Central Government notified the Rights of Persons with Disabilities Rules, 2017 under Rights of Persons with Disabilities (RPwD) Act, 2016.
- Under rule 18(5) the centre can issue directions to the state government/authorities. This includes mandating the issue of a certificate of disability through online mode.

**About Unique Disability ID**

- "Unique ID for Persons with Disabilities" project is an initiative of Department of Empowerment of Persons with Disabilities, Government of India.
- The UDID project is under implementation since 2016.
- It 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.

**Benefits of UDID**

- The UDID card shall bring a host of benefits to the Persons with Disabilities as given below:
    - Persons with disabilities will not need to make multiple copies of documents, maintain, and carry multiple documents as the card will capture all the necessary details which can be decoded with the help of a reader.
    - The UDID card will be the single document of identification, verification of the disabled for availing various benefits in future.
    - The UDID Card will also help in stream-lining the tracking of the physical and financial progress of beneficiary at all levels of hierarchy of implementation – from village level, block level, District level , State level and National level.

## SC sets up task force for Covid response, oxygen audit, supply

**(Topic- GS Paper II–Governance, Source- Indian Express)**

**Why in the news?**

- The Supreme Court has recently put in place a 12-member National Task Force (NTF), including top experts and doctors from across the country, "to facilitate a public health response to the pandemic based on scientific and specialised domain knowledge".

**About the National task Force**

- The Union Cabinet Secretary or a nominee of the official will serve **as Convenor of the NTF.**
- The Task Force would also undertake an oxygen audit for "formulating a methodology for the scientific allocation of oxygen to states and UTs (Union Territories)".
- The Court said the NTF will assess the need for oxygen for the entire country as well as availability and distribution, and devise allocation on a "scientific, rational and equitable" basis, reviewing this periodically.
- It will also make recommendations on augmenting the supplies.

## US to join New Zealand-led global campaign to stamp out violent extremism online

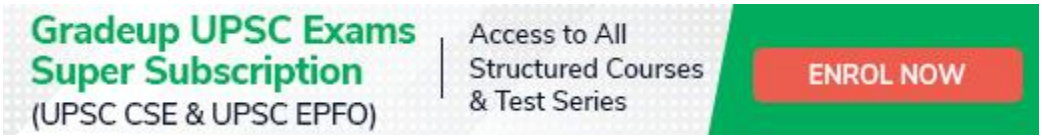
**(Topic- GS Paper II–International Relation, Source- Indian Express)**

**Why in the news?**

- Recently, the United States will join a New Zealand-led global campaign known as '**Christchurch Call to Action**' to Eliminate Terrorist and Violent Extremist Content Online.
- It makes a policy change two years after the administration of former president Donald Trump declined to participate.

**Why America has not Join this campaign previously?**

- The US cited free speech protections when it declined to join the campaign in 2019.
- It will not take steps that would violate the freedoms of speech and associations protected by the First Amendment to the U.S. Constitution, nor violate reasonable expectations of privacy.



**Christchurch Call to Action Summit**

- The Christchurch Call to Action Summit (also called the Christchurch Call), was a political summit initiated by New Zealand Prime Minister Jacinda Ardern that took place on 15 May 2019 in Paris, France, two months after the Christchurch mosque shootings of 15 March 2019.
- The summit aimed to "bring together countries and tech companies in an attempt to bring to an end the ability to use social media to organise and promote terrorism and violent extremism".
- The initiative outlines collective, voluntary commitments from governments and online service providers intended to address the issue of terrorist and violent extremist content online and to prevent the abuse of the internet.

**Note:**

- **India** has joined France, New Zealand, Canada and several other countries in Paris to combat terrorism and extremism online and to secure the internet.

## Pakistan government to set new rules to meet FATF requirements

**(Topic- GS Paper II–International Relation, Source-The Hindu)**

**Why in the news?**

- Pakistan, keen to exit from the grey list of the FATF, is set to introduce new rules relating to anti-money laundering cases and change the prosecution process to meet its remaining tough conditions recently.
- Pakistan was put on the grey list by the Paris-based Financial Action Task Force (FATF), the global watchdog for money laundering and terror financing in June 2018 and the country has been struggling to come out of it.

**Outstanding issues**

- This is part of two sets of rules, including the AML (Forfeited Properties Management) Rules 2021 and the AML (Referral) Rules 2021 under the “National Policy Statement on Follow the Money” approved by the federal Cabinet meeting a few days ago.
- These rules and related notifications for certain changes in the existing schedule of Anti-Money Laundering Act 2010 (AMLA) would come into force immediately, to be followed by the appointment of administrators and special public prosecutors for implementation.
- Based on these measures, the FATF would conclude if Pakistan has complied with three outstanding benchmarks, out of 27, that blocked its exit from the grey list in February 2021.

**About Financial Action Task Force**

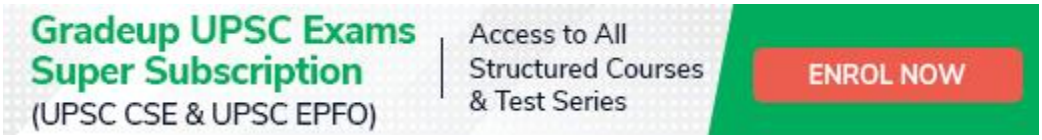
- It is a global watchdog that was founded to tackle money laundering initially but its role became prominent post the 9/11 terror attacks.
- It was set up **in 1989 by the G7 countries, with headquarters in Paris**.

**Objectives**

- The objectives are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other related threats to the integrity of the international financial system.
- It is therefore a “policy-making body” which works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.
- **It is empowered to curtail financing of UN-designated terrorist groups**.
- The FATF monitors countries to ensure they implement the FATF Standards fully and effectively, and holds countries to account that do not comply.

**Members**

- The FATF currently comprises 37 member jurisdictions and 2 regional organisations, representing most major financial centres in all parts of the globe.



- The two regional organisations are – Gulf Cooperation Council and the European Commission.
- **India became a full member in 2010.**

**Financial Action Task Force has two lists:**

**Grey List**

- Countries that are considered safe haven for supporting terror funding and money laundering are put in the FATF grey list.
- This inclusion serves as a warning to the country that it may enter the blacklist.

**Consequences of being in the FATF grey list:**

**Considered in the grey list may face**

**1.** Economic sanctions from IMF, World Bank, ADB

**2.** Problem in getting loans from IMF, World Bank, ADB and other countries

**3.** Reduction in international trade

**4.** International boycott

**Black List**

- Countries known as Non-Cooperative Countries or Territories (NCCTs) are put in the blacklist.
- These countries support terror funding and money laundering activities.
- The FATF revises the blacklist regularly, adding or deleting entries.

**Note:**

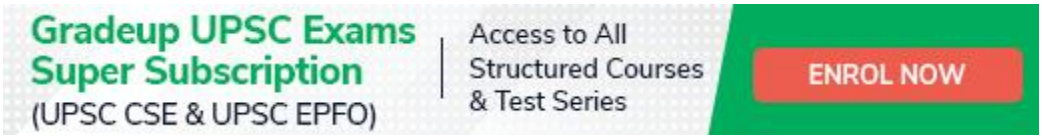
- As of 2019, FATF has blacklisted North Korea and Iran over terror financing.
- Twelve countries are in the grey list, namely: Bahamas, Botswana, Cambodia, Ethiopia, Ghana, Pakistan, Panama, Sri Lanka, Syria, Trinidad and Tobago, Tunisia and Yemen.

## Israel targets Gaza with air strikes

**(Topic- GS Paper II–International Relation, Source- Indian Express)**

**Why in the news ?**

- Recently, Israel unleashed new air strikes on Gaza, hitting a pair of high-rise buildings believed to be housing militants, as Hamas and other armed groups bombarded southern Israel with hundreds of rockets.
- The escalation was sparked by weeks of tensions in contested Jerusalem.
- Israeli armed forces stormed **Al-Aqsa Mosque in the Haram esh-Sharif in Jerusal**em, ahead of a march by Zionist nationalists commemorating Israel's capture of the eastern half of the city in 1967.



**What led to escalation?**

- Tensions have been building up since the start of Ramzan in mid-April when Israeli police set up barricades at the Damascus Gate outside the occupied Old City, preventing Palestinians from gathering there.
- As clashes erupted, the police removed the barricades, but tensions were already high.
- The threatened eviction of dozens of Palestinian families in the East Jerusalem neighborhood of Sheikh Jarrah escalated the crisis further in the last week of Ramzan.

**Sheikh Jarrah dispute**

- Hundreds of thousands of Palestinians were forced out of their homes when the State of Israel was created in historic Palestine in 1948 (the Palestinians call the events 'Nakba', or catastrophe).
- Twenty-eight of those Palestinian families moved to Sheikh Jarrah in East Jerusalem to settle there.
- In 1956, when East Jerusalem was ruled by Jordan, the Jordanian Ministry of Construction and Development and the UN Relief and Works Agency facilitated the construction of houses for these families in Sheikh Jarrah.
- But Israel would capture East Jerusalem from Jordan in 1967.
- By the early 1970s, Jewish agencies started demanding the families leave the land. Jewish committees claimed that the houses sat on land they purchased in 1885 (when Jews, facing persecution in Europe, were migrating to historic Palestine that was part of the Ottoman Empire).

**Court Decision**

- Earlier this year, the Central Court in East Jerusalem upheld a decision to evict four Palestinian families from their homes in Sheikh Jarrah in favour of Jewish settlers.
- The Israeli Supreme Court was scheduled to hear the case on May 10.
- But the hearing was postponed on advice from the government amid the ongoing violence in Jerusalem.

**Why Jerusalem?**

- Jerusalem has been at the centre of the Israeli-Palestinian conflict.

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- According to the original 1947 UN Partition Plan, Jerusalem was proposed to be an international city.
- But in the first Arab Israel war of 1948, the Israelis captured the western half of the city, and Jordan took the eastern part, including the Old City that houses Haram esh-Sharif.
- **Al-Aqsa Mosque, Islam's third holiest site, and the Dome of the Rock are situated within Haram esh-Sharif (Noble Sanctuary).**
- One side of the compound, called Temple Mount by the Jews, is the Wailing Wall (Western Wall), which is believed to be the remains of the Second Jewish Temple, the holiest site in Judaism.
- **Israel captured East Jerusalem from Jordan in the 1967 Six-Day War and annexed it later.**
- Since its annexation, Israel has expanded settlements in East Jerusalem, which is now home for some 220,000 Jews.

**Note :**

- Israel sees the whole city as its "unified, eternal capital", a claim endorsed by Donald Trump when he was U.S. President but not recognised by most other countries.

## Rajasthan to use MLA fund for vaccination

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news ?**

- Recently, as a part of the efforts to mobilise financial resources for COVID-19 vaccination of people in the age group of 18 to 44 years, Rajasthan Chief Minister has approved a proposal to provide ₹3 crore each from the MLA Local Area Development (LAD) Fund.
- The CM had earlier announced enhancement in the MLA-LAD Fund in each Assembly constituency in the 2021-22 Budget.

**About MLA Local Area Development (LAD) Fund**

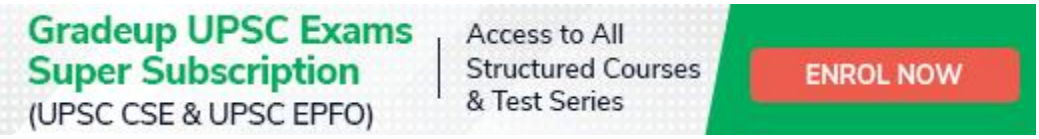
- Member of Legislative Assembly Local Area Development is a scheme that enables each MLA to undertake small developmental works in his/her constituency through the allocated funds (different for different states) per year.
- Under this scheme, funds will be provided in the State's Plan Budget every year.
- The MLALAD Scheme is intended to be utilised for small but essential projects/works based on the felt needs of the local public.

**About MPLAD Scheme**

- In 2020, the Government of India in the event of struggle against Covid-19 had suspended Member of Parliament Local Area Development Scheme or MPLADS funds for two years (2020 and 2021) and directed these funds to be transferred to the Consolidated Fund of India.
- The Members of Parliament Local Area Development Scheme (MPLADS) was launched on 23rd December, 1993.
- Initially, Ministry of Rural Development was the Nodal Ministry for this scheme but in October, 1994 this scheme was transferred to the Ministry of Statistics and Programme Implementation as a nodal agency.

**The salient features of the MPLAD Scheme include:**

- It is a Central Plan Scheme fully funded by the Government of India under which funds are released in the form of grants-in-aid directly to the district authorities.



- The funds released under the Scheme are non-lapsable, i.e. the entitlement of funds not released in a particular year is carried forward to the subsequent years, subject to eligibility.
- Under MPLADS, the role of the Members of Parliament is limited to recommend works.
- Thereafter, it is the responsibility of the district authority to sanction, execute and complete the works recommended by Members of Parliament within the stipulated time period.

**Note:**

- The elected Lok Sabha Members can recommend works in their respective constituencies.
- The elected members of the Rajya Sabha can recommend works anywhere in the state from which they are elected.
- Nominated Members of the Lok Sabha and Rajya Sabha can recommend works for implementation, anywhere in the country.

## Bangladesh rebuffs China on Quad warning

**(Topic- GS Paper II–International Relation, Source- The Hindu)**

**Why in the news?**

- Bangladesh's government has asked foreign envoys in Dhaka "to maintain decency and decorum" after public remarks from China's Ambassador to the country provoked a sharp response.
- The strongly-worded statement from the Foreign Ministry followed remarks by China's envoy in Dhaka, Li Jiming, who warned Bangladesh to not consider joining the Quad grouping and said doing so would "damage" relations.

**No plans to expand**

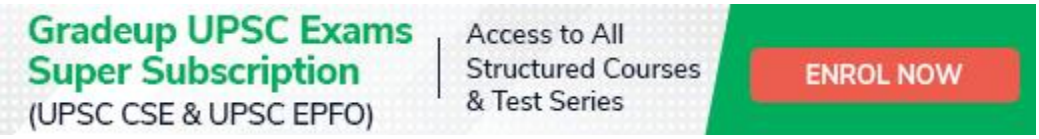
- While the informal India-Australia-United States-Japan framework has no plans as yet to expand, China's remarks were seen as an advance warning and followed similar recent comments by China's Defence Minister who on visits to Colombo and Dhaka last month urged countries in **South Asia to not join any military alliances.**
- Some Chinese officials have described the Quad as an "Asian NATO" and as a military alliance, a label that its members have rejected.

**Chinese and Bangladesh Relation**

- Recently, Bangladesh and China have been deepening cooperation, including on COVID-19. China invited Bangladesh, along with Afghanistan, Nepal, Pakistan and Sri Lanka, to a Foreign Minister-level virtual dialogue last month.
- The fourth such meeting organised with South Asian countries to discuss COVID-19 cooperation, and offered Chinese vaccines and a plan to set up an emergency reserve for supplies for South Asian countries.

**About Quadrilateral Security Dialogue (Quad)**

- It is the informal strategic dialogue between **India, USA, Japan and Australia** with a shared objective to ensure and support a "free, open and prosperous" Indo-Pacific region.
- The Ministers met also discuss collective efforts in our shared commitments and close cooperation on counter terrorism, mentoring, assistance in disaster relief, airtime security, cooperation, development, finance and cyber security efforts.
- The idea of Quad was first mooted by **Japanese Prime Minister Shinzo Abe in 2007.**
- However, the idea couldn't move ahead with Australia pulling out of it, apparently due to Chinese pressure.
- In December 2012, **Shinzo Abe again floated the concept of Asia's "**Democratic Security Diamond" involving Australia, India, Japan and the US to safeguard the maritime commons from the Indian Ocean to the western Pacific.



- In November 2017, India, the US, Australia and Japan gave shape to the long-pending "Quad" Coalition to develop a new strategy to keep the critical sea routes in the Indo-Pacific free of any influence (especially China).
- **Quad is criticised by China as Asian version of the North Atlantic Treaty Organization (NATO).**

## Article 311

**(Topic- GS Paper II–Polity, Source- The Hindu)**

**Why in the news?**

- Recently, suspended police officer Sachin Waze, arrested by the National Investigation Agency (NIA) in connection with the Mukesh Ambani terror scare case, was dismissed from service by Mumbai Police Commissioner under Article 311 (2) (b) without a departmental enquiry.

**About the Article 311**

- The procedure laid down in Article 311 is intended to assure, first, a measure of security of tenure to Government servants, who are covered by the Article and secondly to provide certain safeguards against arbitrary dismissal or removal of a Government servant or reduction to a lower rank.
- These provisions are enforceable in a court of law
- Article 311 says that no government employee either of an all India service or a state government shall be dismissed or removed by an authority subordinate to the own that appointed him/her.

**Exceptions article where a person can be dismissed without departmental enquiry (DE)**

- As per Article 311 subclause 2 provision a, if a government employee is convicted in a criminal case, he can be dismissed without DE.
- Apart from this, under 311 (2) (c), a government employee can be dismissed when the President or the Governor, as the case may be, is satisfied that in the interest of the security of state it is not expedient to hold such an enquiry, the employee can be dismissed without DE.

## Child marriages may go unnoticed amid lockdown

**(Topic- GS Paper II–Social Issue, Source- The Hindu)**

**Why in the news?**

- Recently, the child rights activists have observed that during the lockdown the cases of Child marriage being alarmed to see a slew of child marriages being reported in Karnataka.

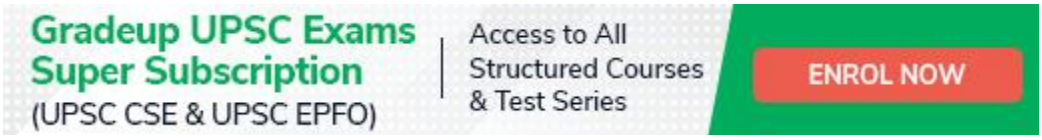
**Number may go up**

- A total of 2,180 child marriage cases were reported in Karnataka as per reports of Childline (1098) from April 2020 to January 2021.
- In December last year, of the 1,598 complaints, 365 were related to this category.
- The other complaints ranged from illegal adoptions, child trafficking and child labour to the need for medical help or shelter.
- The number of complaints eased when lockdown restrictions were relaxed, but were still worrying.
- With another lockdown in place and marriages being allowed in homes, the number of cases might go up.

**Related Information**

**Government Initiatives to Prevent Child Marriages**

- The Child Marriage Restraint Act of 1929 restricts the practice of child marriage.



- The Special Marriage Act, 1954 and the Prohibition of Child Marriage Act, 2006 prescribe 18 and 21 years as the minimum age of consent for marriage for women and men respectively.
- The Prohibition of Child Marriage Act, 2006 was enacted to address and fix the shortcomings of the Child Marriage Restraint Act.

**About Jaya Jaitely Committee**

- It had been proposed in Budget 2020-21.
- The committee has been set up under **Jaya Jaitely Committee** to examine matters pertaining to age of motherhood, imperatives of lowering Maternal Mortality Ratio and the improvement of nutritional levels among women.

**Sustainable Development Goals**

- Prevention of Child Marriage is a part of SDG 5 which deals with gender equality and empowerment of all women and girls.

## Texas lawmakers approve abortion ban as early as 6 weeks

**(Topic- GS Paper II–Social Issue, Source- Outlook India)**

**Why in the news?**

- Recently, Texas would ban abortions after as early as six weeks and allow private citizens to enforce the rule through civil lawsuits against doctors and others under a measure given final approval by state lawmakers.

**Key highlights of the bill**

- It is also called “heartbeat bills".
- The bill would ban abortions after the first detection of an embryonic “heartbeat.”
- The advanced technology can detect an electric signal flutter as early as six weeks into a pregnancy, even though the embryo isn’t yet a fetus and doesn’t have a heart.
- **According to Medical Expert, an embryo is termed a fetus beginning in the 11th week of pregnancy.**
- A unique provision in the Texas bill prohibits state officials from enforcing the ban.
- Instead, it allows anyone, even someone outside Texas, to sue a doctor or anyone else who may have helped someone get an abortion after the time limit, and seek financial damages of up to $10,000 per defendant.
- The bill does not punish women who obtain abortions.

**Note:**

- Texas law currently bans abortion after 20 weeks, with exceptions for a woman with a life-threatening medical condition or if the fetus has a severe abnormality.

**Related Information**

**India and Pregnancy Law**

- **In India,** according to the Medical Termination of Pregnancy (Amendment) Bill, 2020 which has been passed by the Parliament has the provision that, a pregnancy may be terminated up to 20 weeks by a married woman in the case of failure of contraceptive method or device.
- The Bill also allows unmarried women to also terminate a pregnancy for this reason.

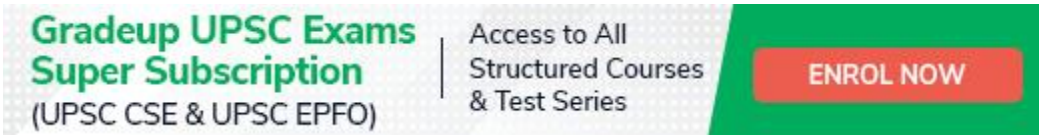
## Particularly Vulnerable Tribal Group

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently, twenty-one more members of the Particularly Vulnerable Tribal Group (PVTG) in Odisha were afflicted with coronavirus, taking their number to 45.

**More on the news**



- For these 10 more members of the Bonda tribe and 14 of the Dongaria Kondha community tested positive for the virus.

**About Dongaria Kondha community**

- The Dongaria Kondha tribe lives in Niyamgiri Hills on the border of Rayagada and Koraput districts.
- They live on hill tops and rarely come to plains.

**About Bonda Community**

- Bonda is one of the ancient tribes of Odisha and the community is divided into two groups, the Lower Bonda and the Upper Bonda.
- While Lower Bondas live on the foothills of Bonda hills, the Upper ones, mostly untouched by the modern civilization, live in the hill range in Khairaput block of Malkangiri district.

**Odisha and Tribes**

- Odisha has among the largest and most diverse tribal populations 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.

**About Particularly Vulnerable Tribal Groups**

- They are the more vulnerable among the tribal groups.
- Due to this factor, more developed and assertive tribal groups take a major chunk of the tribal development funds, because of which PVTGs need more funds directed for their development.
- In 1973, the **Dhebar Commission created Primitive Tribal Groups** (PTGs) as a separate category, which is less developed among the tribal groups.
- In 2006, the Government of India renamed the **Primitive Tribal Groups** as **Particularly Vulnerable Tribal Groups.**

The criteria for identifying Particularly Vulnerable Tribal Groups are: -

1. Pre-agricultural level of technology
2. Low level of literacy
3. Economic backwardness
4. A declining or stagnant population

**Schemes for Particularly Vulnerable Tribal Groups**

- Recently Ministry of Tribal Affairs implements the Scheme of "**Development of Particularly Vulnerable Tribal Groups (PVTGs)**" exclusively for them.
- Under the scheme, Conservation-cum-Development (CCD)/Annual Plans are to be prepared by each State/UT for their PVTGs based on their need assessment, which are then appraised and approved by the Project Appraisal Committee of the Ministry.

**Note:**

- Among the 75 listed PVTG's the **highest number are found in Odisha**

## India calls for 'immediate de-escalation' of hostilities

**(Topic- GS Paper II–International Relation, Source- India Today)**

**Why in the news?**

- Recently, India called for an immediate de-escalation of the situation between Israel and Palestine at the first public United Nations Security Council.

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- The meeting has been held since the current surge in hostilities between the two parties entered its seventh day, killing at least 149 people in Gaza and 10 in Israel, including many children.

**More on the news**

- India had already voiced its concern over the violence in Jerusalem at closed-door meetings of the 15- member council held earlier this week.
- India supported the efforts of the Quartet (UN, U.S., EU and Russia) and others, and expressed India's support to the "just Palestinian cause" and its "unwavering" support for the two-state solution

**India's Stand on Israel-Palestine Issue**

**India - Israel Timeline**

1. 1948: India voted against the creation of Israel as a separate state.
2. May 1949: India voted against Israel in its admission to UN.
3. September 17, 1950: India announced recognition of Israel, two years after its creation.
4. 1992: Upon establishment of full diplomatic relations, embassies were opened in Tel Aviv.
7. 4-6 July 2017: Prime Minister Modi made the first ever official visit to Israel.

The relationship between the two nations was turned to 'strategic'.

Modi, however, did not stop at Ramallah in Palestine, a traditional stop for most foreign heads of state or dignitaries visiting Israel.

**India – Palestine Timeline**

1. 1974: India became the first non-Arab state to recognize Palestine Liberation Organization (PLO).
2. 1988: India was one of the first countries to recognize the State of Palestine.
3. 1996: India opened its Representative Office to the State of Palestine in Gaza. 2003: It was shifted to Ramallah. Unlike in Israel, India does not have an embassy in Palestine.
4. October 2011: India voted in favour of Palestine for its acceptance as a full member of UNESCO.
5. November 29, 2012: India co-sponsored the resolution that made Palestine a 'non-member state' of United Nations General Assembly.
6. April 2015: India supported the Bandung Declaration on Palestine at Asian African Commemorative Conference
7. September 2015: India supported installation of Palestine flag at UN premises.

## Tamil Nadu Goondas Act

**(Topic- GS Paper II–Social Issue, Source- India Express)**

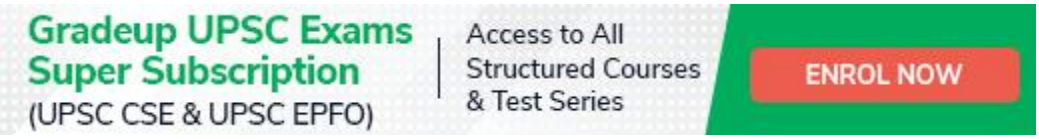
**Why in the news?**

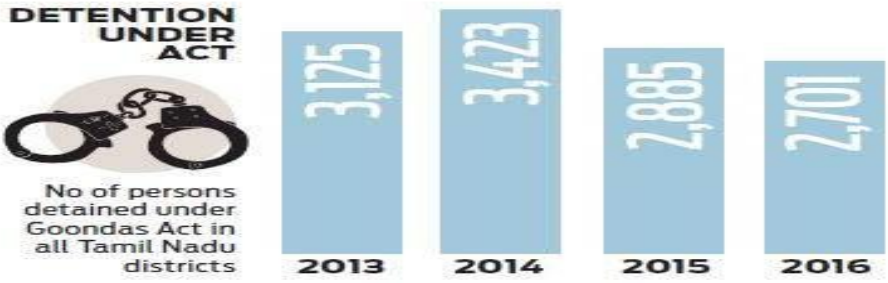
- Chief Minister of Tamil Nadu has recently said that those hoarding and selling Remdesivir (a drug used in COVID-19 treatment) and oxygen cylinders at higher prices would be detained under the Goondas Act.

**About the Goondas Act**

- It is a type of preventive detention law that was first enacted in 1923 in Bengal.
- The law aims at a year-long preventive detention of habitual offenders.
- This enables the authorities to imprison persons without having to provide for a court trial.

**Tamil Nadu's Goondas Act**






**Commissionerate figures**

| | Jurisdiction | 2013 | 2014 | 2015 | 2016 |
|---|---|---|---|---|---|
| 1 | Chennai | 2,108 | 2,262 | 1,245 | 1,201 |
| 2 | Coimbatore | 64 | 47 | 66 | 59 |
| 3 | Madurai | 109 | 94 | 185 | 185 |
| 4 | Trichy | 45 | 39 | 40 | 33 |
| 5 | Salem | 48 | 71 | 95 | 93 |
| 6 | Tiruppur | NA | 24 | 41 | 23 |
| 7 | Tirunelveli | 30 | 35 | 77 | 41 |
| | Total | 2,404 | 2,572 | 1,749 | 1,635 |

**Note:** 2017 data not available

- Goondas Act in Tamil Nadu is known as the Tamil Nadu Prevention of Dangerous Activities of Bootleggers, Drug Offenders, Goondas, Immoral Traffic Offenders, Forest Offenders, Sand Offenders, Slum-Grabbers and Video Pirates Act, 1982.
- Even a single offence under the act enables the authorities to detain a person as a goonda.

**Other States having Similar Law**

- Uttar Pradesh Control of Goondas Act- covers offenders like house grabbers, eve-teasers, those convicted under public gambling act, etc.
- Karnataka Prevention of Dangerous Activities of Bootleggers, Drug-Offenders, Gamblers, Goondas, Immoral Traffic Offenders and Slum-Grabbers Act.
- Kerala Anti-Social Activities (Prevention) Act, etc.
- Madhya Pradesh's Central Provinces and Berar Goondas Act which was struck down by the Supreme Court in 1960.

## West Bengal government decides to set up a Legislative Council

**(Topic- GS Paper II–Polity, Source- The Hindu)**

**Why in the news?**

- Recently the state cabinet of West Bengal Government has decided to set up a Legislative Council, or a Vidhan Parishad.
- The State had an Upper House till 1969.

**About the Legislative Councils**

- The LC or Vidhan Parishad is the upper house in those states that have a bicameral legislature; the lower house being the State Legislative Assembly.
- Under Article 169 of the constitution, Parliament may by law create or abolish the second chamber in a state if the Legislative Assembly of that state passes a resolution to that effect by a special majority.

**Abolition or Creation - Article 169**

- The Parliament can abolish a legislative council (where it already exists) or create it (where it does not exist) by a simple majority, that is, a majority of the members of each House present

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and voting, if the legislative assembly of the concerned state, by a special majority, passes a resolution to that effect.

- This Act of Parliament is not to be deemed as an amendment of the Constitution for the purposes of Article 368 and is passed like an ordinary piece of legislation (i.e. by simple majority).

**Strength of the House**

- As per article 171 clause (1) of the Indian Constitution, the total number of members in the legislative council of a state shall not exceed one third of the total number of the members in the legislative Assembly.
- The maximum strength of the council is fixed at one-third of the total strength of the assembly and the minimum strength is fixed at 406.
- Though the Constitution has fixed the maximum and the minimum limits, the actual strength of a Council is fixed by Parliament.

Note:

- At present (2019), only six states have two Houses (bicameral).
- These are Andhra Pradesh, Telangana, Uttar Pradesh, Bihar, Maharashtra and Karnataka.
- The Jammu and Kashmir Legislative Council was abolishes by the Jammu and Kashmir Reorganisation Act, 2019.

## Creating a new district

**(Topic- GS Paper II–Governance, Source- The Hindu)**

**Why in the news?**

- Recently the Punjab Chief Minister Captain Amarinder Singh declared Malerkotla the 23rd district of the State.

**How are new districts carved?**

- The power to create new districts or alter or abolish existing districts rests with the State governments.
- This can either be done through an executive order or by passing a law in the State Assembly.
- Section 5 of the Punjab Land Revenue Act, 1887 says the “State government may, by notification, vary the limits and alter the numbers of tehsils, districts and divisions into which the State is divided”.
- Many States prefer the executive route by simply issuing a notification in the official gazette.

**How does it help?**

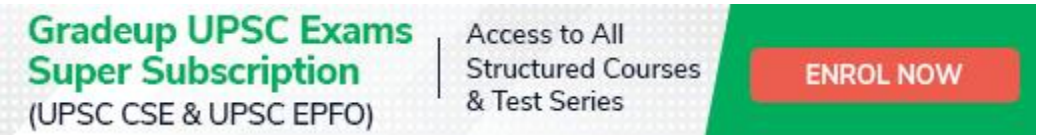
- States argue that smaller districts lead to better administration and governance.
- For example, in 2016, the Assam government issued a notification to upgrade the Majuli sub-division to Majuli district for “administrative expediency”.

**Are there any exceptions?**

- The State government has been vested with unfettered powers under Section 5 of the Punjab Land Revenue Act, 1887 to create new districts.
- This power is generally held temporarily in abeyance only during active census operations or during the delimitation exercise of Lok Sabha/Vidhan Sabha constituencies.

**Role of Central Government**

- The Centre has no role to play in the alteration of districts or creation of new ones.
- States are free to decide.



- The Home Ministry comes into the picture when a State wants to change the name of a district or a railway station.
- The State government's request is sent to other departments and agencies such as the Ministry of Earth Sciences, Intelligence Bureau, Department of Posts, Geographical Survey of India Sciences and the Railway Ministry seeking clearance.
- A no-objection certificate may be issued after examining their replies.

**Previous Trend**

- According to the 2011 Census, there were 593 districts in the country.
- The Census results showed that between 2001-2011, as many as 46 districts were created by States.
- Though the 2021 Census is yet to happen, Know India, a website run by the Government of India, says currently there are 718 districts in the country.
- The surge in number is also due to bifurcation of Andhra Pradesh into A.P. and Telangana in 2014.
- Telangana at present has 33 districts and A.P. has 13 districts.

## Farzad B gas field

**(Topic- GS Paper II–International Realtion, Source- The Hindu)**

**Why in the news ?**

- Recently, Iran gave the Farzad B gas field to Petropars, a domestic gas producer which is a setback for India's energy ties with Iran as ONGC Videsh Ltd (OVL) had discovered the gas field in 2000 and has been part of the ongoing cooperation on that front.

**About Farzad B gas field**

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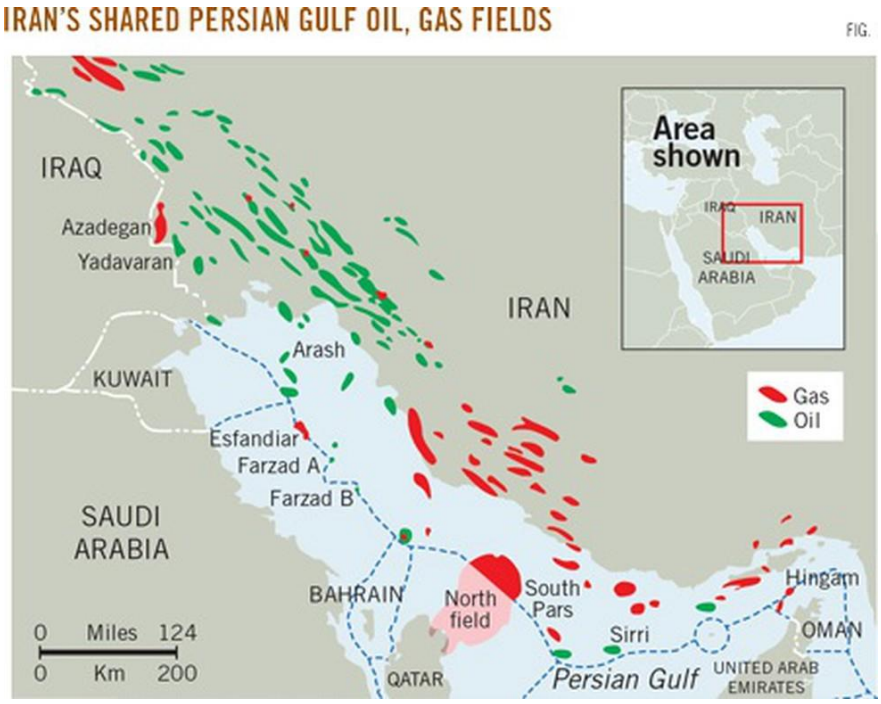


- It is located in Persian Gulf (Iran).
- The contract for exploration of the field was signed in 2002 by Indian consortium comprising ONGC Videsh, Indian Oil Corporation and Oil India.
- The contract expired in 2009 after declaration of commerciality of the field, based on the gas discovery.
- It has gas reserves of more than 19 trillion cubic feet.

## China bars foreign curriculum and foreign ownership in private schools

**(Topic- GS Paper II–International Relation, Source- The Hindu)**

**Why in the news?**

- China's State Council has recently announced tough new laws halting the teaching of foreign curriculum in schools from kindergarten to grade nine (K-9) and prohibiting the ownership or control of any private K-9 schools by foreign entities.
- The new laws, which come into effect on September 1 2021.
- China currently has private K-9 schools that teach local and foreign curricula.

**More on the news**

- The K-9 schools will no longer be able to organize entrance tests or recruit in advance.
- Also, public K-9 schools will be barred from establishing private schools or converting themselves into private schools.
- As per media reports, China is framing tough new rules for its booming private tutoring industry, aiming both to ease pressure on schoolchildren and to boost the country's birth rate by lowering family living costs.

## SAMVEDNA Platform

**(Topic- GS Paper II–Governance, Source- PIB)**

**Why in the news?**

- Recently, the Ministry of Women and Child Development has called for SAMVEDNA Platform for children affected by COVID-19.

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**About SAMVEDNA Platform**

- SAMVEDNA is Sensitizing Action on Mental Health Vulnerability through Emotional Development and Necessary Acceptance.
- National Commission for Protection of Child Rights (NCPCR) is providing Tele-Counselling to children with an objective d to provide psycho-social mental support for Children affected during COVID 19 Pandemic.
- The tele-counselling is being provided through a network of qualified Experts/Counselors/Psychologists.
- Counsellors have been specially trained by the expert team of NIMHANS to address the needs of children in these difficult times.
- Technical support to this initiative has been provided by National Institute of Mental Health and Neuro-Sciences (NIMHANS) in training of counsellors.
- SAMVEDNAtele counselling service is for psychological support to children to address their stress, anxiety, fear and other issues during the Pandemic.

**Tele counselling is provided to the children under three categories:**

1.Children who are in Quarantine/isolation/COVID Care centers.
2.Children who have COVID positive parents or family members and near ones.
3. Children who have lost their parents due to Covid-19 Pandemic.

**About National Commission for Protection of Child Rights**

- It is a statutory body set up in March 2007 under the Commissions for Protection of Child Rights (CPCR) Act, 2005.
- It is under the administrative control of the Ministry of Women and Child Development.
- For the Commission, protection of all children in the 0 to 18 years age group is of equal importance.

**Mandate**

- To ensure that all laws, policies, programmes and administrative mechanisms are in consonance with the child rights perspective as enshrined in the Constitution of India and also the United Nations Convention on the Rights of the Child, 1989.

**Powers**

- It monitors the implementation of Protection of Children from Sexual Offences (POCSO) Act, 2012.
- It inquires into complaints and takes **suo moto** notice of matters related to:

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a. It can inquire into complaints about violation of the law and can summon individual, demand evidence, seek a magisterial enquiry.
b. Deprivation and violation of child rights.
c. Non implementation of laws providing for protection and development of children.
d. Non compliance of policy decisions, guidelines or instructions aimed at mitigating hardships to and ensuring welfare of the children and to provide relief to such children or take up the issues arising out of such matters with appropriate authorities

**About NIMHANS**

- The National Institute of Mental Health and Neuro-Sciences is a premier medical institution located in Bengaluru, India.
- It is an Institute of National Importance operates autonomously **under the Ministry of Health and Family Welfare.**
- Recently a team of neuroscientists from the National Institute of Mental Health and Neuro Sciences (NIMHANS) has developed **Indian Brain Templates (IBT) and a brain atlas.**

**Brain Template**

- It is a gross representation from various brain images to understand brain functionality in diseased conditions.

**Brain Atlas**

- It has been developed for five age groups covering late childhood to late adulthood (six to 60 years).

**Note:**

- **NIMHANS RAAH app of** National Institute of Mental Health and Neuro-Sciences (NIMHANS) provides free information to the public on mental health care professionals and mental healthcare centres.

## MyGov launches innovation challenge for creating Indian Language Learning App

**(Topic- GS Paper II–Governance, Source- PIB)**

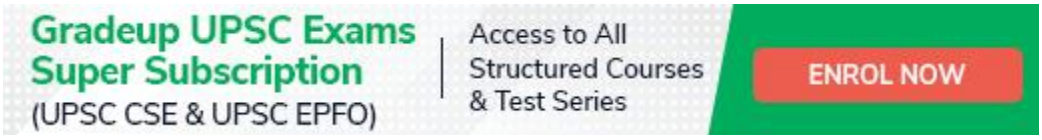
**Why in the news ?**

- Recently, MyGov, the citizen engagement platform of the Government of India, in partnership with Department of Higher Education has launched an Innovation Challenge for creating an **Indian Language Learning App.**
- This Innovation Challenge has been launched to take forward Prime Minister Narendra Modi's vision of celebrating **India's cultural diversity through greater interaction among its constituent parts.**

**About the Innovation Challenge**

- It has been launched by MyGov to create an app that will enable individuals to learn simple sentences of any Indian language and acquire working knowledge of a language.
- The objective of this challenge is to create an app that will promote regional language literacy, thereby creating greater cultural understanding within the country.
- The key parameters that will be looked into will include ease of use, simplicity, Graphical User Interface, gamification features, UI, UX and superior content that makes it easy and fun to learn an Indian language.

## Analysis of the loss of life associated with working long hours



**(Topic- GS Paper II–Social Issue, Source- Indian Express)**

**Why in the news?**

- According to the latest estimates by the World Health Organization (WHO) and the International Labour Organization (ILO) published in Environment International, Long working hours led to 7.45 lakh deaths from stroke and ischemic heart disease in 2016, a 29% increase since 2000**.**
- It is the first global analysis of the loss of life and health associated with working long hours jointly prepared by WHO and ILO.

**Key Highlights**

- The number of people working long hours is increasing and this trend puts even more people at risk of work-related disability and early death.
- The working long hours is now known to be responsible for about one-third of the total estimated work-related burden of disease.
- It estimated that in 2016, 3.98 lakh people died from stroke and 3.47 lakh from heart disease as a result of having worked at least 55 hours a week.
- It highlights that between 2000 and 2016, the number of deaths from heart disease due to working long hours increased by 42% and from stroke by 19%.
- 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.

**Impact of Long Working Hours on Gender**

- It highlighted that the 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.
- 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.

## Diplomatic immunity

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news?**

- Recently the wife of Belgium's ambassador to South Korea has hit two staff members at a boutique in Seoul last month will now be exercising her diplomatic immunity to avoid criminal charges.

**What is diplomatic immunity?**

- It is a privilege of exemption from certain laws and taxes granted to diplomats by the country in which they are posted. The custom was formed so that diplomats can function without fear, threat or intimidation from the host country.
- Diplomatic immunity is granted on the basis of two conventions, popularly called the Vienna Conventions — the Convention on Diplomatic Relations, 1961, and the Convention on Consular Relations, 1963.
- They have been ratified by 187 countries, including South Korea.

**What is the extent of this immunity?**

- According to the Vienna Convention on Diplomatic Relations, 1961, the immunity enjoyed by a diplomat posted in the embassy is "inviolable".
- The diplomat cannot be arrested or detained and his house will have the same inviolability and protection as the embassy.

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- It is possible for the diplomat's home country to waive immunity but this can happen only when the individual has committed a 'serious crime', unconnected with their diplomatic role or has witnessed such a crime.
- Alternatively, the home country may prosecute the individual.
- While diplomatic immunity is intended to "insulate" diplomats from harm, it does not insulate their countries from a bad reputation and a blow to bilateral ties.
- The privilege of diplomatic immunity is not for an individual's benefit.
- If a diplomat acts outside his business of conducting international relations, a question arises over whether his immunity still applies.

**Immunity is not same for all diplomats and their families**

- The Vienna Convention classifies diplomats according to their posting in the embassy, consular or international organisations such as the UN.

## China protests U.S. Navy passage via Taiwan Strait

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news?**

- Recently, China has recently protested the latest passage by a U.S. Navy ship through the Taiwan Strait, calling it a provocation that undermined peace and stability in the region.

**More on the news**

**Reaction from China side**

- Col. Zhang Chunhui of China has said that the U.S. actions were "sending wrong signals to the 'Taiwan independence' forces, deliberately disrupting and sabotaging the regional situation and endangering peace and stability across the Taiwan Strait."

**USA's Stand**

- According to US Navy, the United States military will continue to fly, sail, and operate anywhere international law allows.
- The U.S. Navy's 7th Fleet said that the guided missile destroyer USS Curtis Wilbur conducted a routine Taiwan Strait transit in accordance with international law.
- The passage "demonstrates the U.S. commitment to a free and open Indo-Pacific.

**About the Taiwan Strait**

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- It is also known as the Formosa Strait separating Taiwan and mainland China.
- The strait is currently part of the South China Sea and connects to the East China Sea to the north.
- The entire strait is on Asia's continental shelf.

**China- Taiwan relations**

**Politics**

- China has claimed Taiwan through its "one China" policy since the Chinese civil war forced the defeated Kuomintang, or Nationalist, to flee to the island in 1949 and has vowed to bring it under Beijing's rule, by force if necessary.
- Taiwan is self-governed and de facto independent; it has never formally declared independence from the mainland.
- Under the "one country, two systems" formula, Taiwan would have the right to run its own affairs; a similar arrangement is used in Hong Kong.

**Trade**

- China is Taiwan's top trading partner, with trade totaling $226 billion in 2018.
- Taiwan runs a large trade surplus with China.
- China, with its 1.3 billion people and much cheaper costs, is also Taiwan's favorite investment destination with Taiwan companies investing over $100 billion there, private estimates show.

**Military**

- China and Taiwan have nearly gone to war several times since 1949, most recently ahead of the 1996 presidential election.
- Taiwan says China has thousands of short- and medium-range ballistic missiles as well as cruise missiles pointed at Taiwan, and that China runs a sophisticated online misinformation campaign to support China-friendly candidates.

**Members**

- Taiwan is a member of the World Trade Organization, Asia-Pacific Economic Cooperation and Asian Development Bank under various names

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## Center circumventing states

**(Topic- GS Paper II –Governance, Source- The Hindu)**

**Why in the news?**

- Recently, Centre has direct interactions through the bypassing the elected leadership while dealing with States under the Articles 256 and 257.

**More on the news**

- Two recent developments have raised concern that the Centre wants to give instructions to officials functioning under elected State regimes.
    a. Prime Minister Narendra Modi has held two virtual meetings with district magistrates and State officials to review the COVID-19 situation.
    b. Union Education Minister Ramesh Pokhriyal held a virtual meeting to discuss the National Education Policy, and related matters such as the conduct of Class XII examinations with State Secretaries in charge of education.
- The Tamil Nadu Minister for School Education, Anbil Mahesh Poyyamozhi, took the right stand by not deputing any official to represent the State in Mr. Pokhriyal's virtual interaction.
- The idea was not to boycott the meeting, but to say the Minister ought to have been included in a discussion on the NEP.

**Not a new Precedent**

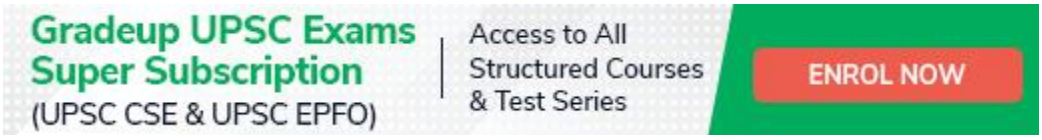
- The Prime Minister addressing district magistrates, or collectors, does have a precedent.
- Rajiv Gandhi addressed the heads of the district administration in Uttar Pradesh, when it was under Congress rule, on the issue of Panchayati Raj.

**Administrative Relations**

- The administrative jurisdiction of the union and the state Governments extends to the subjects in the union list and state list respectively, which clearly establishes the superiority of the Union Government in the administrative sphere as well.
- In addition the Constitution contains a number of provisions which accord a position of superiority to the Union Government.
- **Article 256** lays down that the executive power of every state shall be so exercised as to ensure compliance with the laws made by Parliament and any existing laws which apply in that State, and the executive power of the Union shall extend to the giving of such directions to a state as may appear to the Government of India to be necessary for that purpose.
- **Similarly, Article 257** of the Constitution provides that the executive power of every state shall be so exercised as not to impede or prejudice the exercise of the executive power of the Union, and the executive power of the Union shall extend to giving of such directions to a state as may appear to the Government of India to be necessary for that purpose.
- In short, the Union Government can issue directions to the state Government even with regard to the subjects enumerated in the state list.
- The Union Government can also give directions to the state with regard to construction and maintenance of the means of communication declared to be of national or military importance.
- It can also ask the state Governments to construct and maintain means of communication as part of its functions with respect to naval, military and air force works.

**Other Constitutional Provision of Centre-State Administrative Relations**

- Article 257A. Assistance to States by deployment of armed forces or other forces of the Union (Repealed)
- Article 258. Power of the Union to confer powers, etc., on states in certain cases
- Article 258A. Power of the states to entrust functions to the union



- Article 259. Armed Forces in States in Part B of the First Schedule (Repealed)
- Article 260. Jurisdiction of the Union in relation to territories outside India
- Article 261. Public acts, records and judicial proceedings.

## Global Entry Programme

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news ?**

- Recently on the request of the U.S. authorities, Indian security agencies in the past two years checked the antecedents of more than 9,000 Indians who wanted to enroll for the paid Global Entry Program.
- The **Crime and Criminal Tracking Network and Systems (CCTNS),** a secure application that links over 97% police stations in the country is being used for antecedent verification for Global Entry.

**About Global Entry Programme**

- The Global Entry is a facility run by the U.S. Customs and Border Protection (CBP), an agency that works under the Department of Homeland Security that fast tracks movement of pre-approved, low-risk travellers upon arrival after a rigorous background check through designated kiosks.
- The Program allows members to use expedited lanes at the U.S. airports and few other international airports.
- Applicants are charged $100 and a personal interview before they are enrolled.
- Their biometrics is also collected.

**Who are not eligibe for Global Entry Programme?**

- The CBP does not process the application if a person has been “convicted of any criminal offence or have pending criminal charges, including outstanding warrants; have been found in violation of any customs, immigration or agriculture regulations or laws in any country.”

**Members**

- The other countries along with India that are part of this programme are Argentina, Australia, Canada, Colombia, Germany, Mexico, New Zealand, Panama, Republic of Korea, Singapore, Switzerland, Taiwan and the United Kingdom.

**Indian and Global Entry Programme**

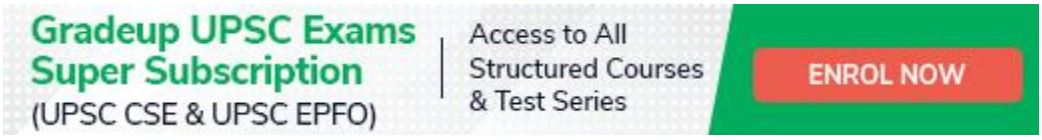
- India became a member of Global Entry in 2017.

**Recent Development**

- Recently in response to a Right to Information Act (RTI) request filed by The Hindu on the number of applicants successfully verified by the NCRB for the programme, the agency denied information under Section 8 (exemption from disclosure of information) of the Act.
- It said, “background verification of Indian citizens who have applied for U.S CBP’s Global Entry has been undertaken by Government of India on behalf of U.S government’s CBP Global Entry Program.
- This is not a public service open to all the Indian citizens.
- Hence, there is no obligation on the part of Government of India to furnish any information pertaining to the processing of this service to the GEP applicants or the general public.

**Benefits of Global Entry Programme**

- The biggest advantage of getting enrolled in this programme is that you will no longer have to stand in the long queues for immigration.



- The approved applicants can make their way ahead through automatic kiosks instead of standing in the immigration lines.

**Related Information**

**About Crime and Criminal Tracking Network and Systems**

- It is a centrally funded scheme.
- It has been developed by the National Crime Records Bureau (NCRB) through a Mission Mode Project under the National e-Governance Plan (NeGP) of the Ministry of Home Affairs.
- It was approved in 2009.

## Sri Lanka Parliament passes Bill on China-backed Port City

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news?**

- Recently, the Sri Lankan Parliament passed a controversial Bill on laws governing the China-backed Colombo Port City.

**Recent Issue**

- The ruling Rajapaksa administration tabled a Bill, titled **Colombo Port City Economic Commission**', in Parliament last week, outlining proposed laws for the $1.4 billion-Port City being built on reclaimed land at Colombo's seafront.

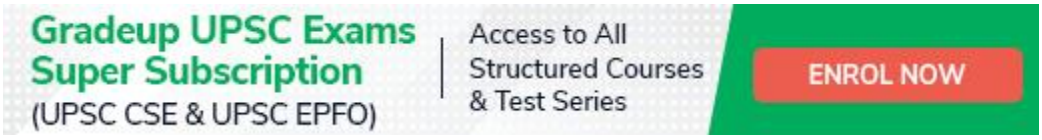
**Constitutional validity**

- Sri Lanka's Opposition parties Samagi Jana Balawegaya (SJB or United People's Front), Janatha Vimukthi Peramuna (JVP), the United National Party (UNP), Colombo-based NGO Centre for Policy Alternatives, and labour organisations have challenged the constitutional validity of the proposed legislation for the Port City, touted by the government as an investment hub for foreign capital.

**Highlights of the bill**

- The clauses prohibit investment in the Port City in Sri Lankan rupees, which will keep out Sri Lankan.
- It will be like a forbidden city within Colombo.
- The government claims it stands for 'one country, one law', but the Bill allows for running the Port City like a foreign country with special laws."

**About Port City**



- The Port City was launched by President Xi Jinping during his state visit to the island nation in September 2014, during former President Mahinda Rajapaksa's second term in office, months before his poll defeat.
- The successor government, led by President Maithripala Sirisena and PM Ranil Wickremesinghe, vowed to develop the site into an "Indian Ocean financial hub".

## CBID Program on rehabilitation of Divyangjan

**(Topic- GS Paper II –Social Justice, Source- DD News)**

**Why in the news?**

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

**About Community Based Inclusive Development (CBID) Program**

- 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.
- The program aims to create a pool of grass-root rehabilitation workers at community level who can work alongside ASHA and Anganwadi workers to handle cross disability issues and facilitate inclusion of persons with disabilities in the society.
- The program has been designed to provide competency based knowledge and skills among these workers to enhance their ability for successfully discharging their duties.
- These workers will be called 'Divyang Mitra' i.e., friends of persons with disabilities.

**Course Designed by**

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- This CBID course has been co-designed by Rehabilitation Council of India and University of Melbourne as a joint initiative under the MoU signed between the Government of Australia and the Government of India on 22nd November, 2018 for cooperation in disability sector.
- Content and curriculum of the course has been developed by an Expert Committee comprising experts drawn from India and Australia.
- The National Board of Examination in Rehabilitation under the Rehabilitation Council of India will conduct examinations and award certificates to pass-out candidates.

## Iran and JCPOA

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news?**

- US Secretary of State Antony Blinken has recently said that it remains unclear whether Tehran is willing to take steps to return to compliance with the Iran nuclear deal.

**More on the news**

- The State Secretary said that the indirect talks between Washington and Tehran in Vienna had clarified what each side needs to do to come back into compliance with the Iran nuclear deal formally known as the Joint Comprehensive Plan of Action (JCPOA).
- The United States and the remaining parties to the JCPOA -- Iran, Britain, China, France, Germany, and Russia -- will reconvene next week for the fifth-round talks in Vienna, in a bid to revive the nuclear deal.

**About the Joint Comprehensive Plan of Action**

- The JCPOA was the result of prolonged negotiations from 2013 and 2015 between Iran and P5+1 (China, France, Germany, Russia, the United Kingdom, the United States, and the European Union, or the EU).
- It was signed between Iran and the P5, plus Germany and the EU in 2015.
- The P5 is the 5 permanent members of the UNSC (US, China, France, Russia, and UK).
- The deal aimed at curbing Iran's nuclear programme.

**Under the deal:**

- most of Iran’s enriched uranium was shipped out of the country
- a heavy water facility was rendered inoperable
- operational nuclear facilities were brought under international inspection
- In return, the deal involved lifting of international sanctions on Iran.

**Why has US pulled out of the deal?**

- The Trump administration had pulled out of the deal in 2018.
- Trump and opponents to the deal say it is flawed because it gives Iran access to billions of dollars but does not address Iran’s support for groups the U.S. considers terrorists, like Hamas and Hezbollah.
- They note it also doesn’t curb Iran’s development of ballistic missiles and that the deal phases out by 2030.
- They said Iran has lied about its nuclear program in the past.

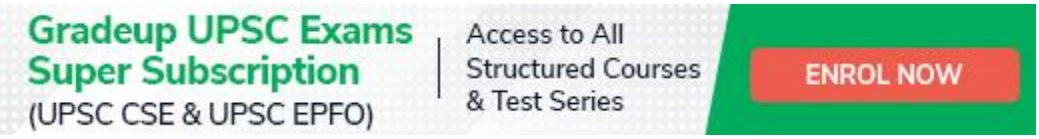
## UK plans fully digital border to provide accurate immigration numbers

**(Topic- GS Paper II –International Relation, Source- The Hindu)**

**Why in the news?**

- Recently, Britain has decided to that it will fully digitise its border, allowing accurate counting of people entering and leaving the country.

**More on the news**



- The move means those coming to Britain without a visa or immigration status will need an Electronic Travel Authorisation - similar to that used in the United States.
- It will be implemented by the end of 2025.

**Significance**

- Digital identity checks will also be used to reduce the need to visit visa application centres.
- It will help the government to count who is coming in and out of the country and whether they have permission to be here."
- UK Government has been unable to accurately measure levels of immigration and the number of people entering or leaving the country.

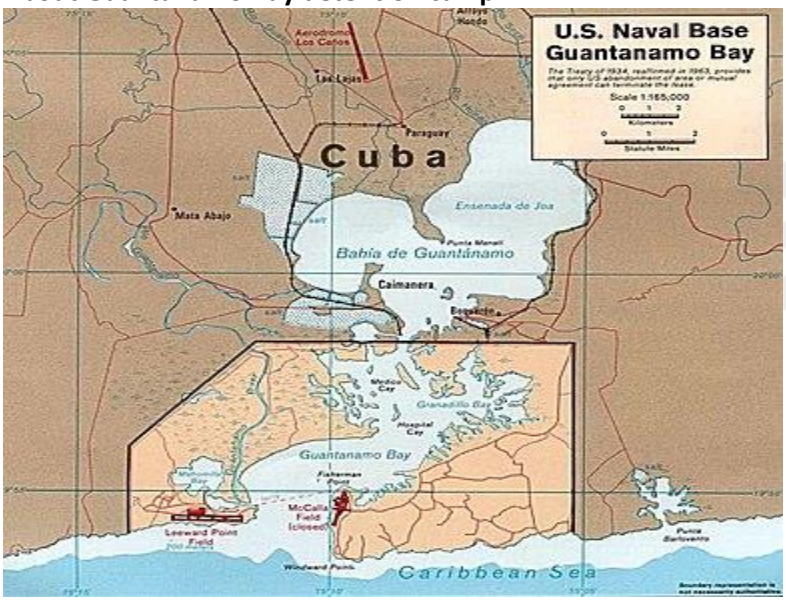
## Guantanamo Bay detention camp

**(Topic- GS Paper II + 1 –International Relation + Geography, Source- The Hindu)**

**Why in the news?**

- Recently the approved release of three detainees locked up in Guantanamo Bay, Cuba for nearly two decades has raised expectations that President Joe Biden might try to close the notorious US military prison.

**About Guantánamo Bay detention camp**




- It is also called Gitmo which is a U.S. detention facility on the Guantánamo Bay Naval Base, located on the coast of Guantánamo Bay in southeastern Cuba.
- It has been constructed in stages starting in 2002.
- The Guantánamo Bay detention camp was used to house Muslim militants and suspected terrorists captured by U.S. forces in Afghanistan, Iraq, and elsewhere (see also Iraq War).

**Violation of Legal Rights**

- The facility became the focus of worldwide controversy over alleged violations of the legal rights of detainees under the **Geneva Conventions** and accusations of torture or abusive treatment of detainees by U.S. authorities.

## National Mobile Monitoring Software) app and Area Officer Monitoring App.

**(Topic- GS Paper II –Governance, Source- The Hindu)**

**Why in the news?**

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- The Union Minister of Rural Development has recently launched the NMMS (National Mobile Monitoring Software) app and Area Officer Monitoring App.

**About NMMS (National Mobile Monitoring Software) app**

- It will permits taking real-time attendance of workers at Mahatma Gandhi NREGA worksites along with geotagged photographs.

**Significance**

- This will increase citizen oversight of the programme.
- It also enables the potential processing of payments faster.

**About Area Officer Monitoring App**

- Area Officer Monitoring App facilitates area officers to record their findings online and even put a time stamp on them.
- The app can also enable the coordination of tagged photographs for all the schemes of the Department of Rural Development such as MGNREGA, PMAYG, PMGSY.

**Significance**

- This would enable the government to record the inspections by officials.
- It will also facilitate analysis of the findings for better programme implementation.

**About MGNREGA**

- Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) is an employment guarantee act.
- It was introduced in 2005 through the National Rural Employment Guarantee Act, 2005.
- Under the scheme, every rural household whose adult member volunteers to do unskilled manual work is entitled to get at least 100 days of wage employment in a financial year.

**Implementation**

- Ministry of Rural Development (MRD) in association with state governments monitors the implementation of the scheme.

**The objective of the MGNREGA Scheme**

- It aims at addressing the causes of chronic poverty through the works that are undertaken and ensuring sustainable development.
- The Act was introduced with the aim of improving the purchasing power of the rural people, primarily semi or un-skilled work to people living below the poverty line in rural India.
- It also aims to strengthen the process of decentralization and empowers Panchayati Raj Institutions (PRIs) for the planning and implementation of these works.

## Ethiopia Tigray crisis

**(Topic- GS Paper II –International Relation, Source- Business Standard)**

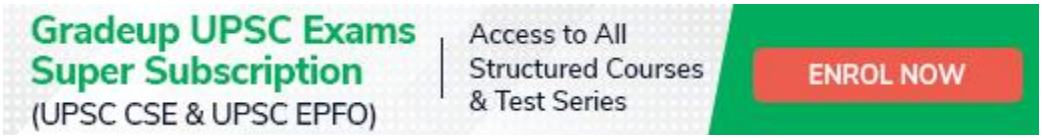
**Why in the news?**

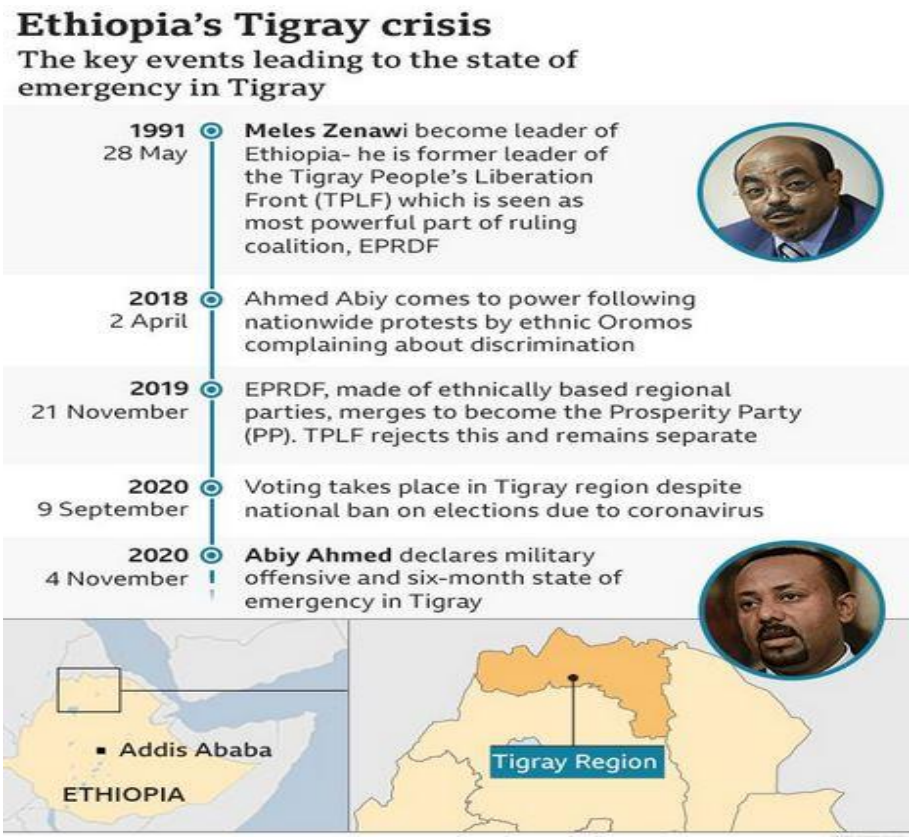
- The United States has recently begun restricting visas for people undermining efforts to resolve the deadly fighting in Ethiopia's Tigray region.

**More on the news**

- Thousands of people are estimated to have died in the six months the conflict between Ethiopian troops and the Tigray Peoples Liberation Front has raged in the northern regional state.
- The U.S. called on the Ethiopian government to meet public commitments to hold accountable all those responsible for human rights violations and abuses, to protect civilians, and to ensure unhindered humanitarian access.

**Background**






- The crisis began in November after Ethiopia accused former leaders of the Tigray Peoples Liberation Front, or TPLF, of ordering an attack on an Ethiopian army base in the region.
- Troops sent by Ethiopia's leader, Prime Minister Abiy Ahmed, quickly ousted the TPLF from major cities and towns, but guerrilla fighting was still reported across the Tigray region.
- Troops from neighboring Eritrea joined in support of Ethiopian forces.

**About Ethiopia**

- Ethiopia is a country on the Horn of Africa.
- The country lies completely within the tropical latitudes and is relatively compact, with similar north-south and east-west dimensions.
- The capital is Addis Ababa ("New Flower"), located almost at the centre of the country.
- Ethiopia is the largest and most populated country in the Horn of Africa.
- With the 1993 secession of Eritrea, its former province along the Red Sea, Ethiopia became landlocked.

**India-Ethiopia Relations**

- Ethiopia is one of the largest recipients of long term concessional credit from India in Africa.
- **Lines of Credit worth more than USD1 billion** have been sanctioned to Ethiopia for sectors such as rural electrification, sugar industry and railways.
- **Tele-Education and Tele-Medicine services** under the Pan African e-network Project was launched in Addis Ababa in July 2007.
- The Tele-Education project has been replicated by the Ethiopian side and linkages established between the Addis Ababa University and the Indian Institutes of Technology at Delhi and Kanpur.
- **Indian Mission has been celebrating the International Day of Yoga in Addis Ababa.**

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## Central Bureau of Investigation

**(Topic- GS Paper II – Polity, Source- The Hindu)**

**Why in the news?**

- Recently, a high-powered committee, headed by Prime Minister and comprising Chief Justice of India (CJI) and Leader of the Congress in the Lok Sabha, met to finalise the choice of the next Director of the Central Bureau of Investigation (CBI).

**About the Central Bureau of Investigation (CBI)**

- It was set up in 1963 by a resolution of the Ministry of Home Affairs.
- Later, it was transferred to the Ministry of Personnel and now it enjoys the status of an attached office.
- The establishment of the CBI was recommended by the **Santhanam Committee on Prevention of Corruption (1962–1964).**
- **The CBI is not a statutory body.**
- It derives its powers from the Delhi Special Police Establishment Act, 1946.

**Provision of prior permission**

- The CBI is required to obtain the prior approval of the Central Government before conducting any inquiry or investigation into an offence committed by officers of the rank of joint secretary and above in the Central Government and its authorities.
- It means it does not have **Suo Moto power**.

**Legal provisions for the appointment of Director of the CBI**

- The Director of the CBI is appointed as per section 4A of the Delhi Special Police Establishment Act of 1946.
- The Lokpal and Lokayuktas Act (2013) amended the Delhi Special Police Establishment Act (1946) and made the following changes with respect to appointment of the Director of CBI.
- The Central Government shall appoint the Director of CBI on the recommendation of a threemember committee consisting of
    - The Prime Minister as Chairperson
    - The Leader of Opposition in the Lok Sabha
    - The Chief Justice of India or Judge of the Supreme Court nominated by him.
- Later, the Delhi Special Police Establishment (Amendment) Act, 2014 made a change in the composition of the committee related to the appointment of the Director of **Central Bureau of Investigation.**
- It states that where there is no recognized leader of opposition in the Lok Sabha, then the leader of the single largest opposition party in the Lok Sabha would be a member of that committee.

## New land regulations in Lakshadweep

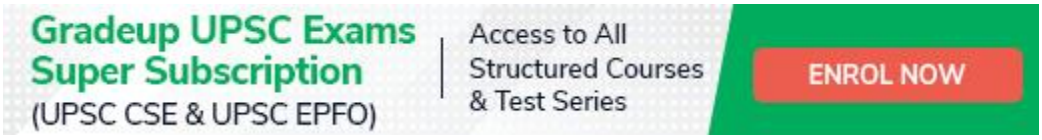
**(Topic- GS Paper II + III – Governance + Environment, Source- The Hindu)**

**Why in the news ?**

- Recently, high dissatisfaction in the Lakshadweep group of islands over a slew of regulations introduced by the new administrator Praful Khoda Patel.

**More on the news**

- The latest draft regulation for the creation of a Lakshadweep Development Authority (LDA) is widely resented as the people suspect that this might have been issued at the behest of 'real



estate interests' seeking to usurp the small holdings of property owned by the islanders, a majority of them (94.8% as per the 2011 census) belonging to the Scheduled Tribes.

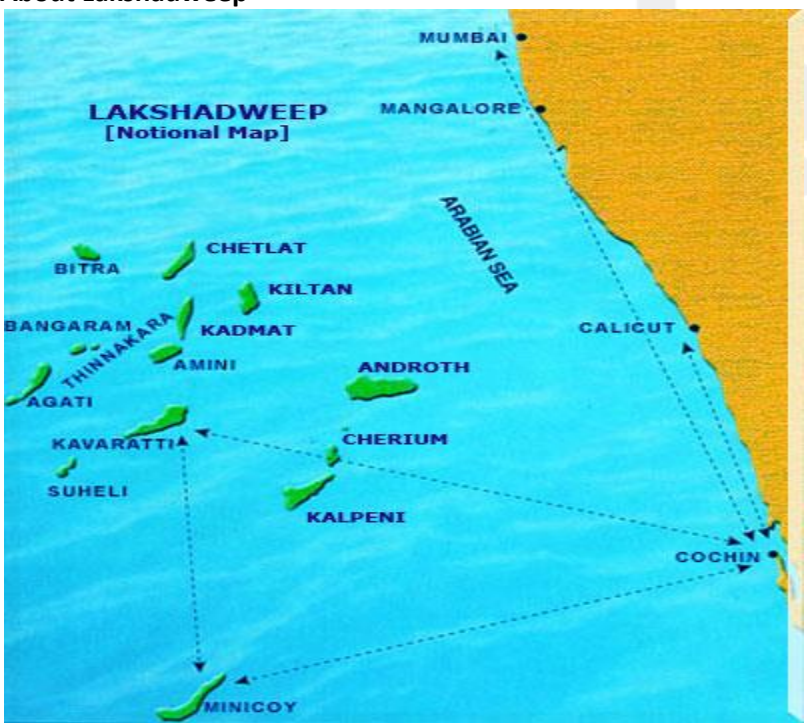
**Definition of Development in the draft**

- The draft regulation defines development as the "carrying out of building, engineering, mining, quarrying or other operations in, on, over or under land, the cutting of a hill or any portion thereof or the making of any material change in any building or land or in the use of any building or land.
- The regulation empowers the government, identified as the administrator, to constitute Planning and Development Authorities under it to plan the development of any area identified as having "bad layout or obsolete development".
- Only cantonment areas are exempted from this

**Concern**

- One of the petitions seeking the withdrawal of the LDA regulation says the legislation vests such powers with the authority that it can prepare comprehensive development plans for any area and relocate people regardless of their will.
- It provides for forcible eviction, puts the onus on the owner to develop his holding as per the plan prepared by the authority as also to heavily penalise them in the event of non-compliance.
- -The island community is a close-knit group with families living in close proximity.
- The regulation will destroy the way of life practised by them for generations.

**About Lakshadweep**




- It is a tropical archipelago of 36 atolls and coral reefs in Arabian Sea.
- The name Lakshadweep in Malayalam and Sanskrit means 'a hundred thousand islands'.

**Some important island of Lakshadweep**

a. Amindivi Islands (consisting of six main islands of Amini, Keltan, Chetlat, Kadmat, Bitra and Perumul Par).
b. Laccadive Islands (consisting of five major islands of Androth, Kalpeni, Kavaratti, Pitti and Suheli Par) and

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c. Minicoy Island: It is the largest island of Lakshadweep.

## 17+1 cooperation forum

**(Topic- GS Paper II –International Organization, Source- The Hindu)**

**Why in the news?**

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

**About 17+1 cooperation forum:**

- It is a China-led initiative founded in the year 2012.
- The format was founded in 2012 in Warsaw to push for the cooperation of the "17+1" (the 17 CEE countries and China).

**Aim**

- To expand cooperation between China and the Central and Eastern European (CEE) member countries.
- This is done through investments and trade for the development of the CEE region.
- The initiative also focuses on infrastructure projects such as bridges, motorways, railway lines and the modernisation of ports in the member states

**Members**

- The countries are Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Czech Republic, Estonia, Greece, Hungary, Latvia, North Macedonia, Montenegro, Poland, Romania, Serbia, Slovakia, and Slovenia.

**Significance**

- The initiative is largely seen as an extension of China's flagship Belt and Road initiative (BRI).

**Recent Development**

- The Baltic country urged fellow EU members to pursue "a much more effective 27+1 approach and communication with China."

**About Lithuania**

- Lithuania, officially the Republic of Lithuania is a country in the Baltic region of Europe.
- It is one of the Baltic States.
- It lies on the eastern shore of the Baltic Sea, to the southeast of Sweden and the east of Denmark, with Latvia to the north, Belarus to the east and south, Poland to the south, and Kaliningrad Oblast of Russia to the southwest.

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- **Its capital and largest city is Vilnius.**

## Panel to define offences of speech, expression

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently, a panel has been constituted by the Union Home Ministry to suggest reforms to the British-era Indian Penal Code (IPC) are likely to propose a separate Section on "offences relating to speech and expression.
- As there is no clear definition of what constitutes a "**hate speech**" in the IPC, the Committee for Reforms in Criminal Laws is attempting for the first time to define such speech.

**Bureau's definition of Speech**

- The Bureau of Police Research and Development recently published a manual for investigating agencies on cyber harassment cases that defined hate speech **as a "language that denigrates, insults, threatens or targets an individual based on their identity and other traits (such as sexual orientation or disability or religion etc.)."**
- Earlier in 2018, the Home Ministry had written to the Law Commission to prepare a distinct law for online "**hate speech" acting on a report by Viswanathan committee headed by former Lok Sabha Secretary General** who recommended stricter laws.
- The committee was formed in the wake of **Section 66A of the Information Technology Act, 2000,** that provided punishment for sending offensive messages through communication services being scrapped by the Supreme Court in 2015.
- In 2019, however, the Ministry decided to overhaul the IPC, **framed in 1860 and the Code of Criminal Procedure (CrPC**) after seeking suggestions from States, the Supreme Court, High Courts, the Bar Council of India, Bar Councils of States, universities and law institutes on comprehensive amendments to criminal laws.

## FB will comply with new IT rules

**(Topic- GS Paper II –Governance, Source- The Hindu)**

**Why in the news?**

- Recently, the new stricter rules for social media intermediaries such as Facebook, WhatsApp, Google. Twitter and Telegram, come into effect.
- The majority of platforms are yet to fully comply with 'The Information Technology (Guidelines for Intermediaries and Digital Media Ethics Code) Rules, 2021'.

**About The Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021**

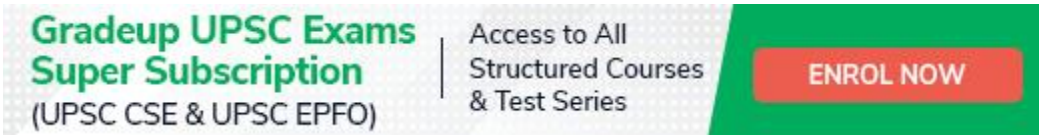
- The rule were notified on February 25, 2021 under the Information Technology Act, 2000 which replace the Information Technology (Intermediaries Guidelines) Rules, 2011.
- **The Act provides for the regulation of electronic transactions and cybercrime.**

**Due diligence by intermediaries**

- Intermediaries are entities that store or transmit data on behalf of other persons.
- Intermediaries include internet or telecom service providers, online marketplaces, and social media platforms.

The due diligence to be observed by intermediaries includes:

a. informing users about rules and regulations, privacy policy, and terms and conditions for usage of its services,



b. blocking access to unlawful information within 36 hours upon an order from the Court, or the government, and
c. retaining information collected for the registration of a user for 180 days after cancellation or withdrawal of registration.

Intermediaries are required to report cybersecurity incidents and share related information with the Indian Computer Emergency Response Team.

**Significant social media intermediaries**

- A social media intermediary with registered users in India above a threshold (to be notified) will be classified as Significant Social Media Intermediaries.
- Intermediaries which provide messaging as a primary service must enable the identification of the first originator of the information on its platform.
- This originator must be disclosed if required by an order from the Court or the government. Such order will be passed for specified purposes including investigation of offences related to sovereignty and security of the state, public order, or sexual violence.
- No such order will be passed if less intrusive means are effective in identifying the originator of the information.
- The intermediary will not be required to disclose the contents of any communication.
- If the first originator is located outside India, the first originator of that information within India will be deemed to be the first originator.

**Code of Ethics for Digital Media Publishers (IT Act new rules 2021):**

The Rules prescribe the code of ethics to be observed by publishers of digital media including:

- **News and current affairs content providers, and**
- **Online curated content providers (also known as OTT platforms).**

**For news and current affairs, the following existing codes will apply:**

- Norms of journalistic conduct formulated by the Press Council of India,
- Programme code under the Cable Television Networks Regulation Act, 1995.

**For OTT platforms, the requirements include:**

- Classifying content in age-appropriate categories as specified,
- Implementing an age verification mechanism for access to adult content, and access control measures such as parental controls, and
- Improving accessibility of content for disabled persons.

This enables a level playing field between the offline as well as the digital media.

## WhatsApp approaches Delhi HC to challenge new IT rules

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently, Instant messaging app WhatsApp has approached the Delhi High Court challenging the Central government's new Information Technology Rules, 2021, which include a requirement for social media platforms to compulsorily enable "**the identification of the first originator of the information"** in India upon government or court order.
- The High Court has sought a response from the Centre on the pleas.

**Related Information**

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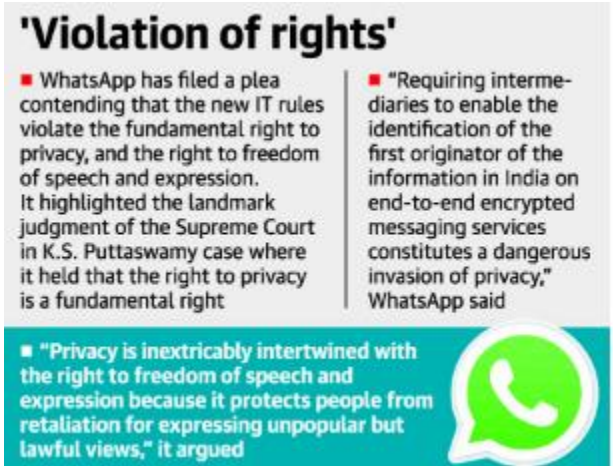


**Right to Privacy**

- The Supreme Court described privacy and its importance in the landmark decision of **K.S. Puttaswamy v. Union of India in 2017** that - **Right to Privacy is a fundamental and inalienable right and attaches to the person covering all information about that person and the choices that he/ she makes**.
- The right to privacy is protected as an intrinsic part of the right to life and personal liberty under Article 21 and as a part of the freedoms guaranteed by Part III of the Constitution.

**Government Steps to Protect Privacy**

**B N Srikrishna Committee**

- Government appointed a committee of experts on data protection under the chairmanship of Justice B N Srikrishna that submitted its report in July 2018.

**Information Technology Act, 2000**

- The IT Act provides for safeguard against certain breaches in relation to data from computer systems. It contains provisions to prevent the unauthorized use of computers, computer systems and data stored therein.

**Draft Personal Data Protection Bill 2019**

- The Bill regulates the processing of personal data of individuals (data principals) by government and private entities (data fiduciaries) incorporated in India and abroad.
- Processing is allowed if the individual gives consent, or in a medical emergency, or by the State for providing benefits.

## BRICS Astronomy Working Group

**(Topic- GS Paper II – International organization, Source- The Hindu)**

**Why in the news?**

- Recently, India hosted the seventh meeting of BRICS Astronomy Working Group (BAWG) on online mode.

**Key Highlights**

- The BRICS Astronomy Working Group has recommended networking of telescopes in member countries and creating a regional data network.

**Future directions**

- The members of the working group also indicated future directions of research in this area such as building a network of intelligent telescopes and data, study of transient astronomical phenomena in the universe, big data, artificial intelligence, machine learning applications to

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process the voluminous data generated by the enhanced multi-wavelength telescope observatory.
- The delegates deliberated on strategic and operational matters and recommended the networking of existing telescopes in BRICS countries and creating regional data network.

**About BRICS Astronomy Working Group**

- The BRICS Astronomy Working Group (BAWG) established in 2015.
- It provides a platform for BRICS member countries to collaborate in the field of astronomy, recommending that the focal points in each country should present the scientific results of the work being carried out in each country.

## Bodoland Territorial Region

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently, the Assam government has created the Welfare of Bodoland Department for dealing with issues related to four districts under the Bodoland Territorial Region (BTR).
- Earlier, the affairs of Bodoland were under the Welfare of Plain Tribes and Backward Classes Department.

**About Bodoland Territorial Region**

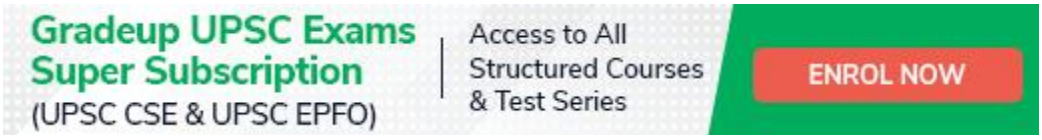
- It is an autonomous region in Assam, Northeast India.
- It is made up of four districts on the north bank of the Brahmaputra River below the foothills of Bhutan and Arunachal Pradesh.
- Bodoland Territorial Region will comprises of Kokrajhar, Chirang, Baksa and Udalguri districts, accounting for 11% of Assam's area and 10% of its population.
- It is administered by an elected body known as the Bodoland Territorial Council which came into existence under the terms of a peace agreement called **Bodo Accord** signed in February 2003 and its autonomy was further extended by an agreement signed in January 2020.
- The region covers an area of over nine thousand square kilometres and is predominantly inhabited by the Bodo people and other indigenous communities of Assam.

**About Bodoland Territorial Council**

- It is an autonomous body under the **Sixth Schedule of the Constitution**.
- There have been two Bodo Accords earlier, and the second one led to the formation of BTC.
- The All Bodo Students Union and the Government of India have signed the first accord in 1993.
- This agreement resulted to the creation of a Bodoland Autonomous Council with some political powers.
- **In 2003, the second Bodo** Accord was signed by the extremist group Bodo Liberation Tiger Force (BLTF), the Centre and the state which led to the BTC.
- The second agreement resulted to the formation of Bodoland Territorial Council (BTC) with four districts – Udalguri, Chirang, Baska and Kokrajhar.
- These areas are commonly called Bodoland Territorial Area District (BTAD).
- The area under the jurisdiction of BTC, formed under the 2003 Accord, was called (BTAD).
- **The Bodo Territorial Autonomous District was renamed Bodoland Territorial Region (BTR).**

**About Bodo Accord 2020**

- It is a tripartite agreement in which the central government, the Assam government and the Bodo groups, including all factions of the militant National Democratic Front of Bodoland (NDFB), signed an agreement to redraw and rename the Bodoland Territorial Area District (BTAD) as the Bodoland Territorial Region (BTR), in Assam.



- BTAD is spread over four districts of Kokrajhar, Chirang, Baksa and Udalguri.
- It provides for "alteration of area of BTAD" and "provisions for Bodos outside BTAD" ○ The BTAD was renamed Bodoland Territorial Region (BTR).
- It provides for more legislative, executive, administrative and financial powers to BTC.

**Note :**

- The Bodoland Territorial Area District and other areas mentioned under the Sixth Schedule of the Constitution have been exempted from the Citizenship (Amendment) Act (CAA), 2019.

## Streaming platforms will be covered by IBF

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently the Indian Broadcasting Foundation (IBF) is expanding its purview to cover digital streaming platforms and will be renamed the **Indian Broadcasting and Digital Foundation (IBDF).**

**Significance of the Move**

- The move would bring broadcasters and OTT (over-the-top) platforms, which have seen a substantial jump in their viewership base after the pandemic, under one roof.
- For this, the IBDF was in the process of forming a new wholly-owned subsidiary to handle all matters of digital media.
- The IBDF would also form a self-regulatory body, **the Digital Media Content Regulatory Council (DMCRC), for digital OTT platforms.**
- This self-regulatory body will be formed as per the Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021 notified by the government.
- DMCRC will be a second-tier mechanism at the appellate level similar to Broadcast Content Complaint Council (BCCC).

**About the Indian Broadcasting Foundation**

- It was established in 1999 to primarily fulfill this simple need.
- It is a not-for-profit organization.

**Members**

- Its members comprise both News and Non-News Channels (GEC, Sports, Music, Movies, Infotainment, etc).
- The members manage 400+ channels and about 91% of television viewership across the country.

**Related Information**

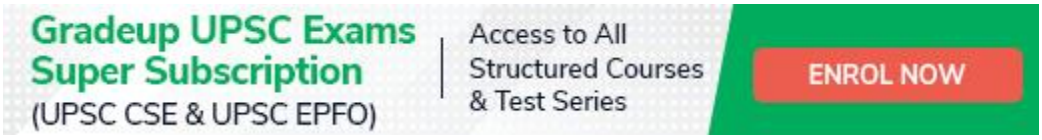
**About Broadcasting Content Complaints Council (BCCC)**

- It is a self-regulatory body set up in 2011 for general entertainment channels set up by the Indian Broadcasting Foundation.
- It has been formed to examining content-related complaints against non-news general entertainment television channels.
- The initiative signifies the maturity of broadcasters to uphold freedom of speech and expression enshrined as a Fundamental Right in the Indian Constitution.
- The Guidelines set out the principles and practices that guide the Broadcasting Service Provider (BSP) in offering content that conforms to the 'Programme Code' prescribed under the Cable Television Networks (Regulation) Act, 1995 and the Rules framed thereunder.

**Members**

It has 12 members which includes

- Four members from civil society



- Four broadcaster members
- Four chairpersons/members from National level statutory commissions such as National Commission for Scheduled Tribes, National Commission for Minorities, National Commission for Backward Classes and National Human Right Commission (NHSRC)

## Vaccine wastage

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently the Health Ministry said in a press statement that many state has wasted vaccine more than 1% which have been urged repeatedly to keep vaccine wastage below 1%.

**Key highlights**

- Jharkhand had "wasted" nearly 37% vaccines while in Chhagtisgarh it was 30%.
- Tamil Nadu (15.5%), Jammu and Kashmir (10.8%), Madhya Pradesh (10.7%) are reporting much higher **wastage than the national average (6.3%).**
- Of the vaccines supplied by the Central government for healthcare and frontline workers and for 45+ year olds, only 0.95% was wasted and for those in the 18-45 age group only 0.29% was wasted.

**About Vaccine wastage**

- Vaccine wastage is an expected component of any large vaccination drive, and a vaccine is procured from the maker with an estimated wastage.
- For each vaccine type, the wastage has to be within recommended limits.

**How Wastage happens?**

**IN UNOPENED VIALS**

- If the vaccine has crossed expiry date
- If it's exposed to heat
- If the vaccine has been frozen Breakage
- Missing inventory and theft

**IN OPENED VIALS**

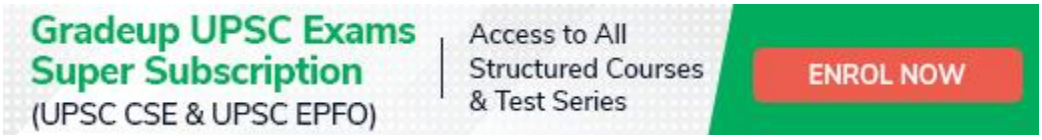
- While discarding leftover doses
- Not able to draw out the number of doses
- Vials submerged in water
- Suspected contamination
- Poor vaccine administration practices

**Different Stages where wastage occurs**

- At cold chain points
- District vaccine stores
- Vaccination session sit
- At all times, the issue of vaccine doses should match the registered list of beneficiaries:
    - Vials with earlier manufacturing dates should be prioritized
    - Supply frequency should be monitored closely

**Ways to Prevent Wastage**

- Sessions should be planned well.
- Each vaccine session should service maximum 100 beneficiaries.
- The Centre has advised not to open the vials if sites do not have minimum 10 people.
- Train vaccinators: Some vaccinators end up drawing only nine doses against 10.



## Rwanda's genocide

**(Topic- GS Paper II – International Relation, Source- The Hindu)**

**Why in the news?**

- Recently, French President Emmanuel Macron has recognised that France bears a heavy responsibility for the 1994 genocide in the central African country.

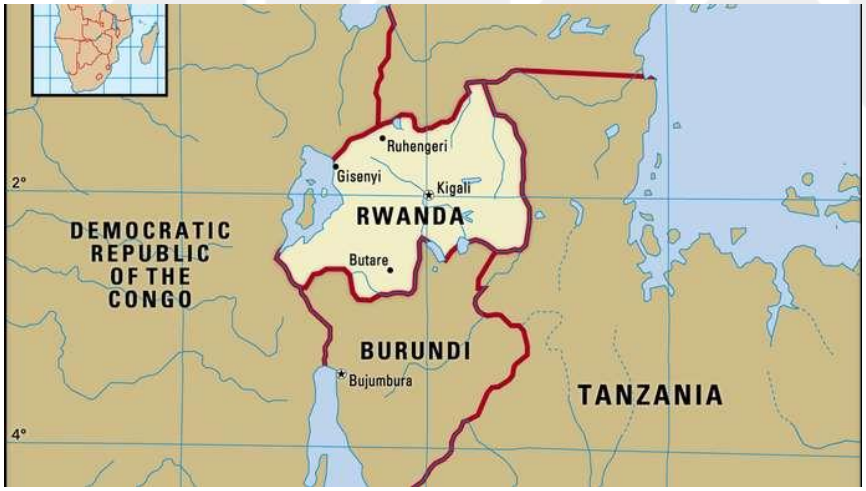
**More on the news**

- The previous visit by Nicolas Sarkozy in 2010 was the first by a French leader after the 1994 massacre sent relations into a tailspin Rwandas government and genocide survivor organizations often accused France of training and arming militias and former government troops who led the genocide.

**About Rwanda genocide of 1994**

- It is a planned campaign of mass murder in Rwanda that occurred over the course of some 100 days in April–July 1994.
- The genocide was conceived by extremist elements of Rwanda's majority Hutu population who planned to kill the minority Tutsi population and anyone who opposed those genocidal intentions.
- It is estimated that some 200,000 Hutu, spurred on by propaganda from various media outlets, participated in the genocide.
- More than 800,000 civilians—primarily Tutsi, but also moderate Hutu—were killed during the campaign.
- As many as 2,000,000 Rwandans fled the country during or immediately after the genocide.

**About Rwanda**




- It is a landlocked republic lying south of the Equator in east-central Africa.
- Rwanda is often referred to as le pays des mille collines (French: "land of a thousand hills").
- **The capital is Kigali, located in the centre of the country on the Ruganwa River.**

## Centre plans one-stop centres in 9 countries

**(Topic- GS Paper II – Social Issue, Source- The Hindu)**

**Why in the news?**

- The Ministry of Women and Child Development (WCD) has recently announced that it will set up One-Stop Centres (OSC) in nine countries in collaboration with the Ministry of External Affairs.
- These nine countries where first ten One-Stop Centres (OSC) has been introduced are- Australia, Canada, Singapore, Bahrain, Kuwait, Oman, Qatar, UAE, and Saudi Arabia.

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**Funding**

- The countries have been identified by the MEA based on the Indian diaspora population and that these centres will be run by the MEA, though they will be funded by the WCD Ministry.

**Significance**

- It will help women overseas, who are victims of violence or are simply stuck due to particular situations.
- They can now approach these centres for immediate as well as non-immediate support including legal aid, medical support and counseling.
- There are currently 700 One-Stop Centres in the country.

**About One stop centre Scheme**

- It is a centrally sponsored scheme of Ministry of Women and Child Development (MWCD) for addressing the problem of violence against women.
  It will provide integrated support and assistance under one roof to women affected by violence, both in private and public spaces.

**Subscheme**

- It is a **subscheme of umbrella scheme for National Mission for Empowerment of Women including Indira Gandhi Mattritav Sahyaog Yojana.**

**Funding**

- The scheme is funded through Nirbhaya Fund and the central government provides 100% financial assistance to the state governments /Union Territories administrations.

**Auditing**

- Audit will be done as per Comptroller & Auditor General of India norms and social audit will also be undertaken by civil society groups.

**Services**

**One stop centres will be integrated with women helplines to provide following services:**

- Medical assistance
- Assistance to women in lodging the FIR
- Psycho- social support and counseling
- Legal aid and counseling
- Shelter
- Emergency response and rescue services
- Video conferencing facility.

**About Nirbhaya Fund**

- The Nirbhaya Fund Framework provides for a non-lapsable corpus fund for safety and security of women.
- It is administered by the Department of Economic Affairs (DEA) of the Ministry of Finance of the Government of India.
- It can be utilized for projects and initiatives related to women safety.

## Member of Parliament Local Area Development (MPLAD) scheme

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently the congress leader wrote to Lok Sabha Speaker Om Birla to restart the Member of Parliament Local Area Development (MPLAD) scheme and make MPLAD funds available to MPs.

**More on the news**

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- Last year, the Government of India in the event of struggle against Covid-19 has suspended Member of Parliament Local Area Development Scheme or MPLADS funds for two years (2020 and 2021) and directed these funds to be transferred to the Consolidated Fund of India.

**About Members of Parliament Local Area Development (MPLADS) Scheme**

- The Members of Parliament Local Area Development Scheme (MPLADS) was launched on 23rd December, 1993.
- Initially, Ministry of Rural Development was the Nodal Ministry for this scheme but in October, 1994 this scheme was transferred to the Ministry of Statistics and Programme Implementation as a nodal agency.

**The salient features of the MPLAD Scheme include:**

- It is a Central Plan Scheme fully funded by the Government of India under which funds are released in the form of grants-in-aid directly to the district authorities.
- The funds released under the Scheme are non-lapsable, i.e. the entitlement of funds not released in a particular year is carried forward to the subsequent years, subject to eligibility.
- Under MPLADS, the role of the Members of Parliament is limited to recommend works.
- Thereafter, it is the responsibility of the district authority to sanction, execute and complete the works recommended by Members of Parliament within the stipulated time period.

**Note:**

- The elected Lok Sabha Members can recommend works in their respective constituencies.
- The elected members of the Rajya Sabha can recommend works anywhere in the state from which they are elected.
- Nominated Members of the Lok Sabha and Rajya Sabha can recommend works for implementation, anywhere in the country.

## Steadfast Defender 21

**(Topic- GS Paper II – International Organization, Source- Financial Express)**

**Why in the news?**

- Recently, North Atlantic Treaty Organisation (NATO) is organising “Steadfast Defender 21 war games” military exercises in Europe as tensions with Russia increases.

**About the Steadfast Defender 21**

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**Aims**

- The exercise aimed at simulating the 30-nation military organization's response to an attack on any one of its members.
- It will test NATO's ability to deploy troops from America and keep supply lines open.
- The military exercises stretching across the Atlantic, through Europe and into the Black Sea region.
- The war-games, dubbed Steadfast Defender 2021, are aimed at simulating the 30-nation military organization's response to an attack on any one of its members.

**About North Atlantic Treaty Organization**

- It is an international alliance that consists of 30 member states from North America and Europe.
- It was established at the signing of the North Atlantic Treaty on 4 April 1949.
- NATO is committed to the principle that an attack against one or several of its members is considered as an attack against all.
- This is the principle of collective defence, which is enshrined in Article 5 of the Washington Treaty.
- It's headquarter at **Brussels, Belgium.**

## Center vs State: How IAS officers are put on central deputation

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- Recently, West Bengal Chief Secretary Bandyopadhyay, an IAS officer of the 1987 batch, the Centre has asked him to report to the Government of India.

**More on the news**

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- The West Bengal government issued an order, citing the Centre's approval "in the interest of public service" to extend Bandyopadhyay's services for three months.
- Few days after it the Department of Personnel and Training (DoPT) wrote to the Chief Secretary that the Appointment Committee of the Cabinet has approved the placement of the services of Bandyopadhyay with the Government of India and requested the state to relieve the officer with immediate effect.
- This came after Chief Minister and Bandyopadhyay skipped a meeting with the Prime Minister during his visit to the state.

**How officers get an extension?**

- Rule 16(1) of DCRB (Death-cum-Retirement Benefit) Rules says that "a member of the Service dealing with budget work or working as a full-time member of a Committee which is to be wound up within a short period may be given extension of service for a period not exceeding three months in public interest, with the prior approval of the Central Government".
- For an officer posted as Chief Secretary of a state, this extension can be for six months.

**Central deputation**

- In normal practice, the Centre asks every year for an "offer list" of officers of the All India Services (IAS, IPS and Indian Forest Service) willing to go on central deputation, after which it selects officers from that list.
- **Rule 6(1) of the IAS Cadre Rules says an officer may**, "with the concurrence of the State Governments concerned and the Central Government, be deputed for service under the Central Government or another State Government…"
- It says "in case of any disagreement, the matter shall be decided by the Central Government and the State Government or State Governments concerned shall give effect to the decision of the Central Government."

**Rule 7 of the All India Services (Discipline and Appeal) Rules, 1969**

- The Centre can take no action against civil service officials who are posted under the state government.
- Rule 7 of the All India Services (Discipline and Appeal) Rules, 1969, states that
- The "authority to institute proceedings and to impose a penalty" will be the state government if the officer is serving in connection with the affairs of a state.
- For any action to be taken against an officer of the All India Services, the state and the Centre both need to agree.

**Recent Development**

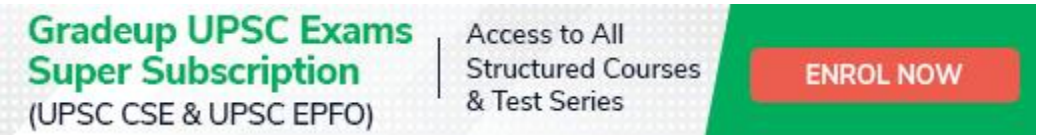
- In a PIL in the Supreme Court in January 2021, lawyer Abu Sohel pleaded that Rule 6(1) be struck down.
- He contended that because of the Rule, states have to bear the brunt of arbitrary actions taken by the Centre, while the Rule makes it difficult for the Centre to enforce its will on a state that refuses to back down.
- Ruling on March 1, a Bench of Justice L Nageswara Rao and Justice S Ravindra Bhat did not find any merit in the petition.

## Namibia Genocide

**(Topic- GS Paper II – International Relation, Source- Indian Express)**

**Why in the news?**

- Recently, Germany for the first time has recognised that it committed genocide against the Herero and Nama people in present-day Namibia during its colonial rule over a century ago.
- It also promised financial support of over a billion euros to the Southern African nation.



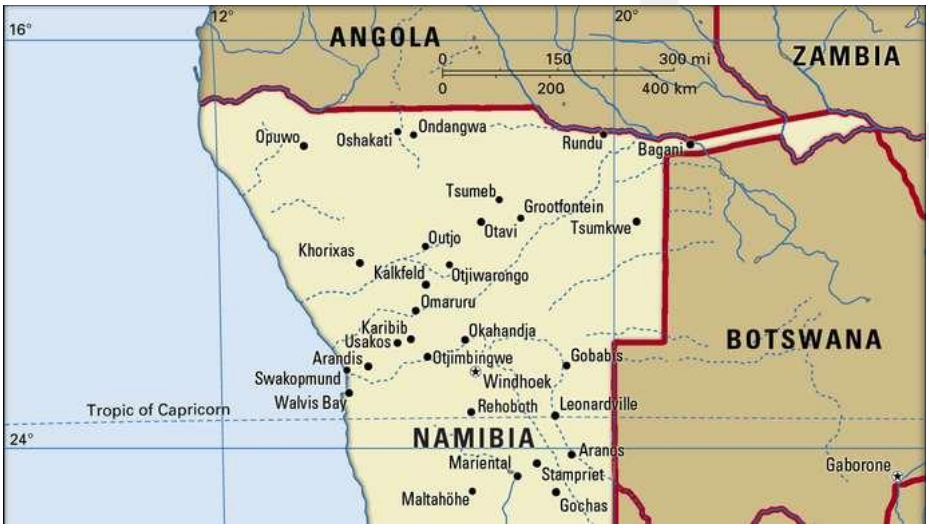
**What was the Herero and Nama Genocide?**

- Between 1904 and 1908, German colonial settlers killed tens of thousands of men, women and children from the Herero and Nama tribes after they rebelled against colonial rule in what was then called German South West Africa.
- While Germany has previously acknowledged the atrocities, they refused to pay direct reparations for many years.
- Violence first broke out between Herero fighters and German settlers in a small town called **Okahandja.**
- The Herero, who by then had embraced some symbols of modernity such as guns and horses, laid siege on a German fort.

**Battle of Waterberg**

- During **the Battle of Waterberg**, around 80,000 Herero, including women and children, were chased across the desert by German troops.
- A mere 15,000 survived.
- Over the next three years, thousands of **Nama and Herero** men, women and children were exiled to the Kalahari desert where many died of thirst.
- Several others were sent to bleak concentration camps, and used for forced labour.
- The Germans continued to rule the region till 1915, following which it fell under South Africa's control for 75 years.
- **Namibia finally gained independence in 1990.**

**About Namibia**




- It is officially called Republic of Namibia.
- It is located on the southwestern coast of Africa.
- It is bordered by Angola to the north, Zambia to the northeast, Botswana to the east, South Africa to the southeast and south, and the Atlantic Ocean to the west.

## UAE's Golden Visa

**(Topic- GS Paper II – International relation, Source- AIR)**

**Why in the news?**

- Recently, Bollywood actor Sanjay Dutt received his golden visa from the UAE government.

**About the Golden Visa**

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- 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.

**Benefits**

- The main benefit of the visa will be security as through the issuance of the Golden Visa, the UAE government has made it clear that they are committed to providing expatriates, investors and essentially everyone looking to make the UAE their home an extra reason to feel secure about their future.

**Recent Development**

- In September that year, the Dubai government also launched a **five-year renewable Retirement Visa for foreigners aged 55 and over to live in the emirate.**
- The programme, called Retire in Dubai, is open to all retirees as long as they earn a monthly income of at least $5,500, have savings of $275,000, or own a property in Dubai worth $550,000.

## YUVA - Prime Minister's Scheme

**(Topic- GS Paper II – Governance, Source- The Hindu)**

**Why in the news?**

- The Ministry of Education, Department of Higher Education has recently launched YUVA- Prime Minister's Scheme For Mentoring Young Authors.

**About YUVA - Prime Minister's Scheme**

- YUVA**(Young, Upcoming and Versatile Authors) is a part of India@75 Project (Azadi Ka Amrit Mahotsav)** to bring to the fore the perspectives of the young generation of writers on themes like Unsung Heroes, Freedom Fighters, Unknown and Forgotten Places and their role in National Movement.
- This scheme will thus help to develop a stream of writers who can write on a spectrum of subjects to promote Indian heritage, culture and knowledge system.
- The books prepared under this scheme will be published by National Book Trust, India; and will also be translated into other Indian languages ensuring the exchange of culture and literature, thereby promoting 'Ek Bharat Shreshtha Bharat'.

**Implementing Agency**

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- The National Book Trust, India under the Ministry of Education act as the Implementing Agency of this Scheme.

**Highlights of YUVA (Young, Upcoming and Versatile Authors):**

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# GS PAPER-3
## (ECONOMY, SCIENCE & TECHNOLOGY & ENVIRONMENT)

### Immunisation Agenda 2030 (IA2030)

**(Topic- GS Paper III–Health issue, Source- The Hindu)**

**Why in the news?**

- Recently World Health Organization (WHO), UNICEF and others have set a target of avoiding 50 million vaccine-preventable infections in this decade as part of **Immunisation Agenda 2030 (IA2030).**
- The Immunisation Agenda 2030 (IA2030) has been launched during World Immunisation Week celebrated every year in the last week of April.

**Key highlights of the Immunisation Agenda 2030**

- The IA2030 is based on learnings from Global Vaccine Action Plan (GVAP).
- It also aims to address the unmet targets of the GVAP that were initially to be fulfilled as part of the global immunisation strategy of the 'Decade of vaccines' (2011–2020).
- It intends to reduce the number of zero-dose children by 50 per cent.
- **Zero-dose** children are those who have received no vaccines through immunisation programmes.
- The programme will focus on a 'bottoms-up' approach, in contrast to the GVAP that followed a 'top-down' one.
- IA2030 calls for introducing booster doses for lifelong protection against diphtheria, -pertussis and tetanus.
- The programme will give priority to populations that are not currently being reached, particularly the most marginalised communities, those living in fragile and conflict-affected settings and mobile populations, such as those moving across borders.
- **IA2030 will also provide a strong foundation for the global immunisation strategy in the decade 2021-2030.**
- The UN agencies aim to ensure through IA2030 that the benefits of immunisation are shared equitably among and within countries.

**Contribute to achieve SDGs goal**

- The immunization programmes will contribute to achieving the UN-mandated sustainable development goals or SDGs, specifically SDG3 which will ensure "**Ensure healthy lives and promote well-being for all at all ages.**

**Related Information**

**World Immunization Week 2021**

- World Immunization Week is celebrated every year in the last week of April.
- The theme of the World Immunization week 2021 is '**Vaccines bring us close**'.
- It aims to promote the use of vaccines to protect people of all ages against disease.

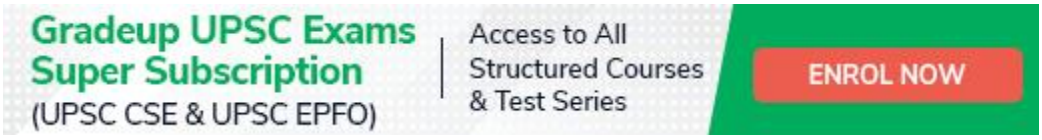
### Global Forest Goals Report 2021

**(Topic- GS Paper III–Environment, Source- Down to Earth)**

**Why in the news?**

- Recently, the Global Forest Goals Report 2021 has been released by the Department of Economic and Social Affairs of the United Nations

**Key highlights of the report**



- The report finds that while the world had been making progress in key areas such as increasing global forest area through afforestation and restoration, these advances are also under threat from the worsening state of our natural environment.
- According to the Global Forest Goals Report 2021, the world had been making progress in key areas, such as increasing the global forest area through afforestation and restoration.
- Many regions, in particular, Asia, Europe and Oceania, appear to be on track to reach one of the key targets of the Global Forest Goals - increasing forest area by three percent by 2030.

**Report and India**

- Indian has added 200, 00 ha of forests and tree cover per year.

**About Global Forest Goals Report 2021**

- It provides an initial overview of progress towards achieving the six Global Forest Goals and their 26 associated targets as contained within the United Nations Strategic Plan for Forests 2030.
- The report draws upon 52 voluntary national reports and 19 voluntary national contributions which together representing 75 per cent of forests in the world.

**About United Nations Strategic Plan for Forests 2017-2030**

- The United Nations Strategic Plan for Forests 2030 provides a global framework for action at all levels to sustainably manage all types of forests and trees outside forests, and to halt deforestation and forest degradation.
- The historic agreement on the Strategic Plan was forged at a special session of the United Nations Forum on Forests in January 2017, and subsequently adopted by the United Nations General Assembly in April 2017.
- The Strategic Plan serves as a reference framework for the forest-related work of the United Nations system and for the fostering of enhanced coherence, collaboration and synergies among United Nations bodies and partners towards the vision and mission.
- It also serves as a framework to enhance the coherence of and guide and focus the work of the international arrangement on forests and its components.
- The plan contains a set of six Global Forest Goals and 26 associated targets to be reached by 2030.

**Voluntary in nature**

- All these are voluntary in nature and universally applicable.
- It also includes a target to increase forest area by 3% worldwide by 2030.
- This is an increase of 120 million hectares, an area over twice the size of France.

**The Six Global Forest Goals are:**

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**Note:**

- The '**Global Assessment Report on Biodiversity and Ecosystem Services**' of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) had highlighted that **one million species were at risk of extinction and that 100 million hectares of tropical forest were lost from 1980-2000.**
- The report called for a future course of action that included greater sustainability and a greener and more inclusive economy to tackle the threats of COVID-19, climate change and the biodiversity crisis faced by forests.

## MACS 1407

**(Topic- GS Paper III–Agriculture, Source- PIB)**

**Why in the news?**

- Indian Scientists have recently developed a high-yielding and pest-resistant variety of soybean called **MACS 1407.**

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**About MACS 1407**

- It has been developed by MACS- Agharkar Research Institute (ARI), Pune in collaboration with Indian Council of Agricultural Research (ICAR), New Delhi.
- It is suitable for cultivation in the states of Assam, West Bengal, Jharkhand, Chhattisgarh and North-Eastern states and its seeds will be made available to farmers for sowing during the 2022 Kharif season.

**Character tics**

- MACS 1407' showed 17% increase in yield over the best check variety and 14-19 % yield advantage over the qualifying varieties.
- It is highly adaptive to sowing from 20 June to 5 July without any yield loss. This makes it resistant to the vagaries of Monsoon as compared to other varieties."
- MACS 1407 require an average 43 days for 50 % flowering and take 104 days to mature from the date of sowing.

**Significance of this development**

- In 2019, India produced around 90 million tons of soybeans which are widely cultivated as oilseeds and a cheap source of protein for animal feed and many packaged meals.
- Further, India also has a target to be among the world's major producers of soybean.
- Hence, MACS 1407 having high yielding, disease-resistant characteristics can help India to achieve this target.

## Joe Biden recognises Armenian genocide

**(Topic- GS Paper III–International Relation, Source- Indian Express)**

**Why in the news?**

- U.S. President Joe Biden has recently recognised the 1915 killings of Armenians by Ottoman forces as genocide.
- **The Armenian diaspora marks April 24 as Armenian Genocide Remembrance Day**.

**Definition of Genocide**

- Raphael Lemkin, the Polish lawyer, coined the term "genocide" in 1943.
- According to **Article II of the United Nations (UN) Convention on Genocide** of December 1948, genocide has been described as carrying out acts intended "to destroy, in whole or in part, a national, ethnic, racial or religious group".

**About the Armenian genocide**

- Armenian Genocide is often called the first genocide of the twentieth century.
- It refers to the systematic annihilation of Armenians living in the Ottoman Empire between 1915 to 1917.

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- According to estimates, approximately 1.5 million Armenians died during the genocide, either in massacres and in killings, or from ill treatment, abuse and starvation.

**Why did the Armenian Genocide occur?**

- The Armenian Genocide occured during the First World War, and in many ways a direct result of the developments during the war.
- Although Armenians had always faced harassment and persecution in Asia Minor, this heightened around 1908.
- The Armenians in the Ottoman Empire were Christians by faith and the Ottoman Caliphate feared that the Armenians would bear allegiance to neighbouring countries, Russia for instance, with similar religious affiliations than the Ottoman empire, especially during a war.
- A result of this continued hostility and suspicion towards Armenians was the first state-sanctioned pogroms called the Hamidian Massacres between 1894–1896.
- These violent massacres were implemented to crush protests against discrimination that was being perpetrated against minorities in the Ottoman Caliphate.

**Does Turkey recognise the Armenian Genocide?**

- Following years of criticism for genocide denials, in 2007, Recep Tayyip Erdoğan, then Turkish Prime Minister, called for an alternative term to be used for the Armenian Genocide— 1915 Olayları, the 'Events of 1915'.
- In Turkey, intellectuals and authors who have openly written about the Armenian Genocide have faced harassment, violence, arrest and have even been killed in retaliation.
- As of 2020, the Armenian Genocide has been formally recognised by 32 countries and parliaments.
- While other countries may not have officially recognised the genocide, presently, only Turkey and Azerbaijan openly deny the occurence of the genocide.
- In the past, whenever a country has officially extended recognition to the Armenian Genocide, Turkey has threatened those governments with economic and diplomatic consequences.

**Note:**

- **India does not officially recognise the Armenian Genocide.**

## Oldest water on Earth

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news ?**

- According to Scientists, the findings of the "**Oldest Water on Earth**" could provide information about the nature of water and life on Earth and the possibility of finding life on Mars.

**About the Oldest Water on Earth**

- The discovery made by Dr Barbara Sherwood Lollar of the University of Toronto, who in 2009 extracted from a Canadian mine water that is 1.6 billion years old– the oldest to be found on our planet.

**Location**

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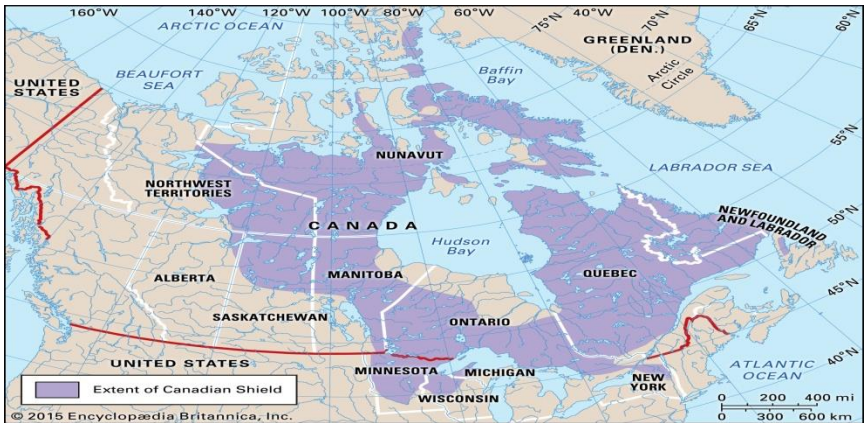


- It located on the 2.7 billion-year-old Canadian Shield, one of the world's largest continental shields – meaning the oldest and least tectonically active parts of the Earth's crust.

**Significance in the search for life on Mars**

- The Researcher observed that being a continental shield, which suffers the least from plate tectonic activity, the Canadian Shield is the closest analogue on Earth to the subsurface of Mars.
- Scientists argue that if life-supporting water can be found 2.4 km below the Earth, it may be possible that the same could be true in the case of the Red Planet.
- This hypothesis provides an impetus for missions like Perseverance, which are looking for signs of present or past life on Mars.

## WHO clears Moderna vaccine for emergency use

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

- Recently the WHO has recently listed Moderna's vaccine (mRNA 1273) in the listed in Emergency Use Listing (EUL), making it the fifth to receive such validation from the WHO.

**Other vaccines included in emergency use are**

- It includes Pfizer's mRNA vaccine, the AstraZeneca-Oxford University vaccine from two different suppliers, including Serum Institute of India, and the one-dose Johnson and Johnson vaccine.
- The vaccine has already been reviewed by WHO's Strategic Advisory Group of Experts on Immunization (SAGE), which makes recommendations for vaccines' use in populations (recommended age groups, intervals between shots, advice for specific groups such as pregnant and lactating women).

**About Emergency Use Listing (EUL)**

- It is a procedure to streamline the process by which new or unlicensed products can be used during public health emergencies.
- The EUL replaces the Emergency Use Assessment and Listing (EUAL) procedure, which was used during the West Africa Ebola outbreak of 2014-2016.

**Logistics concerns**

- The WHO emergency listing paves the way for countries without the regulatory infrastructure to expedite their own approval process to import and administer the mRNA vaccine.
- But mRNA also comes with added logistics concerns, given the extreme temperatures required to transport and distribute it.
- Moderna appears to have addressed this issue.

**No presence in India**

- India has recently opened up the pathway to bring foreign vaccines into the country with fast-track approvals.

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- Moderna has no presence or alliance in India, and there is little clarity on its India plans.

**April GST collections may go up to ₹1.2 lakh cr.'**

- Goods and Services Tax (GST) collections are likely to remain robust at about ₹1.15 lakh crore to ₹1.2 lakh crore in April, despite the spate of lockdowns across the country.
- GST collections have clocked more than ₹1 lakh crore for six months in a row, with a record ₹1.24 lakh crore flowing in, in March.

## RBI joins network for 'greening the financial system'

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news?**

- The Reserve Bank of India (RBI) has recently joined the Central Banks and Supervisors Network for Greening the Financial System (NGFS) as a Member.

**About for Greening the Financial System (NGFS)**

- It is a group of Central banks and supervisors willing to share the best practices and contribute to the development of the environment and climate risk management in the financial sector.
- It aims to accelerate the scaling up of green finance and develop recommendations for central banks' role for climate change.
- The System was launched at the Paris One Planet Summit on December 2017 and its secretariat is hosted by the Banque de France.

**Benefits for RBI**

- RBI expects to benefit from the membership of NGFS by learning from and contributing to global efforts on Green Finance which has assumed significance in the context of climate change.
- It also helps in mobilising mainstream finance to support the transition towards a sustainable economy.

## SUTRA model

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- Recently, 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 (Saturated-Unsaturated Transport) model**

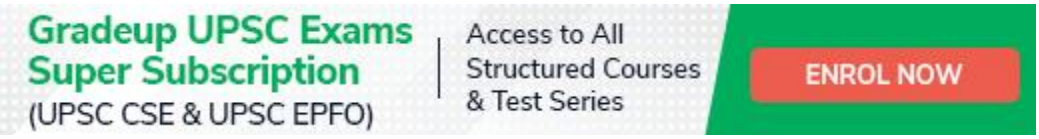
- The SUTRA (Saturated-Unsaturated Transport) is a computer program that simulates fluid movement and the transport of either energy or dissolved substances in a subsurface environment which was firstly released in 1984.
- It is a three-dimensional groundwater model that simulates solute transport (i.e. salt water) or temperature in a subsurface environment.
- It has been used to simulate the effects of saltwater intrusion, contaminant transport, and thermal pollution.
- It employs a weight grid that is based on a finite element and integrated finite difference hybrid method framework.

**Model Used for COVID-19 future Trajectory**

- It is used for charting the trajectory of COVID-19 in the country.

**Drawbacks**

- It is a mathematical model which can only predict future with some certainty so long as virus dynamics and its transmissibility don't change substantially over time.



- But in the case of COVID-19, the nature of the virus has been changing very rapidly.

## US put India on Priority Watch List under Special 301 Report
**(Topic- GS Paper III–Economics, Source- Indian Express)**

**Why in the news?**

- The Office of the United States Trade Representative (USTR) has recently released its annual Special 301 Report on the adequacy and effectiveness of U.S. trading partners' protection and enforcement of intellectual property rights.

**Significant elements of the 2021 Special 301 Report include:**

- The office of the USTR reviewed more than 100 trading partners for this year's "Special 301 Report", and eight on Priority Watch List and 23 on the Watch List.
- It placed India and eight other countries on the Priority Watch List for IP protection and enforcement.
- The other countries that have been put on the list are Argentina, Chile, China, Indonesia, Russia, Saudi Arabia, Ukraine and Venezuela.
- The countries will be the subject of intense bilateral engagement during the coming year.

**The twenty three trading partners on the Watch List are**

- Algeria, Barbados, Bolivia, Brazil, Canada, Colombia, Dominican Republic, Ecuador, Egypt, Guatemala, Kuwait, Lebanon, Mexico, Pakistan, Paraguay, Peru, Romania, Thailand, Trinidad & Tobago, Turkey, Turkmenistan, Uzbekistan, and Vietnam.

**India and Special 301Report**

- India's enforcement of IP in the online sphere has gradually improved but a lack of concrete benefits for innovators and creators persists, which continues to undermine their efforts.
- The report highlighted that India remains one of the world's most challenging major economies with respect to protection and enforcement of IP.

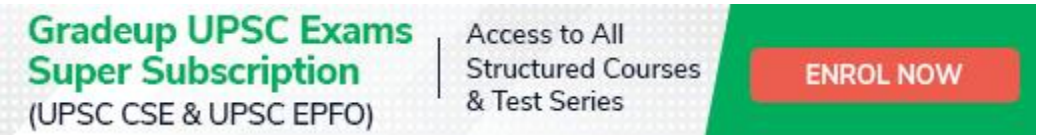
**About Special 301 Report**

- The Office of the United States Trade Representative (USTR) is responsible for the preparation of Special 301 Report.
- It is the result of an annual review of the state of intellectual property (IP) protection and enforcement in U.S. trading partners around the world.
- USTR conducts this review pursuant to Section 182 of the Trade Act of 1974, as amended by the Omnibus Trade and Competitiveness Act of 1988 and the Uruguay Round Agreements Act.
- It reflects the outcome of a Congressionally-mandated annual review of the global state of intellectual property (IP) rights protection and enforcement.

**India and intellectual property (IP) rights**

**India is a member of**

a. **World Trade Organisation** and committed to the Agreement on Trade Related Aspects of Intellectual Property (TRIPS Agreement).
b. **World Intellectual Property Organization**, a body responsible for the promotion of the protection of intellectual property rights throughout the world.
c. India is also a member of the following important WIPO-administered International Treaties and Conventions relating to IPRs.
    - Paris Convention for the Protection of Industrial Property.
    - Convention Establishing the World Intellectual Property Organization.



- Berne Convention for the Protection of Literary and Artistic Works.
- Patent Cooperation Treaty.
- Protocol Relating to the Madrid Agreement Concerning the International Registration of Marks- Madrid Protocol.
- Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure.
- Washington Treaty on Intellectual Property in respect of Integrated Circuits.
- Nairobi Treaty on the Protection of the Olympic Symbol.
- Convention for the Protection of Producers of Phonograms Against Unauthorized Duplication of Their Phonograms.
- Marrakesh Treaty to facilitate Access to Published Works by Visually Impaired Persons and Persons with Print Disabilities.

## Xylophis Deepaki

**(Topic- GS Paper III–Environment, Source- The Hindu)**

**Why in the news?**

- Recently, the Western Ghats has now added Xylophis Deepaki to list of new species discovered in 2021.

**About Xylophis Deepaki**

- It is a tiny snake of just 20 cm length with iridescent scales.
- The species is named in honour of Indian herpetologist Deepak Veerappan for his contribution in erecting a new subfamily Xylophiinae to accommodate wood snakes.
- It is found in the drier regions and in lower altitudes around Agasthyamalai hills.

**Distributions**

- It is now reported to be an endemic species of Tamil Nadu.

**About Wood Snakes**

- These are harmless, sub-fossorial and often found while digging soil in farms and under the logs in the Western Ghat forests.
- They feed on earthworms and possibly other invertebrates.

## 8 Asiatic lions test positive for Covid-19

**(Topic- GS Paper III–Environment, Source- The Hindu)**

**Why in the news?**

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- Recently, eight Asiatic lions at Hyderabad's Nehru Zoological Park have tested positive for Covid-19.
- This is the first case of lions or any other animals testing positive in an Indian zoo.

**About Asiatic lion**

- They are also known as **Indian Lion.**
- The scientific name is **Panthera Leo Persica.**
- Its current range is restricted to the **Gir National Park** and environs in the Indian state of Gujarat.

**Conservation status**

- It is listed in Schedule I of Wildlife (Protection) Act 1972.
- It is listed in Appendix I of CITES
- It is listed as **Endangered** as per IUCN Red List.
- The African Lion is listed as **Vulnerable** under the IUCN Red List.

**Related Information**

**About Canine Distemper Virus**

- Recently a deadly combination of canine distemper virus and babesiosis, a disease caused by tick-borne parasites, is killing Asiatic lions in the Gir forest sanctuary in Gujarat.
- It is a contagious viral disease that affects a wide variety of animal species, including dogs, coyotes, foxes, pandas and wolves.
- It attacks the respiratory, gastrointestinal and nervous systems of animals.

## Govt. gives TSPs nod for 5G trials

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

- Recently, the Department of Telecommunications (DoT) gave permission to Telecom Service Providers (TSPs) to conduct trials for the use and application of 5G technology.

**More on the news**

- Huawei and ZTE, Chinese company, left out of the trial of 5G in India.
- Trial applicants Telecommunications Service Providers (TSPs) are:
    - Bharti Airtel Ltd.
    - Reliance Jioinfocomm Ltd.
    - Vodafone Ltd.

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- State-run Mahanagar Telephone Nigam (MTNL)

- The International Telecommunications Union (ITU) encouraged Indian TSPs to conduct trials using 5Gi technology in addition to the already known 5G technology.
- ITU has also approved the 5Gi technology, prescribed by India, as it facilitates much larger reach of the 5G towers and radio networks.

**About 5Gi Technology**

- The 5Gi technology has been developed by the Indian Institute of Technology, Madras (IIT-M), Centre of Excellence in Wireless Technology (CEWiT) and IIT Hyderabad.

**About 5G technologies**

- 5G network is the next generation of wireless communication.
- It's much faster and able to connect with more devices than the existing 4G LTE network.
- China is the first country to officially announce its entry to the 5G era.

**Evolution of 4G to 5G**

**About 4G LTE**

- It provided with high speed and wide coverage. It was launched in 2009 and it enables features like virtual reality.
- Most mobile phones at present support both 4G and 3G technologies.

**About 5G**

- It mainly works in 3 bands, namely low medium and high frequency spectrum - all of which have their uses and limitations.
- 5G will deliver ultra low latency, multi-Gbps rates, massive capacity, and more fluent experience over the current 4G technology.

**Features of 5G**

- High average speed of downloading is 20Gbps as compared to 20 Mbps from 4G.
- The latency of 1milliseconds.
- Spectrum- 2.3GHz to 24 GHz and more. In the 4G spectrum, the range is 800MHz to 2.6 wider connectivity

**Government steps to push for 5G**

- The government established a steering committee under the **Chairmanship of A.J.Paulraj** to suggest a roadmap for 5G adoption.
- Telecom Regulatory Authority of India (TRAI) has started the process of auctioning 5G spectrum.

**National Electronics Policy 2019**

- National Electronics Policy 2019 aims to position India as a global hub for Electronics System Design and Manufacturing and promotes 5G, IoT, Articial intelligence etc.

**Bharat Net project**

- **BharatNet is a flagship mission implemented by Bharat Broadband Network Ltd. (BBNL)**
- It aims to provide broadband connectivity to all household.
- The three-phase implementation of the BharatNet project is as follows:

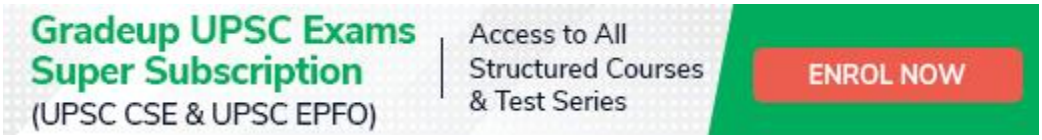
**First Phase**

- Provide one lakh gram panchayats with broadband connectivity by laying underground optic fibre cable (OFC) lines by December 2017.

**Second Phase**

- Provide connectivity to all the gram panchayats in the country using an optimal mix of underground fibre, fibre over power lines, radio and satellite media.
- It is to be completed by March 2019.

**Third Phase**



- It has been started from 2019 to 2023, a state-of-the-art, future-proof network, including fibre between districts and blocks, with ring topology to provide redundancy would be created.

## R21/Matrix M: Malaria Vaccine Candidate

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

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

**Background**

- The previous version 'RTS-S' is a vaccine candidate against malaria that has been in development for more than 30 years which is being developed by Walter Reed Institute of Research, GlaxoSmithKline and Bill and Melinda Gates Foundation with the PATH Malaria Vaccine Initiative.
- It 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.
- The RTS-S is the first, and to date the only, vaccine to reduce malaria in children.

**About R21/Matrix M**

- It is a modified version of RTS-S.
- It has been developed by scientists at University of Oxford, the same location where the - AstraZeneca Covid-19 vaccine was developed.
- It was the first to reach whose goal of at least 75% efficacy.

**Global Scenario of Malaria**

- 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.

**Benchmark of WHO Certification**

- Between the period 2000 and 2020, 24 nations reported zero indigenous malaria **cases for three or more years.**
- This is the benchmark for the WHO certification of a malaria-free nation.
- Around the world, a total of 39 countries have achieved the milestone.
- According to WHO, in 2019 India had an estimated 5.6 million cases of malaria compared to about 20 million cases in 2020.

## Congo declares end of Ebola outbreak

**(Topic- GS Paper III–Science and Technology, Source- AIR)**

**Why in the news?**

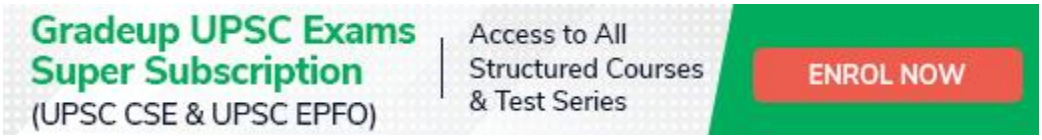
- Recently the Democratic Republic of Congo has declared the end of an Ebola outbreak that infected 12 people in the eastern province of North Kivu and killed six of them.

**About Ebola**

- Ebola virus disease (EVD), formerly known as Ebola haemorrhagic fever, is a severe, often fatal illness in humans.

**Transmission**

- The virus is transmitted to people from wild animals such as chimpanzees, gorillas, fruit bats) and then spreads in the human population through human-to-human transmission.



- It is thought that fruit bats of the Pteropodidae family are natural Ebola virus hosts.

**Note:**

- People can get the virus through sexual contact as well.

## P-8I Patrol Aircraf

**(Topic- GS Paper III–Defence, Source- Indian Express)**

**Why in the news?**

- The US State Department has recently approved the proposal for the sale of six P-8I patrol aircraft and related equipment to India.

**About P-8I patrol aircraft**

- It is a long-range, multi-mission maritime patrol aircraft. US-based manufacturer Boeing developed this aircraft.
- The aircraft is based on the Boeing 737 commercial aircraft and India is its first international customer.

**Features**

- The aircraft is designed to protect the vast coastline and territorial waters of India.
- It can also conduct anti-submarine warfare (ASW), anti-surface warfare (AsuW), intelligence, maritime patrol and surveillance, and reconnaissance missions.

## SpaceX Nighttime Splashdown

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news ?**

- Recently, Elon Musk's SpaceX marked the successful completion of its Crew-1 mission for NASA after landing after successfully landing in the Gulf of Mexico off the coast of Florida.

**About Crew 1 Mission**

- It is the first of six crewed missions that NASA and SpaceX will operate as part of the Commercial Crew Program.
- The mission is part of NASA's Commercial Crew Program.
- Its objective is to make access to space easier in terms of its cost, so that cargo and crew can be easily transported to and from the ISS, enabling greater scientific research.
- The programme is a way to reduce the cost of going to space for agencies such as NASA and also makes it possible for any individual to buy a ticket on a commercial rocket.
- The Crew-1 team members joined members of Expedition 64 and conducted microgravity studies at the ISS.

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**About Crew-1's nighttime splashdown**

- The last US mission to land astronauts to land on water in the dark was the historic Apollo 8.
- It was the first human spaceflight to reach and orbit the Moon in 1968.
- The spacecraft spent six days in space before splashing into the Pacific Ocean near Hawaii before dawn.
- The advantage of landing in dark is avoiding disturbance from private boats, a safety risk.

**Note :**

**Gaganyaan Mission**

- It is India's first Human Space Flight Programme to be launched by Indian Space Research Organisation by 2022.

## Also in news

**Mayflower 400" -- the world's first intelligent ship**

- Recently, the "Mayflower 400" -- the world's first intelligent ship -- bobs gently in a light swell as it stops its engines in Plymouth Sound, off England's southwest coast, before self-activating a hydrophone designed to listen to whales.

## 'INSACOG shared inputs on variants'

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news ?**

- The Indian SARS-CoV-2 Genome Sequencing Consortia (INSACOG), which studies coronavirus samples of various States, had been giving regular updates on the threat from new strains to the government.

**More on the news**

- The Union Health Ministry said it was informed about the current status of Variants of Concern and new mutants and "stressed on increased and stringent public health interventions".
- The current surge in cases could be correlated with the rise in the B.1.617 lineage of SARS-CoV-2, popularly known as the **"Indian variant" of the coronavirus.**

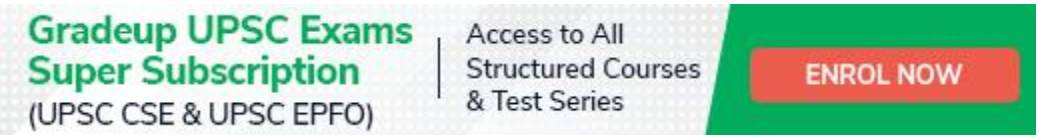
**Concern prevails** Among all the genome samples which showed variants of concern in Kerala (18), all belonged to the B.1.1.7 variant which originated in the U.K. In Maharashtra, 89% of the variants of concern detected were the double mutant B.1.617 variant

| State | B.1.1.7 samples | Share of B.1.1.7 |
|---|---|---|
| Kerala | 18 | 100% |
| Rajasthan | 23 | 100% |
| Punjab | 516 | 99% |
| Haryana | 20 | 95% |
| Himachal | 34 | 94% |

| States | B.1.617 | Share of B.1.617 |
|---|---|---|
| Maharashtra | 761 | 89% |
| Jharkhand | 61 | 81% |
| Chhattisgarh | 75 | 79% |
| West Bengal | 124 | 72% |
| Karnataka | 146 | 62% |

**About Indian SARS-CoV-2 Consortium on Genomics (INSACOG)**

- It is a multi-laboratory, multi-agency, pan-India network to monitor genomic variations in the SARS-CoV-2.
- It helps in the understanding of how the virus spreads and evolves.
- Genomic surveillance can generate a rich source of information for tracking pathogen transmission and evolution on both national and international levels.



## RBI steps in to ease COVID-19 burden

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news?**

- Recently, the RBI Governor Shaktikanta Das announced a series of measures to support the nation's fight against the second wave of COVID-19 infections.

**Step Taken by the RBI**

**Term Liquidity Facility**

- RBI Governor announced a Term Liquidity Facility of ₹50,000 crore with tenor of up to three years, at the repo rate, to ease access to credit for providers of emergency health services.
- Under the scheme, banks will provide fresh lending support to a wide range of entities, including vaccine manufacturers, importers/suppliers of vaccines and priority medical devices, hospitals/dispensaries, pathology labs, manufacturers and suppliers of oxygen and ventilators, and logistics firms.
- "These loans will continue to be classified under priority sector till repayment or maturity, whichever is earlier.
- The banks were expected to create a **COVID loan book under the scheme**.

**About COVID loan Book**

- The Banks can park additional surplus liquidity to the size of the Covid loan book under the reverse repo window at an interest rate which is 40 basis points more than reverse repo rate.
- The banks benefit out of it by receiving interest for their holdings with the central bank.

**SFB loan to MFIs for on-lending to be classified as priority sector lending**

- The Reserve Bank of Indian has decided to allow the classification of priority sector lending for loans given by small finance banks (SFB) to micro-finance institutions (MFI) for on-lending to individuals.
- The smaller MFIs, SFBs are now being permitted to reckon fresh lending to smaller MFIs (with asset size of up to Rs 500 crore) for on-lending to individual borrowers as priority sector lending."
- This facility will be available up to March 31, 2022.
- **At present, lending by Small Finance Banks (SFBs) to Micro Finance Institutions (MFIs) for on-lending is not reckoned for priority sector lending (PSL) classification.**
- **Bank credit will be permitted up to 10 per cent of the bank's total priority sector portfolio as on March 31, 2021**.
- Loans disbursed under the scheme will continue to be classified under priority sector till the date of repayment or maturity whichever is earlier.

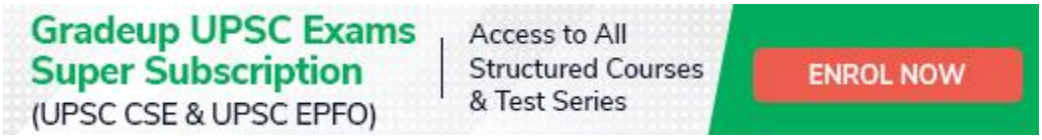
**Credit flow to MSME Entrepreneurs**

- To further incentivize inclusion of unbanked MSMEs into banking system, exemption provided in February, 2021 wherein scheduled banks were allowed to deduct credit given to new MSME borrowers from Net Time & Demand Liabilities for calculation of CRR, is now extended to December 31, 2021.

**Relaxation of overdraft facility for states**

- Maximum number of days of overdraft in a quarter for state governments has been increased from 36 to 50 days.
- The number of consecutive days of OD has been increased from 14 to 21 days; facility available up to September 30, 2021.

**Stress resolution framework 2.0 for individual and MSME**



- Individuals, borrowers and MSMEs with aggregate exposure up to Rs. 25 crore, who have not availed restructuring under any previous frameworks, who were classified as standard on 31 March, 2021, will **be eligible to be considered under Resolution Framework 2.0.**
- Restructuring under new framework can be invoked till September 30, 2021 and will have to be implemented within 90 days after invocation.
- For individuals and small businesses who have availed restructuring of loans under Resolution Framework 1.0, where moratorium of less than 2 years was permitted, lending institutions can now increase the period and/or extend residual **tenure up to a total period of 2 years**.
- In respect of small businesses and MSMEs restructured earlier, lending institutions are now permitted to review working capital sanction limits, as a one-time measure.

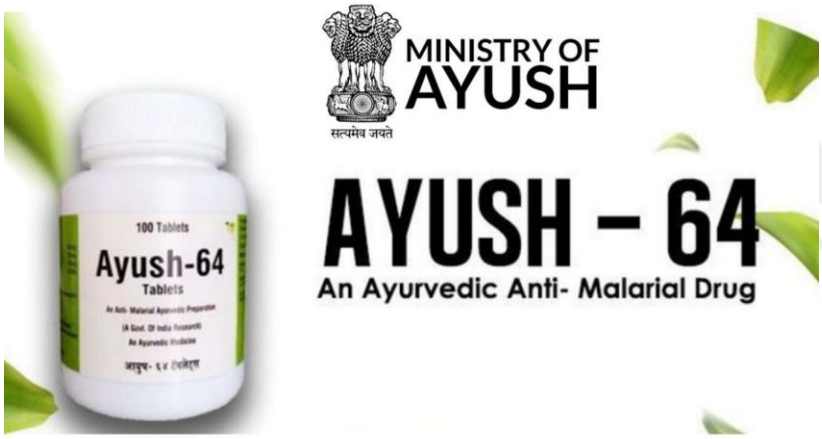
## Ayush-64

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news ?**

Recently, the polyherbal drug AYUSH-64 which was originally developed in 1980 for treatment of malaria, has now been repurposed for Covid 19.

**About Ayush-64**




- It is an Ayurvedic formulation, developed by the Central Council for Research in Ayurvedic Sciences (CCRAS).
- It was originally developed in 1980 for the management of Malaria.
- The in-silico study done on Ayush 64 showed that 35 out of 36 of its Phyto-constituents have high binding affinity against COVID 19 virus.
- Ayush 64 has been identified as a potential adjunct to standard care in the management of asymptomatic, mild and moderate COVID 19 to improve the clinical recovery and quality of life.
- **It is found to be useful in the treatment of asymptomatic, mild and moderate COVID-19 infection.**
- It can be taken as a standalone treatment in mild cases under the supervision of an Ayurvedic physician, provided there is availability of appropriate referral facilities.

**Related Information**

**About Central Council for Research in Ayurvedic Sciences**

- It is an autonomous body of the Ministry of AYUSH (Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homeopathy), Government of India.

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- It is an apex body in India for the formulation, coordination, development and promotion of research on scientific lines in Ayurveda and Sowa-Rigpa system of medicine.

## VINCOV-19

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- Recently, the Centre for Cellular and Molecular Biology has developed the **VINCOV-19**, possibly the first specific drug for COVID-19 treatment, which contain therapeutic antibodies.
- The Drug Controller General of India (DGCI) has given its approval for human trials, Phase-I and Phase-II for the VINCOV-19 and expected to be tried next week in Delhi and Rajasthan.

**About VINCOV-19**

- The VINCOV-19 is a collection of antibodies from Horses after they got injected inactivated Corona virus.
- VINCOV may be the first specific drug for COVID treatment and it works best when given on early stage of infection.

## White-bellied heron

**(Topic- GS Paper III–Environment, Source- Hindustan Times)**

**Why in the news?**

- Recently, the white-bellied heron, a rare and elusive bird, was spotted at **Walong in the Anjaw district of Arunachal Pradesh.**

**About White-bellied Heron**

- The white-bellied heron, also known as the imperial heron or great white-bellied heron.

**Distribution**

- **It is mostly solitary and occurs in undisturbed riverside or wetland habitats.**

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- It is one of the rarest birds in the world and is found only in Bhutan, Myanmar and the Namdapha Tiger Reserve in Arunachal Pradesh.
- It had also been recorded in the adjacent Kamlang Tiger Reserve in Lohit district in camera trap images.

**Conservation Status**

- The white-bellied heron is categorised as **'critically endangered'** in the International Union for Conservation of Nature (IUCN) Red Data Book.
- It is listed in **Schedule IV** in the Wildlife Protection Act, 1972.

**Also in news**

## Oxygen on Wheels

- The Jain International Trade Organisation (JITO), in association with the Greater Chennai Corporation, has launched "Oxygen on Wheels", an initiative where buses laden with oxygen concentrators will be deployed outside government hospitals.

**Features**

- JITO has set up four dedicated specialty buses, each laden with six oxygen concentrators, which will be deployed outside government hospitals.
- Each bus can handle six patients and can provide relief to those queuing up for admission. The facility is free for patients.

## Jeevan Seva App

- A company providing e-mobility services has partnered with the Delhi government to provide sanitised electric vehicles for safe commute of patients to healthcare facilities across the Capital round the clock.
- The service is free.
- The 'Jeevan Seva App', created by Prakriti E-Mobility provides a dedicated EV cab service to help patients commute for treatment from any point in Delhi and without any charges.

## Intellectual property waiver for Covid-19 vaccines

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**(Topic- GS Paper III–Economics, Source- Indian Express)**

**Why in the news?**

- The United States recently announced support for waiving intellectual property protection for Covid-19 vaccines.
- United States Trade Representative Katherine Tai said the US will pursue "**text-based negotiations**" on the waiver at the World Trade Organization (WTO).

**Significance**

- The IP waiver might open up space for production of Covid vaccines with emergency use authorisations (EUA) — such as those developed by Pfizer, Moderna, AstraZeneca, Novavax, Johnson & Johnson and Bharat Biotech — on a larger scale in middle-income countries.
- Most production is currently concentrated in high-income countries; production by middle-income countries has been happening through licensing or technology transfer agreements.

**Earlier proposal from India and South Africa**

- In October 2020, India and South Africa had asked the WTO to waive certain conditions of the Trade Related Aspects of Intellectual Property Rights (TRIPS) Agreement that could impede timely access to affordable medical products to combat Covid-19.
- The countries had asked the TRIPS Council to recommend, "as early as possible", a waiver on the implementation, application and enforcement of four sections in the second part of the agreement.
- These sections — 1, 4, 5, and 7 — pertain to copyright and related rights, industrial designs, patents, and the protection of undisclosed information.
- The proposal had said that developing countries "especially", may face institutional and legal difficulties when using flexibilities available in the TRIPS Agreement.

**India and Patent**

- India moved from product patenting to process patenting in the 1970s, which enabled India to become a significant producer of generic drugs at global scale, and allowed companies like Cipla to provide Africa with anti-HIV drugs in the 1990s.
- But due to obligations arising out of the TRIPS Agreement, India had to amend the Patents Act in 2005, and switch to a product patents regime across the pharma, chemicals, and biotech sectors.

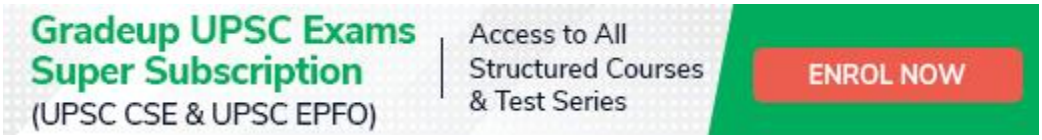
**Related Information**

**About text-based negotiations**

- Text-based negotiations involve negotiators exchanging texts with their preferred wording and then thrashing out a consensus on the working — a fairly long-drawn affair. Negotiations are expected in a mix of virtual and in-person meetings.
- They "will take time given the consensus-based nature of the institution and the complexity of the issues involved.

**About Patents and IP rights**

- A patent represents a powerful intellectual property right, and is an exclusive monopoly granted by a government to an inventor for a limited, pre-specified time.
- It provides an enforceable legal right to prevent others from copying the invention.
- Patents can be either process patents or product patents.
- A product patent ensures that the rights to the final product is protected, and anyone other than the patent holder can be restrained from manufacturing it during a specified period, -even if they were to use a different process.



- A process patent enables any person other than the patent holder to manufacture the patented product by modifying certain processes in the manufacturing exercise.

## Russia approves one-dose 'Sputnik Light'

**(Topic- GS Paper III–Science and Technology, Source- the Hindu)**

**Why in the news?**

- Recently, Russia has authorised Sputnik Light, a single dose vaccine against COVID-19, for use.

**About Sputnik Light Vaccine**

- It 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.
- It will also be effective on new strains of coronavirus".

**Efficacy**

- The Sputnik Light demonstrated 79.4% efficacy.

**Related Information**

**About the 'Sputnik V' vaccine**

- Russia named the newly approved vaccine "Sputnik V," in reference to Sputnik 1, the world's first artificial satellite, launched in 1957 during the space race.
- It uses two strains of adenovirus that typically cause mild colds in humans.

**Developed by**

- The vaccine has been developed by Moscow‟s Gamaleya Institute in collaboration with the Russia‟s defence ministry.

**Efficacy**

- The efficacy of Sputnik V was 92%.

## Global greenhouse gas emissions estimates for 2019

**(Topic- GS Paper III–Environment, Source- the Hindu)**

**Why in the news?**

- Recently, the US-based Rhodium Group has released the Global Greenhouse Gas Emissions Report.

**About the Report**

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- Rhodium provides annual estimates of economy-wide emissions—including all six Kyoto gases—for over 190 countries from 1990-2019.
- It also included land-use and forests and international bunkers.
- The six main gases under Kyoto Protocol are:
    - Carbon dioxide ($CO_2$)
    - Methane($CH_4$)
    - Nitrous oxide($N_2O$)
    - Sulphur hexafluoride($SF_6$)
    - Hydrofluorocarbons (HFCs)
    - Perfluorocarbons(PFCs)
    -

**Key highlights of the report**

- The emissions of all six Kyoto gases, inclusive of land-use and forests and international bunkers—reached 52 gigatons of $CO_2$-equivalent in 2019 which is a 11.4% increase over the past decade.
- China emitted 27% of the world's greenhouse gases in 2019 which is more greenhouse gas than the entire developed world combined, a new report has claimed.
- The US was the second-largest emitter at 11% while India was third with 6.6% of emissions.
- GHG emissions from all members of the Organization for Economic Cooperation and Development (OECD), as well as all 27 EU member states, reached 14,057 MMt $CO_2e$ in 2019, about 36 MMt $CO_2e$ short of China's total.
- China's Nationally Determined Contributions (NDCs) rating is "highly insufficient" and "are not at all consistent with holding warming to below 2C".

**Note:**

- **Nationally Determined Contributions** represent the commitments by each country - under the Paris pact - to reduce their own national emissions and adapt to the impacts of climate change.

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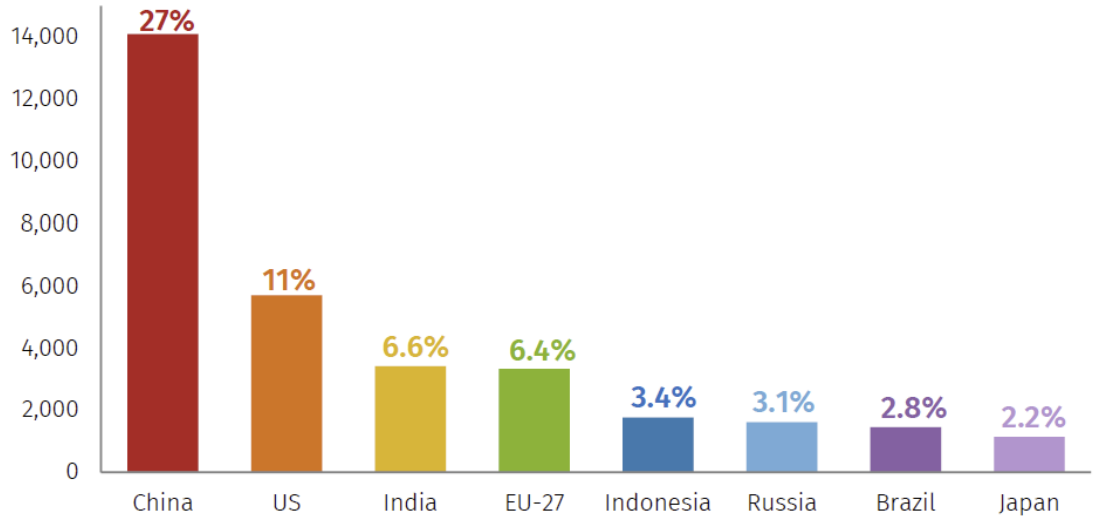
FIGURE 1

**2019 net GHG emissions from the world's largest emitters**

Million metric tons of $CO_2e$, including emissions and removals from land-use and forests and share of global total




Source: Rhodium Group

**Reasons for China Carbon Emission**

- China is heavily reliant on coal power.
- The country is currently running 1,058 coal plants - more than half the world's capacity.

**Related Information**

- Recently US President Joe Biden had announced the country's updated climate goal ahead of the White House's Leaders' Summit, pledging to cut carbon emissions as much as 52 per cent by 2030 compared to 2005 levels.
- China has also vowed to reach net-zero emissions by 2060 with a peak no later than 2030.
- Recently European Union (EU) Environment Ministers have signed a deal that aims to make the EU's 2050 net-zero emissions target legally binding on the states.

**Note:**

**Net zero emissions**

- It refers to achieving an overall balance between greenhouse gas emissions produced and greenhouse gas emissions taken out of the atmosphere.

**Zero Carbon law**

- It was passed by New Zealand with the aim to tackle climate change by setting a net-zero targets for almost all greenhouse gas emissions by 2050**.**

## World food price index

**(Topic- GS Paper III–Economics, Source- the Hindu)**

**Why in the news?**

- The Food and Agriculture Organization has recently released the World food price index.

**About the World food price index**

- The index was introduced in 1996 to help in monitoring the developments in the global agricultural commodity markets.
- It measures monthly changes for a basket of cereals, oilseeds, dairy products, meat and sugar.

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- All these five indices are given weightage based on the average export shares.

**Base Year**

- The Base Year for the index is 2014-16.

**Key findings**

- World food prices increased for an 11th consecutive month in April, hitting their highest level since May 2014, with sugar leading a rise in all the main indices.
- FAO's cereal price index rose 1.2% in April month-on-month and 26% year-on-year.
- FAO's vegetable oil price index rose 1.8% on the month.
- Dairy prices rose 1.2%, with butter, skim milk powder and cheese all lifted by good demand from Asia, while the meat index climbed 1.7%.
- FAO raised its forecast for global cereal production in 2020 by 1.7 million tonnes to 2.767 billion tonnes, 2.1% up on 2019 levels.

**About Food and Agriculture Organization**

- It is a specialized agency of the United Nations that leads international efforts to defeat hunger and improve nutrition and food security.
- It was established in 1945 with the objective of eliminating hunger and improving nutrition and standards of living by increasing agricultural productivity.
- **Its secretariat is in Rome, Italy.**

Some of the important key programmes of FAO are

a. Food Security Programmes
b. Codex Alimentarius
c. International Plant Protection Convention (IPPC) etc.,

**About The Codex Alimentarius Commission**

- It has been established by FAO and WHO is an international food standard setting body.
- It has recently adopted three Codex standards for black, white and green pepper, cumin and thyme owing to India's efforts to benchmark global spices trade.
- With the adoption of codex standards, spices have been included for the first time as commodities that will have universal standards.

**International Plant Protection Convention (IPPC)**

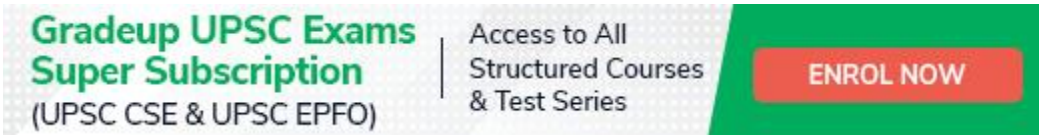
- It aims to protect cultivated and wild plants by preventing the introduction and spread of pests.

**India & FAO**

- FAO council approved India's membership to the Executive Board of the World Food Program (WFP) for 2020 and 2021.
- It has also decided to observe „International Year of Millets" in 2023, upon the request from Indian government.
- **India celebrated 2018 as "National Year of Millets"** and notified millets as nutri-cereals & allowed its inclusion in Public Distribution System (PDS).
- **WFP is the world's largest humanitarian agency that fights hunger by providing food** assistance, school meals, cash-based transfers etc.
- In India, WFP has moved from providing direct food aid to providing technical assistance and capacity building services.
- **The Ministry of Agriculture is the nodal agency.**

**Note:**

- Indian Civil Service Officer Dr. Binay Ranjan Sen was the Director General of FAO during 1956-1967.



- The World Food Programme, which has won the Nobel Peace Prize 2020, was established during his time.

## Leatherback turtle

**(Topic- GS Paper III–Environment, Source- the Hindu)**

**Why in the news?**

- The Environment Appraisal Committee (EAC) - Infrastructure I of the Ministry of Environment, Forest and Climate Change (MoEFCC) has flagged serious concerns about NITI Aayog's ambitious project for Great Nicobar Island ('NITI Aayog vision for Great Nicobar ignores tribal, ecological concerns').
- It has now asked for "an independent study/ evaluation for the suitability of the proposed port site with specific focus on **Leatherback Turtle, Nicobar Magapod (sic) and Dugong"**

**About the Leatherback Turtle**

- The leatherback sea turtle (Dermochelys coriacea), sometimes called the lute turtle or leathery turtle or simply the luth, and is the largest of all living turtles.
- It is the only living species in the genus Dermochelys and family Dermochelyidae.

**Geographic Range**

- Leatherbacks are found in all oceans except the **Arctic and the Antarctic.**
- Within the Indian Ocean, they nest only in Indonesia, Sri Lanka and the Andaman and Nicobar Islands

**Conservation Status**

- They are listed in **Schedule I of India's Wildlife Protection Act, 1972**.
- These are listed as **Vulnerable** in **IUCN Red list**.

## Nicobar megapode

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- The Nicobar megapode or Nicobar scrubfowl (Megapodius nicobariensis) is a megapode endemic to the Nicobar Islands (India).
- The Nicobar Islands are on the edge of the distribution of megapodes, well separated from the nearest ranges of other megapode species.

**Conservation status**

- These are listed as **Vulnerable** in **IUCN Red list**.

**Dugong**

- The dugong is a medium-sized marine mammal.

**Conservation Status**

- These are listed as **Vulnerable** in **IUCN Red list**

**US TRIPS waiver**

**(Topic- GS Paper III–Economics, Source- the Hindu)**

**Why in the news ?**

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- The United States has finally relented and declared its support for a temporary waiver of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) agreement for COVID-19 vaccines at the World Trade Organisation (WTO).

**Background**

- In October 2020, India and South Africa, at the WTO, proposed waiving Sections 1, 4, 5, and 7 of Part II of the TRIPS agreement (covering copyrights, industrial designs, patents, and undisclosed trade information) related to the prevention, containment, or treatment of COVID-19.
- Article IX of the WTO Agreement allows for waiving obligations in 'exceptional circumstances.

**What is the TRIPS Agreement?**

- The TRIPS Agreement has been in force since 1995.
- The TRIPS Agreement requires all its signatory countries to enact domestic law, which guarantees minimum standards of IP protection.
- Such legal consistency enables innovators to monetise their intellectual property in multiple countries.
- Under Article 27(2) of the TRIPS Agreement, WTO member countries may exclude patentability of inventions that are necessary to protect public health.
- Article 30 allows members to place limited exceptions to the rights conferred by a patent.
- This, along with a set of other tools known as the "TRIPS flexibilities", allows governments to waive IP rights in the interest of public health.

**Compulsory licensing**

- In 2001, the WTO signed the Doha Declaration, which clarified that in a public health emergency, governments could compel companies to license their patents to manufacturers, even if they did not think the offered price was acceptable.
- This provision, commonly referred to as "compulsory licensing", was already built into the TRIPS Agreement and the Doha declaration only clarified its usage.

**India and Patent Rights**

- Under Section 92 of the 1970 Indian Patents Act, the central government has the power to allow compulsory licenses to be issued at any time in case of a national emergency or circumstances of extreme urgency.

## Sinopharm Covid-19 vaccine

**(Topic- GS Paper III–Science and Technology, Source- the Hindu)**

**Why in the news?**

- Recently the World Health Organisation (WHO) has finally granted the conditional approval to its Sinopharm Covid-19 vaccine for emergency use.
- China has approved about five of its vaccines for emergency use and especially using Sinopharm and Sinovac vaccines for both at home and abroad.

**About Sinopharm Covid-19 vaccine**

- It is produced by Beijing Bio-Institute of Biological Products Co Ltd, subsidiary of China National Biotec Group (CNBG).

**Efficacy**

- Sinopharm vaccine efficacy for symptomatic and hospitalised disease was estimated to be 79 per cent, all age groups combined.

## 2-deoxy-D-glucose (2-DG) vaccine

**(Topic- GS Paper III–Science and Technology, Source- the Hindu)**

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**Why in the news?**

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

**About 2-deoxy-D-glucose (2-DG)**

- It is an anti-COVID-19 therapeutic drug which 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.

**Significance**

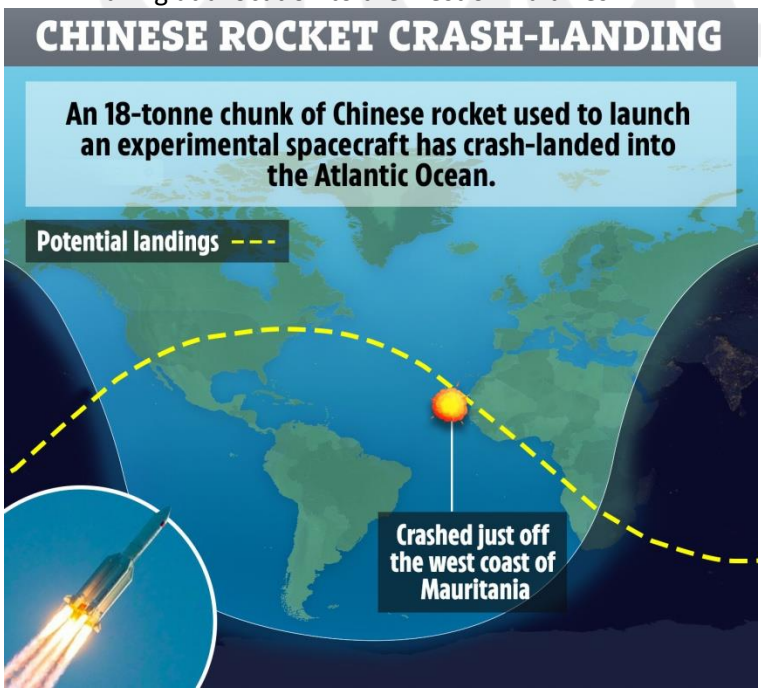
- The drug comes in powder form in sachet, which is taken orally by dissolving it in water.
- It accumulates in the virus infected cells and prevents virus growth by stopping viral synthesis and energy production.
- Clinical trial results have shown that this molecule helps in faster recovery of hospitalised 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.

## Long March 5B Rocket

**(Topic- GS Paper III–Science and Technology, Source- the Hindu)**

**Why in the news ?**

- Recently, the debris from a Chinese rocket Long **March 5B Rocket** made an uncontrolled re-entry into the Earth's atmosphere and disintegrated over the Indian Ocean, with remnants falling at a location to the west of Maldives.




**About Long March 5B**

- Long March 5 or Chang Zheng 5 is a Chinese heavy-lift launch system developed by the China Academy of Launch Vehicle Technology (CALT).

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- It is the first Chinese launch vehicle designed from the ground up to focus on non-hypergolic liquid rocket propellants.
- The maximum payload capacities of the base variant are ~25,000 kilograms to Low Earth Orbit and ~14,000 kilograms to Geosynchronous Transfer Orbit.

## Asperger's syndrome

**(Topic- GS Paper III–Science and technology, Source- Indian Express)**

**Why in the news?**

- Elon Musk has recently announced that he has Asperger's syndrome (AS).

**What is Asperger's?**

- The disorder is named after German doctor Hans Asperger, who first described it in 1944.
- It belongs to the autism spectrum, a family of conditions, which can severely inhibit a person's mental and social development.
- People with AS exhibit three primary symptoms:
    - having difficulty with social interaction
    - engaging in repetitive behavior
    - often focus obsessively on a complex topic
    - focusing on rules and routines

**Cure**

- It cannot be cured.
- Early diagnosis and intervention can help a child make social connections, achieve their potential, and lead a productive life.

## FCRA amendments crippling our work

**(Topic- GS Paper III–Economics, Source- Indian Express)**

**Why in the news ?**

- Recently, the amendments to the Foreign Contribution Regulation Act (FCRA) enacted last year that among others made it compulsory for NGOs to open a bank account in Delhi has crippled the work of many organisations that are unable to receive foreign funds.

**Issues**

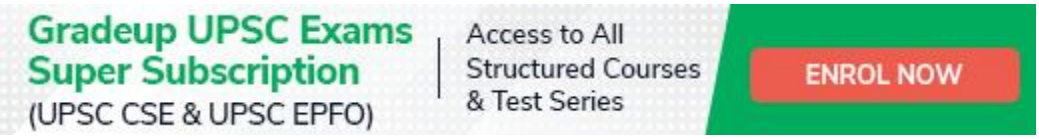
- Indian entities, including hospitals and charitable trusts, hoping to receive COVID-19 relief material from overseas individual donors or donor agencies, could be in trouble, unless they are registered under the Foreign Contribution Regulation Act (FCRA) with a stated objective involving provision of medical care.
- On May 3, the government permitted imports without GST levies for pandemic relief material donated from abroad for free distribution in the country, delegating States to certify the entities that will receive such imports.
- However, no exemption has been granted from the FCRA law that requires any domestic entity receiving foreign material or cash donations to have requisite approvals from the Ministry of Home Affairs.

**About Foreign Contribution Regulation Act**

- It is a law enacted by Parliament to regulate foreign contribution (especially monetary donation) provided by certain individuals or associations to NGOs and others within India.
- The government has used the act over the years to freeze bank accounts of certain NGOs who it found were affecting India's national interest for wrong purposes.

**Provision of FCRA Act 2010**

- As per the FCRA Act 2010, all NGOs are required to be registered under the Act to receive foreign funding.



- An organisation cannot receive foreign funding unless it is registered under the 2010 Act, except when it gets government approval for a specific project.
- Under the FCRA Act, registered NGOs can receive foreign contribution for five purposes — social, educational, religious, economic and cultural.

## Report on 'Connected Commerce: Creating a Roadmap for a Digitally Inclusive Bharat'

**(Topic- GS Paper III–Economics, Source-PIB)**

**Why in the news?**

- NITI Aayog and Mastercard have recently released a report **titled'Connected Commerce: Creating a Roadmap for a Digitally Inclusive Bharat'.**

**Key recommendations**

- The report identifies challenges in accelerating digital financial inclusion in India and provides recommendations for making digital services accessible to its 1.3 billion citizens.

**Key recommendations in the report include:**

- Strengthening the payment infrastructure to promote a level playing field for NBFCs and banks.
- Digitizing registration and compliance processes and diversifying credit sources to enable growth opportunities for MSMEs.
- 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.
- 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.
- To make city transit seamlessly accessible to all with minimal crowding and queues, leveraging existing smart-phones and contactless cards, and aim for an inclusive, interoperable, and fully **open system such as that of the London 'Tube'.**

## Small finance banks may lend ₹3,000 cr. to MFIs'

**(Topic- GS Paper III–Economics, Source-The Hindu)**

**Why in the news ?**

- RBI's move has recently allow small finance banks (SFBs) to classify loans to small microfinance institutions (MFIs) (with a loan book of sub-₹500 crore) as priority sector advances will lead to an incremental funding of up to ₹3,000 crore to the MFIs, as per **Acuite Ratings.**

**SFB loan to MFIs for on-lending to be classified as priority sector lending**

- The Reserve Bank of Indian has decided to allow the classification of priority sector lending for loans given by small finance banks (SFB) to microfinance institutions (MFI) for on-lending to individuals.
- The decision has been taken to address the liquidity issues of MFIs amid the severe Covid crisis.
- This facility will be available up to March 31, 2022.
- At present, lending by Small Finance Banks (SFBs) to Micro Finance Institutions (MFIs) for on-lending is not reckoned for priority sector lending (PSL) classification.
- Bank credit will be permitted up to 10 percent of the bank's total priority sector portfolio as on March 31, 2021.
- Loans disbursed under the scheme will continue to be classified under priority sector till the date of repayment or maturity whichever is earlier.

**Priority Sector**

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- Priority Sector means those sectors which the Government of India and Reserve Bank of India consider as important for the development of the basic needs of the country and are to be given priority over other sectors.
- The banks are mandated to encourage the growth of such sectors with adequate and timely credit

**Categories of Priority Sector**

The categories of priority sector are as follows

- Agriculture
- Micro, Small and Medium Enterprises
- Education
- Housing
- Social Infrastructure
- Renewable Energy

The banks are mandated to encourage the growth of such sectors with adequate and timely credit.

## Methane emissions

**(Topic- GS Paper III–Environment, Source-Down to Earth)**

**Why in the news?**

- Recently the Climate and Clean Air Coalition and the United Nations Environment Programme have released a report titled Global Methane Assessment: Benefits and Costs of Mitigating Methane Emissions.

**Key highlights of the report**

- Human-caused methane emissions are increasing faster currently than at any other time since record keeping began in the 1980s.
- Carbon dioxide levels have dropped during the novel coronavirus disease (COVID-19) pandemic.
- However, methane in the atmosphere reached record levels last year, according to the data from the United States National Oceanic and Atmospheric Administration.

**Sources of Methane Emission**

- The UN report noted that most human-caused methane emissions came from three sectors: Fossil fuels, waste and agriculture.

**Fossil fuel sector** :

- Oil and gas extraction, processing and distribution accounted for 23 per cent of methane emissions in the **fossil fuel sector**.
- Coal mining accounted for 12 per cent of emissions.

**Waste sector**

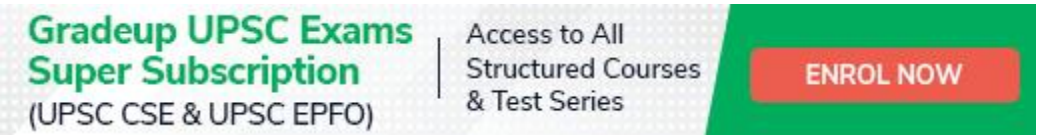
- Landfills and wastewater made up about 20 per cent of emissions in the **waste sector.**

**Agricultural sector**

- In the agricultural sector, livestock emissions from manure and enteric fermentation constituted for roughly 32 per cent.
- The rice cultivation contributes eight per cent of emissions.

**Initiative to tackle Methane emission**

- The European Commission had adopted the European Union Methane Strategy in October 2020.
- It outlined measures to cut methane emissions in Europe and internationally.
- The assessment found that the mitigation potential varied between countries and regions.
- Europe had the greatest potential to curb methane emissions from farming, fossil fuel operations and waste management.



- **India had the greatest potential to reduce methane emissions in the waste sector.**
- China's mitigation potential was best in coal production and livestock, while Africa's was in livestock, followed by oil and gas.
- The waste sector could cut its methane emissions by improving the disposal of sewage around the world.

**Behavioural changes**

- Three behavioural changes — reducing food waste and loss, improving livestock management and adopting healthy diets (vegetarian or with a lower meat and dairy content) — could reduce methane emissions by 65–80 million tonnes per year over the next few decades.

## 3rd Arctic Science Ministerial

**(Topic- GS Paper III–Environment, Source-PIB)**

**Why in the news?**

- India has recently participated in the 3rd Arctic Science Ministerial (ASM3) meeting.
- The theme of the3**rd Arctic Science Ministerial: 'Knowledge for a Sustainable Arctic'**.
- The first two Arctic Science Ministerial (ASM) meetings were held in the USA in 2016 and Germany in 2018 respectively.

**About 3rd Arctic Science Ministerial**

- It is a global platform for discussing research and cooperation in the Arctic region.
- It is the first Ministerial meeting being held in Asia.

**Purpose**

- The meeting is designed to provide opportunities to various stakeholders to enhance collective understanding of the Arctic region.
- The meeting also emphasizes the constant engagement in monitoring and strengthens Arctic observations.

**India and Arctic**

- 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 Himadari at NyAlesund, Svalbard Area in Norway.
- 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.

**About Arctic Council**

- It was formally established in 1996 by the Ottawa Declaration which is an intergovernmental forum for promoting cooperation, coordination and interaction among the Arctic States.

**Members**

- The members of the Arctic Council include Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States.

**Observer Status**

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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).

## Online Flood Reporting System

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news ?**

- Recently, an online flood reporting and information management system was launched by Assam State Disaster Management.
- The new system for online flood reporting on a daily basis will be operational from May 15.
- **Assam became the first state to adopt the digital reporting system that will capture critical impact indicators during floods**.

**About the Online Flood Reporting System**

- The online system developed jointly by Assam State Disaster Management Agency and UNICEF will replace the existing manual flood control mechanism.
- It is driven by web-cum-mobile application technology which will help delivery of relief and rehabilitation grants to flood-affected people
- The digital initiative will facilitate tracking of damages to crops and loss of livestock and also help provide financial assistance for restoration.
- It will enable information feeding at the source, immediate alert-based verification at defined levels and automatic compilation.

## Mission for Integrated Development of Horticulture (MIDH)

**(Topic- GS Paper III–Agriculture, Source- PIB)**

**Why in the news?**

- Recently, the Ministry of Agriculture and Farmers Welfare has provided an enhanced allocation of Rs. 2250 Crore for the year 2021-22 for 'Mission for Integrated Development of Horticulture' (MIDH).

**About Mission for Integrated Development of Horticulture**

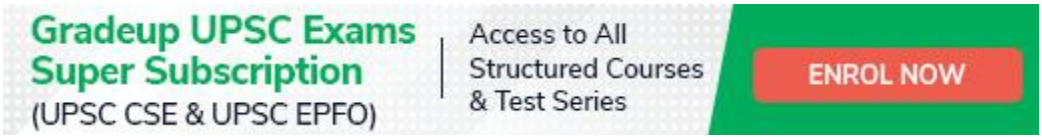
- The Mission for Integrated Development of Horticulture or MIDH is a scheme for the holistic growth and development of the Indian horticulture sector.
- It is a centrally sponsored scheme.
- The Ministry is implementing MIDH with effect from 2014-15.
- The sector covering under this scheme are fruits, vegetables, root & tuber crops, mushrooms, spices, flowers, aromatic plants, coconut, cashew, cocoa and bamboo.

**Contribution**

- Under MIDH, Government of India (GOI) contributes 60%, of total outlay for developmental programmes in all the states except states in North East and Himalayas, 40% share is contributed by State Governments.
- In the case of North Eastern States and Himalayan States, GOI contributes 90%.
- In case of National Horticulture Board (NHB), Coconut Development Board (CDB), Central Institute for Horticulture (CIH), Nagaland and the National Level Agencies (NLA), GOI contributes 100%.

**The Mission includes the following sub-schemes:**

a. **National Horticulture Mission (NHM)**
b. **National Horticulture Board (NHB)**



c. **Horticulture Mission for North East & Himalayan States (HMNEH)**
d. **Coconut Development Board (CDB)**
e. **Central Institute for Horticulture (CIH), Nagaland**
f. **National Bamboo Mission (NBM)**

- MIDH also provides technical advice and administrative support to State Governments/ State Horticulture Missions (SHMs) for the Saffron Mission and other horticulture related activities Rashtriya Krishi Vikas Yojana (RKVY)/NMSA.

**Significance**

- MIDH has played a significant role in increasing the area under horticulture crops.
- Area and production during the years 2014 – 15 to 2019 – 20 has increased by 9% and 14% respectively. The mission has boosted best practices to be followed in farms which have significantly improved the quality of produce and productivity of farmland.
- The initiative of MIDH has not only resulted in India's self-sufficiency in the horticulture sector but also contributed towards achieving sustainable development goals of zero hunger, good health and wellbeing, no poverty, gender equality etc.

## WHO classifies India variant as being of global concern

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

- The World Health Organization has recently classified a coronavirus variant first identified in India as a **"global variant of concern".**
- This variant called B.1.617 was classified as a variant under investigation (VUI) by authorities in the UK earlier in May.
- It has already spread to more than 17 countries and several countries have put travel restrictions for passengers coming from India as a result of the surge in cases here.

**How does the WHO define a variant of concern?**

The WHO says that a variant of interest (VOI) becomes a variant of concern (VOC) if, through a comparative assessment, it has been demonstrated to be associated with increase in

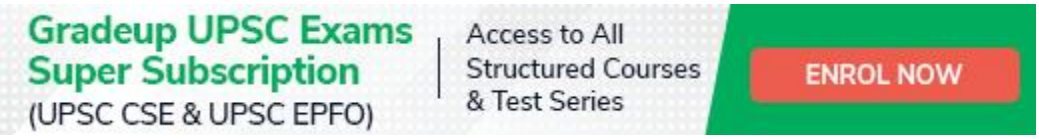
a. transmissibility or detrimental change in COVID-19 epidemiology,
b. increase in virulence or change in clinical disease presentation or
c. a decrease in effectiveness of public health and social measures or available diagnostics, vaccines, therapeutics.

Alternatively, a variant may be classified as a VOC by the WHO in consultation with the WHO SARS-CoV-2 Virus Evolution Working Group.

**Variants of a virus**

- Variants of a virus have one or more mutations that differentiate it from the other variants that are in circulation.
- The SARS-CoV-2 virus is evolving fast because of the scale at which it has infected people around the world.
- **The B.1.617** variant of the virus has two mutations referred to as E484Q and L452R.
- Both are separately found in many other coronavirus variants, but they have been reported together for the first time in India.
- The L452R mutation has been found in some other VOIs such as B.1.427/ B.1.429, which are believed to be more transmissible and may be able to override neutralising antibodies.

**Classification by US Centers for Disease Control and Prevention**



- The US Centers for Disease Control and Prevention (CDC), on the other hand classifies variants into three categories–
  a. variant of interest (VOI)
  b. variant of concern (VOC)
  c. variant of high consequence.
- In the US, the B.1.526, B.1.526.1, B.1.525 (previously designated UK1188 and first identified in the UK), and P.2 (identified first in Brazil) variants.
- On the other hand, the B.1.1.7, B.1.351, P.1, B.1.427, and B.1.429 variants circulating in the US are classified as variants of concern.

**Definition**

**Variant of interest**

- The CDC defines a VOI as, "A variant with specific genetic markers that have been associated with changes to receptor binding, reduced neutralization by antibodies generated against previous infection or vaccination, reduced efficacy of treatments, potential diagnostic impact, or predicted increase in transmissibility or disease severity.

**Variant of concern**

- It is defined as "A variant for which there is evidence of an increase in transmissibility, more severe disease (e.g., increased hospitalizations or deaths), significant reduction in neutralization by antibodies generated during previous infection or vaccination, reduced effectiveness of treatments or vaccines, or diagnostic detection failures."

**Note:**

- So far, the CDC has not found variants of high consequence in circulation in the US

## NASA's OSIRIS-Rex

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

- Recently, NASA's Origins, Spectral Interpretation, Resource Identification, Security, Regolith Explorer (OSIRIS-REx) spacecraft will depart asteroid Bennu, and start its two-year long journey back to Earth.

**About OSIRIS-Rex**

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- OSIRIS-REx is NASA's first mission to visit a near-Earth asteroid, survey its surface and collect a sample from it.
- The mission was launched in 2016.
- The Osiris-Rex mission is expected to return samples to Earth in 2023 and before attempting to obtain a sample from the asteroid, it will map out Bennu's surface in detail and orbit the asteroid to calculate its mass.

- The mission is essentially a seven-year-long voyage and will conclude when at least 60 grams of samples are delivered back to the Earth.
- As per NASA, the mission promises to bring the largest amount of extraterrestrial material back to our planet since the Apollo era.
- The spacecraft contains five instruments meant to explore Bennu including cameras, a spectrometer and a laser altimeter.

**About Asteroids**

- Asteroids are rocky objects that orbit the Sun, much smaller than planets. They are also called minor planets.
- According to NASA, 994,383 is the count for known asteroids, the remnants from the formation of the solar system over 4.6 billion years ago.

**What is asteroid Bennu?**

- Bennu is an asteroid about as tall as the Empire State Building, located about 200 million miles away from the Earth.
- It is a B-type asteroid, implying that it contains significant amounts of carbon and various other minerals.
- 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.

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**Why Scientist study asteroids?**

- Scientists study asteroids to look for information about the formation and history of planets and the sun since asteroids were formed at the same time as other objects in the solar system.
- Another reason for tracking them is to look for potentially hazardous asteroids.

## Ivermectin drug

**(Topic- GS Paper III–Science and Technology, Source- Business Standard)**

**Why in the news?**

- Recently, a day after Goa's health minister Vishwajit Rane recommended Ivermectin to all above 18 to combat Covid in the state, the World Health Organisation has warned against its use.

**More on the news**

- The Goa state government has cleared a new Covid treatment protocol which recommends all residents above the age of 18 to take five tablets of the ivermectin drug, in order to prevent the steep and sometimes fatal viral fever, which accompanies a Covid-19 infection.

**Concern with the Ivermectin drug**

- Last week, a peer-reviewed research which included three US government senior scientists and was published in the American Journal of Therapeutics, touted the common anti-parasitic ivermectin as a miracle cure for Covid-19 by doctors and campaigners the world over.
- But the World Health Organisation Chief Scientist Soumya Swaminathan has said that WHO recommends against the use of Ivermectin.
- Apart from WHO, the German health care has also warned against the use of Ivermectin for COVID-19 treatment.
- These organisations are warning against the drug as there is no sufficient data or meaningful evidences for its clinical efficacy in patients.

## Moody's lowers India's growth projection to 9.3%

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news ?**

- Recently, the Moody's Investors Service sharply scaled down this year's growth projection for India to 9.3% from its earlier estimate of 13.7%, citing "the negative impact of the second wave" of the COVID-19 pandemic.
- It warned that the spread of the coronavirus as well as the rate of vaccinations will have a direct impact on economic outcomes.

**Key highlights**

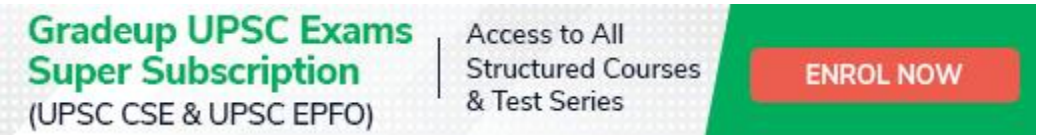
- The Shortage of vaccines and logistical difficulties in reaching a large rural population (about two-thirds of the population) complicate the vaccine roll-out.
- Only around 10% of the country's population had received at least one dose of the vaccine by early May.
- The severe second wave of COVID-19 infections will slow the near-term economic recovery and could weigh on longer-term growth dynamics.

**Healthcare spending**

- Spending will have to be redirected towards healthcare and virus response relative to what the government had budgeted in February.

## Human parainfluenza viruses

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**



**Why in the news?**

- Recently researchers have improved a method in rodent models intended to help keep children healthy by engineering a short chunk of protein, or peptide that can prevent the attachment of human parainfluenza viruses to cells.

**About the Human parainfluenza viruses**

- Human parainfluenza viruses, or HPIVs, are the leading cause of childhood respiratory infections, responsible for 30% to 40% of illnesses like croup and pneumonia.
- The viruses also affect the elderly and people with compromised immune systems.

**Symptoms**

- Human parainfluenza viruses (HPIVs) commonly cause upper and lower respiratory illnesses in infants, young children, older adults, and people with weakened immune systems, but anyone can get infected.

**Transmission**

Human parainfluenza viruses (HPIVs) usually spread from an infected person to others through

a. the air by coughing and sneezing
b. close personal contact, such as touching or shaking hands
c. touching objects or surfaces that have HPIVs on them then touching your mouth, nose, or eyes

**Different Types of HPIVs**

- HPIV-1 and HPIV-2 both cause croup, with HPIV-1 most often identified as the cause in children. Both can also cause upper and lower respiratory illness, and cold-like symptoms.
- HPIV-3 is more often associated with bronchiolitis, bronchitis, and pneumonia.
- HPIV-4 is recognized less often but may cause mild to severe respiratory illnesses.

**Note:**

- HPIV-3 is the most prevalent among these viruses.
- There are currently no approved vaccines or antivirals for HPIV3 infection in people.

## Green Urja Award

**(Topic- GS Paper III–Environment, Source- PIB)**

**Why in the news ?**

- Recently, the Indian Renewable Energy Development Agency Ltd. IREDA has been conferred with “Green Urja Award” for being the Leading Public Institution in Financing Institution for Renewable Energy this year by Indian Chamber of Commerce (ICC).
- IREDA gets the award for the pivotal and developmental role it plays in Green Energy Financing.

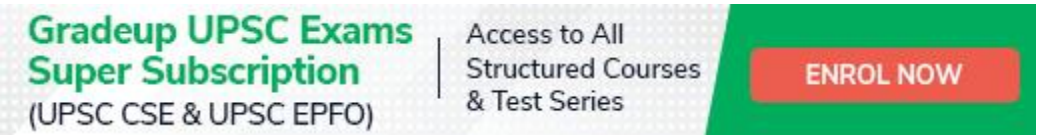
**About Indian Renewable Energy Development Agency**

- It is the only dedicated institution for financing Renewable Energy (RE) & Energy Efficiency (EE) projects in India.
- IREDA under the administrative control of Ministry of New & Renewable Energy (MNRE).
- IREDA has over the years sanctioned loans aggregating to Rs. 96,601 crores, disbursed Rs. 63,492 cores and supported more than 17,586 MW of RE capacities in the country till date.

## Digital Foreign inward remittance advice

**(Topic- GS Paper III–Economics, Source- TOI)**

**Why in the news?**



- Digital payments provider PayPal has recently introduced an automated process to obtain monthly foreign inward remittance advice (FIRA), allowing Indian merchants to download their monthly digital FIRA issued by banks.

**Benefits**

- The automated process will not require sellers to place manual and individual requests, thereby reducing the time taken to file the paperwork.
- The initiatives at zero cost are aimed to empower Indian MSME exporters to seamlessly grow their business internationally.
- PayPal's monthly digital FIRA solution will allow merchants to download the FIRA from their PayPal account.
- The sellers will be notified via an email once the FIRA is made available.
- The simplified process also enables Indian sellers to apply for bill closure and get tax benefits at a much faster rate.

**Related Information**

- Previously, Indian sellers and freelancers had to send a manual request to PayPal's partner bank and also pay a fee for the service.
- The bank would then issue FIRA as a physical statement which could take up to 10 days and required the seller to visit the bank to collect the same.

## Israel's Iron Dome air defence system

**(Topic- GS Paper III–Defene, Source- Indian Express)**

**Why in the news?**

- Recently, in the conflict between Israel and Palestine, both sides have taken to air strikes and rocket attacks which is being intercepted by the Israeli Iron Dome air defence system.
- It appeared that the rockets were hitting an invisible shield.

**What is the Iron Dome?**

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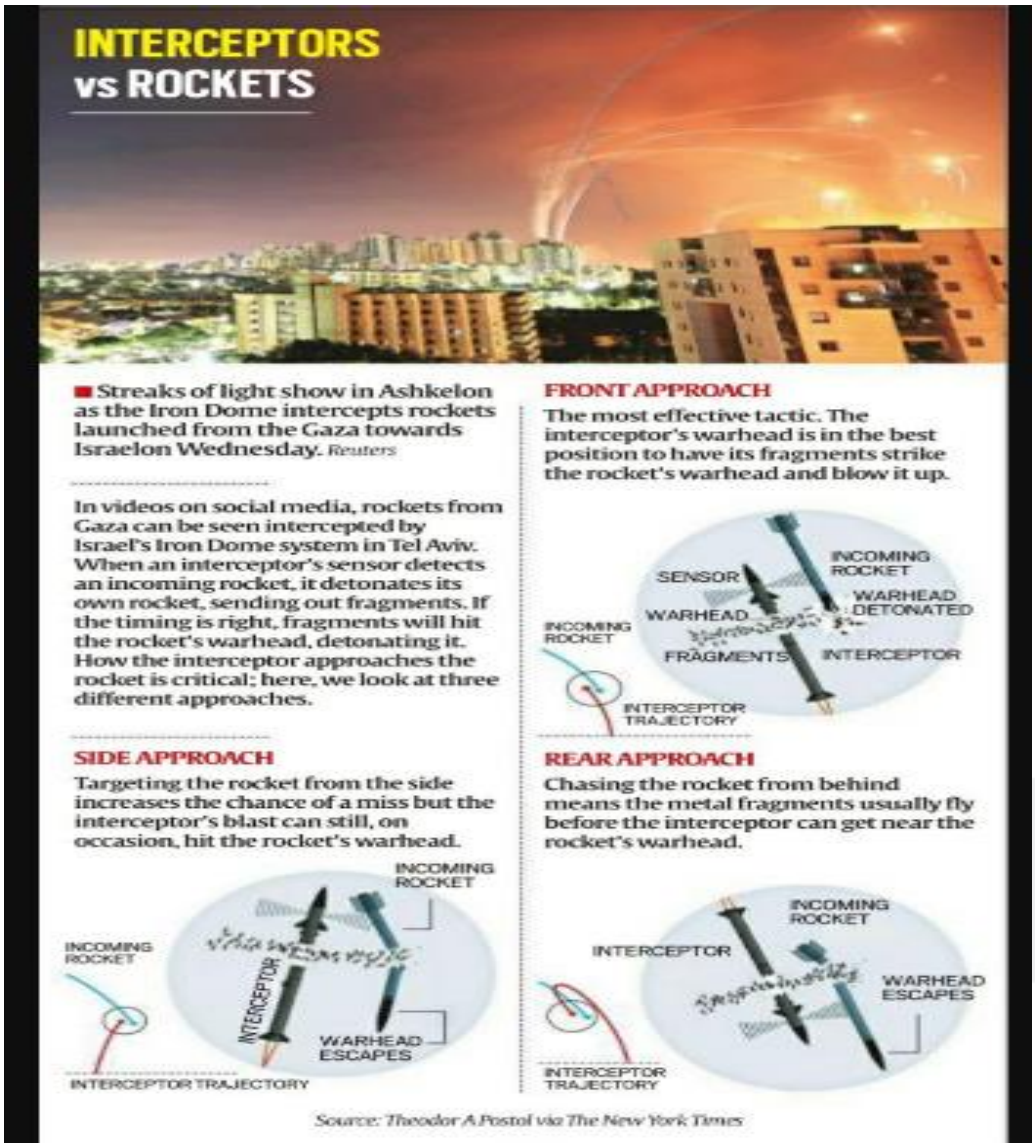


- It is a short-range, ground-to-air, air defence system that includes a radar and Tamir interceptor missiles that track and neutralise any rockets or missiles aimed at Israeli targets.
- It is used for countering rockets, artillery & mortars (C-RAM) as well as aircraft, helicopters and unmanned aerial vehicles.
- It was developed with Israel Aerospace Industries.

**Background**

- The genesis of the Iron Dome goes back to the 2006 Israeli-Lebanon war, when the Hezbollah fired thousands of rockets into Israel.
- The following year, Israel announced that its state-run Rafael Advance Systems would come up with a new air defence system to protect its cities and people.
- The Iron Dome was deployed in 2011.

**How does it work, and what makes it so effective?**

- The Iron Dome has three main systems that work together to provide a shield over the area where it is deployed, handling multiple threats.

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- It has detection and tracking radar to spot any incoming threats, a battle management and weapon control system (BMC), and a missile firing unit.
- The BMC basically liaises between the radar and the interceptor missile.
- It is capable of being used in all weather conditions, including during the day and night.

**Related Information**

**India Defence**

- India also is in the process of buying **S-400 air defence systems from Russia** for over $5 billion which also caters to the three threats (rockets, missiles and cruise missiles).
- S400 has to cater to shooting down missiles, aircraft in some 300 to 400 km range.
- India has also have **Akash short-range surface-to-air missiles**, and Russian systems including **Pechora.**
- India is also buying two National Advanced Surface to Air Missile System-II from the US to protect Delhi.

## Inflation eases to 4.29%; base lifts IIP

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news?**

- India's retail inflation, measured by the Consumer Price Index (CPI), eased to 4.29 per cent in the month of April on decline in food prices.

**More on the news**

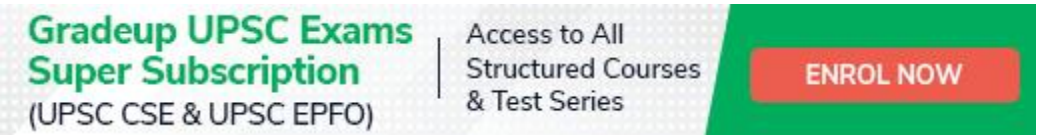
- India's retail inflation slowed to a three-month low of 4.29% in April, from 5.52% in March, helped by softer food prices as well as a base effect.
- Separately, industrial output surged by 22.4% in March, lifted by the statistical impact of the year-earlier period's Index of Industrial Production (IIP) being significantly lower on account of the national lockdown to contain COVID-19 imposed that month, data from the National Statistical Office showed.
- According to a Reuters poll, Consumer price inflation was predicted to cool to 4.2 per cent in April, just above the RBI's 4 per cent mid-point target and down from March's four-month high of 5.52%,.

**About Index of Industrial Production**

- The Index of Industrial Production (IIP) is an index that shows the growth rates in different industry groups of the economy in a fixed period of time.
- It is compiled and published monthly by the National Statistical Office (NSO), Ministry of Statistics and Programme Implementation.
- **The Base Year for IIP calculation is 2011-2012**.
- It is a composite indicator that measures the growth rate of industry groups .
- The eight core sector industries represent about 40% of the weight of items that are included in the IIP.
- The eight core industries in decreasing order of their weightage: Refinery Products (28.04 %)> Electricity (19.85 %)> Steel (17.92 %) > Coal (10.33 %)> Crude Oil (8.98 %)> Natural Gas (6.88 %)> Cement (5.37 %)> Fertilizers (2.63 %).

**Significance**

- It is the measure on the physical volume of production.
- It is used by government agencies including the Ministry of Finance, the Reserve Bank of India, etc, for policy-making purposes.



- It remains extremely relevant for the calculation of the quarterly and advance Gross Domestic Product (GDP) estimate

## Centre pins hopes on 5 Covid vaccines apart from Covishield, Covaxin, Sputnik

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- According to the NITI Aayog (health) member VK Paul, India is hoping to produce at least two billion vaccine doses against Covid-19 by the end of this year.
- The tentative list presented by the government comprises eight vaccines, including Covishield, Covaxin and Sputnik V.
- The government is hoping to get five more vaccines in which four of them will be made in India.

**About the 5 emerging vaccines**

**Bio E Subunit vaccine**

- It is a subunit vaccine which is in the third phase of trial. In the phase 1/2 trial, the vaccine was found to be safe and well-tolerated.
- The Centre is hoping to get 30 crore doses of this vaccine between August and December, provided it gets authorisation.

**Zydus Cadila DNA vaccine**

- It is in the last leg of phase 3 trial and will soon apply for the licence.
- It is a three-dose vaccine and will be administered using a needle-free technology.

**Novavax/Covavax**

- Pune's Serum Institute of India will manufacture this vaccine, developed by the US's Novavax.

**Bharat Biotech's nasal vaccine**

- This is a single shot, a needle-free vaccine that Bharat Biotech is developing.
- The vaccine is in the 1/2 trial phase.

**Gennova mRNA vaccine**

- Pune's Gennova Biopharmaceuticals is developing this messenger RNA vaccine.
- Pfizer and Moderna are also mRNA vaccines.

**Out of these five vaccines, four are Indian while Covavax is being developed abroad, though it will be produced by India's Serum Institue.**

**Related Information**

**About Sputnik V**

- The tranche of Sputnik V vaccine that arrived from India will be available in the market from next week, while the production of Sputnik in India by Dr Reddy's Laboratories will begin in July 2021.

**About the 'Sputnik V' vaccine**

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- Russia named the newly approved vaccine "Sputnik V," in reference to Sputnik 1, the world's first artificial satellite, launched in 1957 during the space race.
- It uses two strains of adenovirus that typically cause mild colds in humans.

**Developed by**

- The vaccine has been developed by Moscow‟s Gamaleya Institute in collaboration with the Russia‟s defence ministry.

**Efficacy**

- The efficacy of Sputnik V was 92%.

**About Sputnik Light Vaccine**

- It 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.
- It will also be effective on new strains of coronavirus".

**Efficacy**

- The Sputnik Light demonstrated 79.4% efficacy.

## Amphotericin B

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news?**

- The government has recently started engaging pharmaceutical companies manufacturing amphotericin B to raise the production of anti-fungal drug used to treat mucormycosis, the "black fungus" infection seen in **some covid-19 patients.**

**About Amphotericin B**

- Amphotericin B is an antifungal medication used for serious fungal infections and leishmaniasis.
- The fungal infections it is used to treat include aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, and cryptococcosis.
- It is typically given by injection into a vein.

**Related Information**

**About Mucormycosis**

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- 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.
- Mucormycosis does not spread between people or between people and animals.

**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 scans of your lungs, sinuses etc may be conducted.

**Treatment**

- Mucormycosis needs to be treated with prescription antifungal medicine.
- In some cases, it can require surgery.

## Migration and Development Brief: World Bank report

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news?**

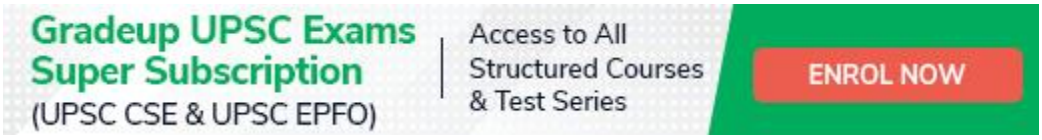
- Recently, World Bank has released its **Migration and Development Brief Report**.

**About Migration and Development Brief Report**

- The Migration and Development Brief report provides updates on global trends in migration and remittances.
- It highlights developments related to migration-related Sustainable Development Goal (SDG) indicators for which the World Bank is a custodian: increasing the volume of remittances as a percentage of gross domestic product (SDG indicator 17.3.2) and reducing remittance costs (SDG indicator 10.c.1).

**Key highlights**

- China, which received USD 59.5 billion in remittances in 2020 against USD 68.3 billion the previous year, is a distant second in terms of global remittances for the year.
- India and China are followed by Mexico (USD42.8 billion), the Philippines (USD34.9 billion), Egypt (USD29.6 billion), Pakistan (USD26 billion), France (USD24.4 billion) and Bangladesh (USD21 billion).
- In neighbouring Pakistan, remittances rose by about 17 per cent, with the biggest growth coming from Saudi Arabia, followed by the European Union countries and the United Arab Emirates.



- In Bangladesh, remittances also showed a brisk uptick in 2020 (18.4 per cent), and Sri Lanka witnessed remittance growth of 5.8 per cent.
- In contrast, remittances to Nepal fell by about two per cent, reflecting a 17 per cent decline in the first quarter of 2020.

**India and the Report**

- According to a World Bank report , India received over USD83 billion in remittances in 2020, a drop of just 0.2 per cent from the previous year, despite a pandemic that devastated the world economy.
- **In 2019, India had received USD83.3 billion in remittances.**

## Whitley Award 2021

**(Topic- GS Paper III–Environment, Source- PIB)**

**Why in the news?**

- Recently, Nuklu Phom a church worker from Nagaland has won the Whitley Award, also known as the 'Green Oscar',
- **Nuklu Phom** is the only Indian to win the prestigious award for his efforts to create a network of community-owned forests in the state and protect the rare Amur falcon.

**About Whitley Award 2021**

- It is presented annually by the Whitley Fund for Nature which is a U.K based Charity fund.
- It involves process of reference, application and interview.
- The Whitley Fund for Nature was established by Edward Whitley in 1994.

**Objectives**

- The Whitley Awards support grassroots leaders in countries rich in natural resources but lacking in financial resource for conservation.
- Winners are local environmental heroes, acting on the latest science and leading projects with passion.
- Through them they support work rooted in communities that creates lasting benefits for habitats, wildlife and people.

**About Amur falcons**

- It is the world's longest travelling raptors start travelling with the onset of winters.

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- The raptors breed in southeastern Siberia and northern China, and migrate in millions across India and then over the Indian Ocean to southern Africa before returning to Mongolia and Siberia.
- They get their name from the Amur River that forms the border between Russia and China.
- In India, Doyang Lake in Nagaland is better known as a stopover for the Amur falcons during their annual migration from their breeding grounds to warmer South Africa.
- Therefore, **Nagaland is also known as the "Falcon Capital of the World**,"

**Conservation Status**

- The birds are the "**least concern'** under the IUCN Red List.
- The species is protected under the Indian Wildlife Protection Act, 1972, and the Convention on Migratory Species.

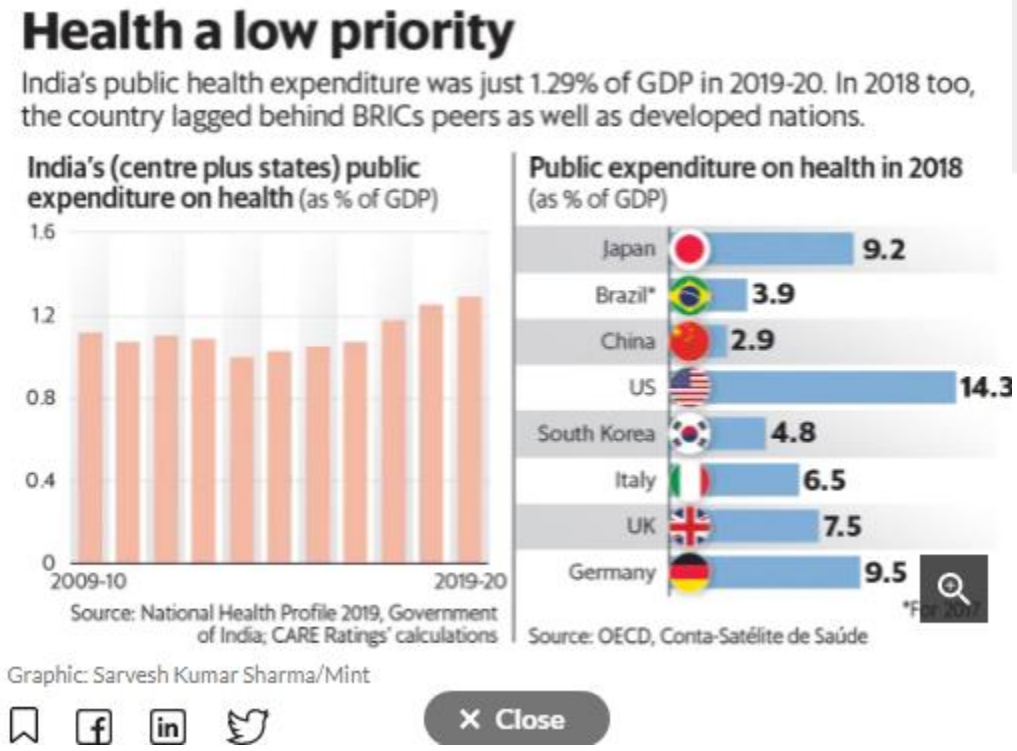
## India's public spending on healthcare lowest in BRICS nations

**(Topic- GS Paper III–Health, Source- The Hindu)**

**Why in the news?**

- Recently, Department of Economic Affairs stated that India's public spending on healthcare is the lowest in BRICS nations during a virtual seminar was held between the Finance Ministry and New Development Bank on the topic of '**Social Infrastructure financing and the use of digital technologies'**

More on the news




- As per Organisation for Economic Co-operation and Development (OECD), in the BRICS nations Brazil spends the most (9.2%), followed by South Africa (8.1%), Russia (5.3%), China (5%) whereas Indian spend only 3.6% of GDP on healthcare.

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- Developed nations—the US (16.9%), Germany (11.2%), France (11.2%) and Japan (10.9%)—spend even more on health care.

**About BRICS**

- BRICS is the grouping of five major emerging countries Brazil, Russia, India, China and South Africa which together represent about 42 per cent of the population, 23 per cent of GDP, 30 per cent of the territory, and 18 per cent of the global trade.

**Related Information**

**Health in Union Budget 2021-22**

- The overall Union health budget for 2021-22 is Rs 2,23,846 crore out of which expenditure of major items (like D/o Health and Family Welfare + D/o Health Research + M/o AYUSH) has increased from Rs 69,234 crore (BE 2020-2021) to Rs 76,902 crore (2021-2022).
- It is an increase of about 10%, the allocation for this year.
- Rest is for Drinking water and Sanitation and others.
- India currently ranks **145 out of 180 countries on quality of and access to healthcare, and 179 of 189 countries in prioritisation of health in government budgets.**

**Economy Survey on HealthCare**

- The 2021 Economic Survey set out the importance of increasing public health spending and also discusses in detail market failures in health.
- It showed that an increase in public health expenditure from the current levels in India to 3% of the GDP can reduce out-of-pocket expenses (OoPE) from 60% currently to about 30%.
- As is well known, the OoPE on health burdens not just the poor but also the middle class of this country.
- The Economic Survey therefore makes a case for increasing public spending on health from 1% to 2.5-3% of GDP, as the National Health Policy (NHP) 2017 states.
- This is necessary to improve India's poor standings on various indicators of health, such as share of OoPE, equitable and good quality access to healthcare, availability of infrastructure and human resources for health.

## World Food Prize 2021

**(Topic- GS Paper III–Agriculture, Source- AIR)**

**Why in the news?**

- Recently, Dr Shakuntala Haraksingh Thilsted, a global nutrition expert of Indian descent has won the prestigious 2021 World Food Prize.
- She has won the prize for her groundbreaking research in developing holistic, nutrition-sensitive approaches to aquaculture and food systems.

**About World Food Prize 2021**

- The World Food Prize is an international award recognizing the achievements of individuals who have advanced human development by improving the quality, quantity, or availability of food in the world.
- It is an annual award that recognizes contributions in any field involved in the world food supply including plant, animal and soil science; food science and technology; nutrition, rural development, etc.

**Eligibility**

- It is open for any individual without regard to race, religion, nationality or political beliefs.

**Significance of this award**

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- The award was conceived in 1987 by Dr Norman E. Borlaug who is also known as the Father of the Green Revolution.
- M.S. Swaminathan, the father of India's green revolution was the first recipient of this award in 1987.

## SEBI pitches for 'person in control' over 'promoter'

**(Topic- GS Paper III–Economics, Source- Indian Express)**

**Why in the news?**

- The Securities and Exchange Board of India (Sebi) has recently proposed doing away with the **concept of promoters** and moving to '**person in control** in a consultation paper.

**Key Highlights**

- The consultation paper suggested that **a three-year transition** period for moving from the promoter to person in control concept.
- It said this shift is necessitated by the changing investor landscape in India where concentration of ownership and controlling rights do not vest completely in the hands of the promoters or promoter group because of the emergence of new shareholders such as private equity and institutional investors.
- Also, investor focus on the quality of board and management has increased, thereby reducing the relevance of the concept of promoter.

**What is person in control concept?**

- Control Person means any person that holds a sufficient number of any of the securities of an issuer so as to affect materially the control of that issuer, or that holds more than 20% of the outstanding voting securities of an issuer.
- Control Person means any individual who has a Control relationship with the Fund or an investment adviser of the Fund.
- Control Person means a director or executive officer of a licensee or a person who has the authority to participate in the direction, directly or indirectly through 1 or more other persons, of the management or policies of a licensee.

## New Lineage of B.1.617

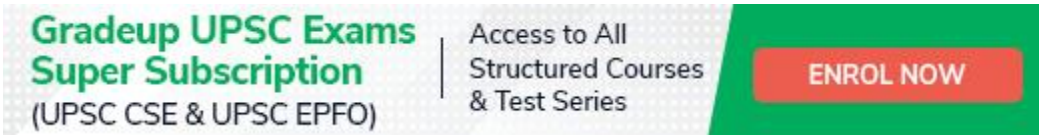
**(Topic- GS Paper III–Science and Technology, Source- Business Today)**

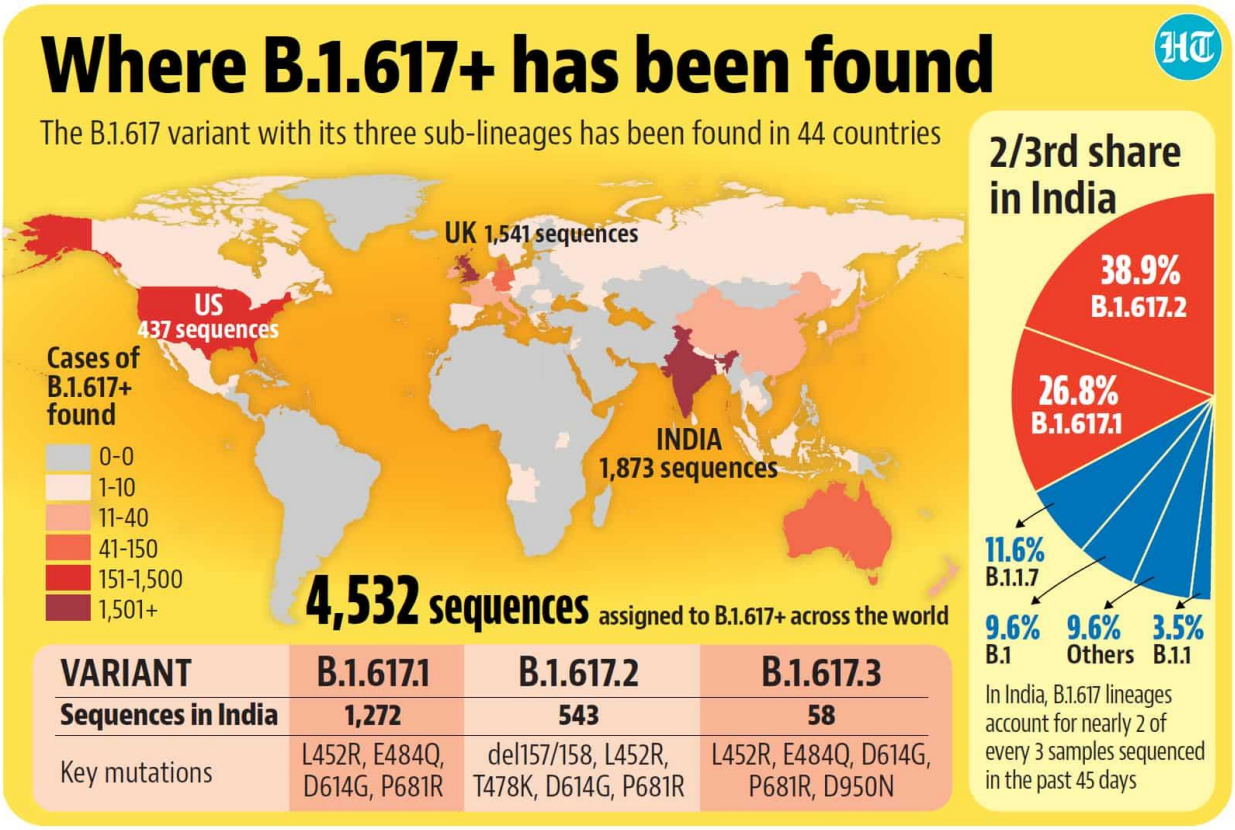
**Why in the news?**

- According to an analysis of genomic data from India to the GISAID global repository, the B.1.617.1 and B.1.617.2 account for two-thirds of the samples uploaded in the last 45 days.
- The World Health Organization (WHO) also said in its weekly Covid-19 epidemiology update that the B.1.617 variant with its three sub-lineages has been found in 44 countries.

**About B.1.617**

- B.1.617 -- first detected in India last October and described by Indian officials in late March by the misnomer "double mutant.
- WHO also classified it as a variant of concern (VOC).
- The three sub-lineages of B.1.617 **are** – **B.1.617.1, B.1.617.2 and B.1.617.3.**






**Concern**

- B.1.617 sub-lineages appear to have higher rates of transmission, including observed rapid increases in prevalence in multiple countries (moderate evidence available for B.1.617.1 and B.1.617.2).

**Wider Indian spread**

- The outbreak.info analysis estimates B.1.617.2 may have grown in prevalence from 9% of cases at the end of March to over 80% at the end of April, although the assessment is dependent on the samples submitted to GISAID and is unlikely to be a random selection.
- Gujarat, Delhi, Bihar and Chhattisgarh are the top states where the proportion of B.1.617.2 samples is high, although the number of samples sequenced varies significantly between states.
- Uttar Pradesh, the largest state by population, has sequenced only 83 samples since the start of the pandemic, while Maharashtra has done over 3,300.

**Global concern**

- Globally, there are now four VOCs – B.1.617, B.1.1.7 (first seen in the UK), B.1.351 (first recorded in South Africa) and P.1 (first seen in Brazil).
- Of these, the variant from UK demonstrated a transmission advantage unlike any Sars-Cov-2 version before, triggering new waves of infection where it was first seen and in several other European nations.

## U.S. slider turtles pose a threat in Northeast

**(Topic- GS Paper III–Environment, Source- The Hindu)**

**Why in the news?**

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- Recently, an American turtle **called Red-eared slider** popular as pet is threatening to invade the natural water bodies across the Northeast.

**More on the News**

- Between August 2018 and June 2019, a team of herpetologists from the NGO 'Help Earth' found red-eared sliders in the **Deepor Beel Wildlife Sanctuary** and the **Ugratara temple pond - both in Guwahati**.
- NorthEast is the home to 21 of the 29 vulnerable native Indian species of freshwater turtles and tortoises.
- Recently this invasive species is posing a major threat to the biodiversity of waterbodies in Kerala also.

**About Red-eared slider**

- The red-eared slider (Trachemys scripta elegans), also known as the red-eared terrapin, red-eared slider turtle, red-eared turtle, slider turtle, and water slider turtle.
- It is the most popular pet turtle in the United States and is also popular as a pet across the rest of the world, and is the most invasive turtle.
- Red-eared sliders are native to the Southern United States and northern Mexico, but have become established in other places because of pet releases, and have become an invasive species in many areas where they outcompete native species.
- The red-eared slider is included in the list of **the world's 100 most invasive species** published by **the International Union for the Conservation of Nature.**
- The slider turtles live in still and warm water bodies.
- They are considered a major threat to native turtle species as they mature fast, grow larger, produce more offspring and are very aggressive.
- As they eat plants and animals, they can finish off a wide range of aquatic species, including fish and rare frogs.
- In places such as **Australia and the European Union, it is illegal to import and keep these turtles.**

**About Invasive Species**

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- An invasive species can be any kind of living organism—an amphibian, plant, insect, fish, fungus, bacteria, or even an organism's seeds or eggs—that is not native to an ecosystem and causes harm.
- They can harm the environment, the economy, or even human health.
- They alter the environment in which they invade and are difficult and expensive to control after they colonise a landscape.
- They possess **phenotypic plasticit**y (the ability to adapt to environmental stress).

## New species of skink found from Western Ghats

**(Topic- GS Paper III–Environment, Source- The Hindu)**

**Why in the news?**

- Recently, Subdoluseps nilgiriensis a new species of skink found from Western Ghats.

**About Subdoluseps nilgiriensis**

- The reptile has a slender body of just about 7 cm and is sandy brown in colour.
- Based on genetic studies, the team writes the new species is closely related to Subdoluseps pruthi that is found in parts of the Eastern Ghats.
- This species is only the third skink species discovered from mainland India in the last millennium.

**Habitat**

- The new species was found in a dry deciduous area, showing that even the dry zones of our country are home to unrealised skink diversity.
- Most skinks are diurnal and are usually secretive in their habits.

**Conservation Status**

- Most of the species are placed under the **data-deficient category** under IUCN Red List.

## US pipeline came under cyberattack

**(Topic- GS Paper III–Security, Source- Indian Express)**

**Why in the news?**

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- Recently, Colonial Pipeline Company of US which transports about 45 per cent of all petrol and diesel consumed on the east coast of the US was forced to shut down operations after the cyber attack.

**What is a ransomware attack?**

- A ransomware attack is a cyberattack using malware that encrypts the victim's files and requires users to pay a ransom to decrypt the files.
- Experts noted that with companies moving to real-time backups, hackers have, as in the case of the Colonial Pipeline attack, also added the element of downloading all the data on an enterprise network before encrypting it.
- The hackers can then threaten to leak the data if the ransom is not paid.
- The FBI has identified the ransomware used in the attack as a variant of ransomware created by the DarkSide group that has been in use since October 2020.

**Who are the DarkSide group?**

- These are the new group which is likely made up of veteran ransomware developers based in Russia.
- In a statement published online, the group has claimed that it is apolitical and is only concerned about making money and has claimed that it also donates some of its proceeds to charities.

**Having Code of Conduct**

- Cyber security firm Cybereason said that the DarkSide group appeared to have a code of conduct that prohibits attacks against hospitals, hospices, schools, universities, non-profit organizations, and government agencies.

## Thromboembolic events after Covishield jab

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- Recently National AEFI (Adverse Event Following Immunization) Committee has submitted a report which showed the adverse event following Immunisation data in India.
- The report showed that there is a minuscule but definitive risk of thromboembolic events after administration of the AstraZeneca-Oxford vaccine (Covishield in India).

**More on the news**

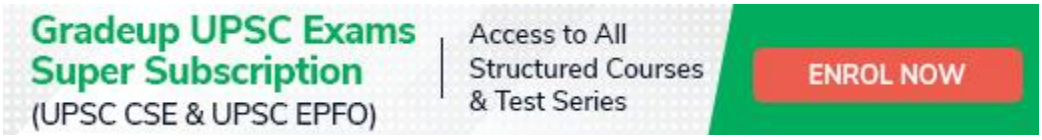
- The reporting rate of these events in India is around 0.61 per million doses, which is much lower than the 4 cases per million reported by UK's regulator Medical and Health Regulatory Authority (MHRA).
- Germany has reported 10 events per million doses.
- There were no potential thromboembolic events reported following administration of Covaxin vaccine.

**Significance of the National AEFI committee**

- The National AEFI committee is expected to review all these serious adverse events (SAEs) including the deaths, to assess whether they are linked to the vaccines being used.
- So far, the committee has received complete documentation of only 236 (38.3%) of the over 600 SAEs reported across the country.
- The committee is expected to study the documentation, including the person's medical history and/or post-mortem reports, verbal autopsy, hospital reports and documents from investigations of the immunisation site.
- It is crucial for this information to be properly gathered at district level.

**Note:**

- World Health Organisation has also established a Global Advisory Committee on Vaccine Safety.



## ICMR drops plasma therapy from COVID treatment norms

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- According to the recent advisory from the Indian Council of Medical Research (ICMR), the use of convalescent plasma has been dropped from the recommended treatment guidelines for COVID-19.

**Recent Study**

- Though a trial by the ICMR on 400 patients last year — called the PLACID trial — had found no significant benefit from the use of plasma, it continued to find a place in the recommended guidelines.
- Some experts have said the use of such plasma may have even played a role in facilitating new worrisome mutations to the virus.
- The most recent study published in the British medical journal The Lancet on May 14 reported that in a double blinded trial involving about 5,000 patients who got the treatment in the U.K., again no benefit was found in reducing mortality, or on improving patient outcomes.
- The ICMR guidelines still recommend Ivermerctin and hydroxychloroquine for mild disease but have underlined "low certainty of evidence".

**About Plasma Therapy**

- Plasma is the liquid part of the blood.
- Convalescent plasma, extracted from the blood of patients recovering from an infection, is a source of antibodies against the infection.
- The therapy involves using their plasma to help others recover.
- For Covid-19, this has been one of the treatment options.
- The donor would have to be a documented case of Covid-19 and healthy for 28 days since the last symptoms.

## WPI inflation hits high of 10.5%

**(Topic- GS Paper III–Economics, Source- The Hindu)**

**Why in the news?**

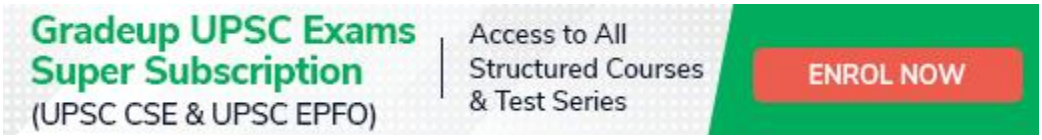
- Recently, Inflation as measured by the Wholesale Price Index quickened to a record high of 10.5% in April, from 7.4% in March and 4.8% recorded in February.

**More on the news**

- The base effect from last April which recorded a negative inflation of 1.57%, and a surge in fuel, food and manufactured goods' prices.
- Wholesale inflation in fuel and power more than doubled to 20.94% in April 2021 from 10.25% in March 2021, while manufactured goods recorded inflation of 9%, prompting industry to urge the government to rationalise fuel prices and try to rein in high commodity prices.

**Key Highlights**

- Food prices also hardened to record 7.6% inflation in April from 3.6% in February and 5.3% in March.
- Retail inflation for April had moderated to a three-month low of 4.29% from over 5.5% in March, helped by cooling food prices, but economists had expected the WPI to harden during the month.



- The high inflation in fuel and power is significantly raising input costs of Indian industry.
- The headline WPI inflation surge was sharper than expected and could rise further to 13%-13.5% in May before winding down.
- However, core WPI inflation may continue to rise over the next three months to a peak of about 10.5% from 8.4% in April.
- The likely trajectory of WPI inflation supports our view that there is no space for rate cuts to support the faltering growth momentum, even as we expect the monetary stance to remain accommodative.

## 'Mice rain' in eastern Australia

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- Recently, the Government of New South Wales (NSW) in Australia is facing one of the worst mouse plagues.
- In some affected areas, mice are falling out from rooftops causing "mice rain**".**

**More on the 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 that has affected farmers, community members and residents.
- To control the plague, the government has now authorised the use of an otherwise outlawed poison called bromadiolone.

**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.

**How does a plague of this scale affect people?**

- As per Victoria's health department there are 2,200 species of rodents and Australia has more than 60 native rodent species and three introduced pest species.
- Rodents are capable of destroying food grains and can cause widespread damage to domestic households, commercial businesses, farms, manufacturers and livestock.
- Further, 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.

## Protein–Antibody Conjugates or PACs

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- A team of researchers at the University of Massachusetts Amherst's Institute for Applied Life Sciences has developed a nanoparticle which is known as Protein–Antibody Conjugates or PACs

**About Protein–Antibody Conjugates or PACs**

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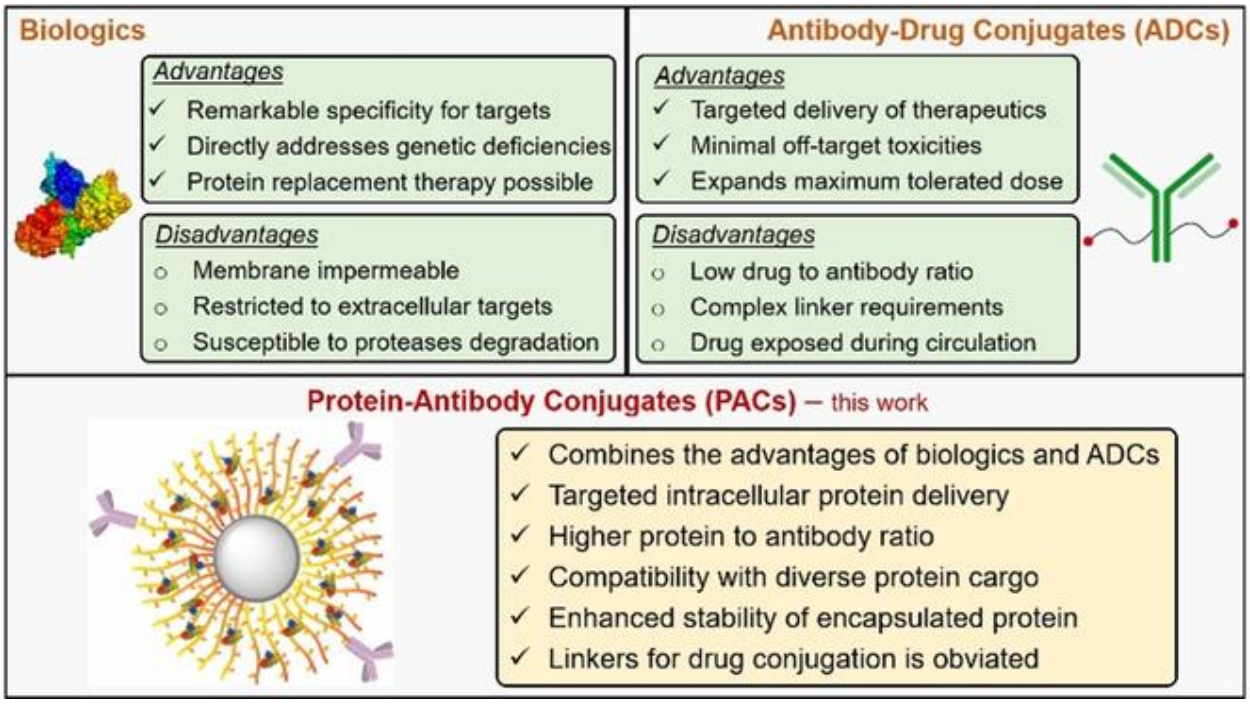


- It is a combine's concept of biologics and antibody–drug conjugates to produce protein–antibody conjugates that can be used for targeted drug delivery – in the case of pancreatic cancer cells.
- One is biologics, where the idea is to target a defective protein in the system by delivering proteins to 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 protein which balances the system.

**What are Antibody Drug Conjugates**?

- Antibody-drug conjugates or ADCs are a class of biopharmaceutical drugs designed as a targeted therapy for treating diseases like cancer.
- Unlike chemotherapy, ADCs are intended to target and kill tumour cells while sparing healthy cells.

## DRDO's drug launched for emergency use

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- The first batch of the adjunct COVID therapy drug, 2-deoxy-D-glucose (2-DG) has been released for emergency use.

**About 2-DG**

- It has been developed by the Institute of Nuclear Medicine and Allied Sciences (INMAS), New Delhi, a lab of the Defence Research and Development Organisation (DRDO), in collaboration with Hyderabad-based pharma company Dr Reddy's Laboratories (DRL).
- The 2-DG drug comes in powder form in the sachet, which is taken orally by dissolving it in water.
- 2-DG accumulates in virus-infected cells, and prevents the growth of the virus by stopping viral synthesis and energy production.

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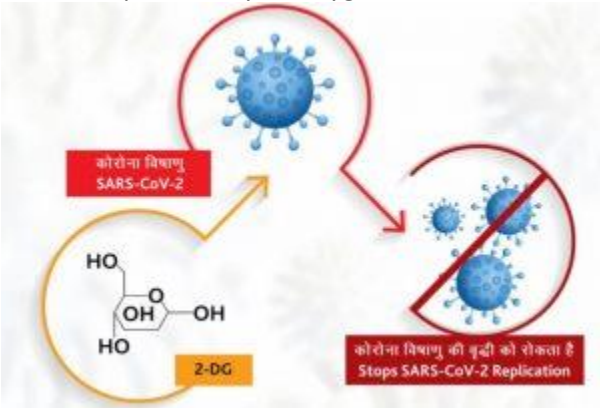
- **Its selective accumulation in virally infected cells makes this drug unique.**

**How 2-DG reduces dependence on oxygen?**

- The 2 DG drug, like glucose, spreads through the body, reaches the virus-infected cells and prevents virus growth by stopping viral synthesis and destroys the protein's energy production.
- The drug also works on virus infection spread into lungs which help us to decrease patient's dependability on oxygen.




## New naming system for virus variants

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- **The World Health Organization (WHO) would unveil a system of naming of coronavirus variants drawn from the way tropical storms are named.**
- **It will also be easier for the lay public to remember rather than these complicated lineage numbers.**

**More on the news**

- **The WHO and health and science agencies across the world, for instance the Indian Council of Medical Research, the United States' Centres for Disease Control and the Public Health England refer to viruses and their variants by formal lineage names, which are a combination of letters and names that point to the relationships between different variants.**

**Geographical tag**

- **The virus names and their associated diseases have frequently been named after geographical places where outbreaks were first reported or samples first isolated — such as the West Nile virus or Ebola.**
- **B.1.1.7 started to be known as the 'U.K. variant' and B.1.351 as the 'South African' variant.**
- **India's Health Ministry, in the aftermath of B.1.617 that was popularly called the 'Indian variant', issued a press release decrying the media's use of the name.**
- **The dilemma of having names that don't stigmatise places but also are amenable to popular use has to an extent been solved by the system of naming hurricanes, or tropical cyclones.**
- **The World Meteorological Organisation leaves it to countries that surround a particular ocean basin to come up with names.**

## Winchcombe meteorite

**(Topic- GS Paper III–Science and Technology, Source- Indian Express)**

**Why in the news ?**

- Recently, a piece of the Winchcombe meteorite that touched down in the town of Winchcombe in Gloucestershire in the UK in February 2021 will be displayed at the National History Museum.

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**Significance of Winchcombe meteorite**

- It dates back to the birth of the solar system nearly 4.5 billion years ago and therefore examining it may offer scientists and researchers clues about the beginning of the solar system and maybe even the Earth.

**Different Mission to Study asteroids**

- Space agencies have launched specific missions to asteroids to be able to study them.

**NASA's OSIRIS-REx mission**

- It was launched in 2018 with the aim of reaching asteroid Bennu and getting back a sample from the ancient asteroid.
- The spacecraft is now on its way back to Earth and is bringing with it about 60 grams of the asteroid that will help scientists study the beginnings of the solar system.

**Hayabusa2 mission**

- Hayabusa 2 is a Japanese mission launched in December 2014 on a six-year mission to study the asteroid Ryugu and to collect samples to bring to Earth for analysis.
- It returned to Earth in December 2020.

**Difference between an Asteroid, Comet, Meteoroid, Meteor and Meteorite**

- **Asteroid**: A relatively small, inactive, rocky body orbiting the Sun.
- **Comet**: A relatively small, at times active, object whose ices can vaporize in sunlight forming an atmosphere (coma) of dust and gas and, sometimes, a tail of dust and/or gas.
- **Meteoroid**: A small particle from a comet or asteroid orbiting the Sun.
- **Meteor**: The light phenomena which results when a meteoroid enters the Earth's atmosphere and vaporizes; a shooting star.
- **Meteorite**: A meteoroid that survives its passage through the Earth's atmosphere and lands upon the Earth's surface.

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## Air India begins zeolite cargo flight service

**(Topic- GS Paper III–Science and Technology, Source- The Hindu)**

**Why in the news?**

- National carrier Air India has begun the first of its "zeolite cargo flights" with the government of India having commenced the process of importing zeolite from across the world for use in medical oxygen plants.

**About Zeolite**

- It is also called molecular sieve are microporous crystalline solid of aluminium silicate that have small openings of fixed size to trap large molecules, while allowing small molecules to pass through.
- Atmospheric air contains 78 % nitrogen and about 20 % oxygen and zeolite adsorbs or traps nitrogen onto its surface.

**Used for the generation of Oxygen**

- Zeolite is used in the Medical Oxygen Plant (MOP) technology, developed by DRDO for on-board oxygen generation on aircraft like Tejas.
- The technology will now be used to generate oxygen for medical purposes to battle the current oxygen shortage brought on by the Covid second wave.

**About Medical Oxygen Plant (MOP) technology**

- The MOP utilizes Pressure Swing Adsorption (PSA) technique and Molecular Sieve (Zeolite) technology to generate oxygen directly from atmospheric air.
- Medical Oxygen Plant (MOP) technology is capable of generating oxygen with 93±3% concentration which can be directly supplied to hospital beds or can be used to fill medical oxygen cylinders

**Significance**

- The MOP technology will be useful to provide oxygen supply during the pandemic in hospitals in urban and rural areas.
- The oxygen plant is designed for a capacity of 1,000 litres per minute (LPM), that is, the system can cater to 190 patients and charge 195 cylinders per day.
- Hospitals will be able to generate on site medical oxygen, in a cost-effective manner with this oxygen plant rather than depending upon sourcing it from other places.

## Customs (Import of Goods at Concessional Rate of Duty) Amendment Rules, 2021

**(Topic- GS Paper III–Economics, Source- AIR)**

**Why in the news?**

- Recently, the Central Board of Indirect Taxes and Customs has introduced changes through the Customs (Import of Goods at Concessional Rate of Duty) Amendment Rules, 2021.
- They change in the existing Customs (Import of Goods at Concessional Rate of Duty) Rules, IGCR 2017 to boost trade facilitation.

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**Key highlights**

- 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.
- The 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.
- However, some sectors such as gold, jewellery, precious stones and metals have been excluded.
- The Ministry also said that another major incentive now provided is to allow those who import capital goods at a concessional Customs duty to clear them in the domestic market on payment of duty and interest, at a depreciated value.
- This was not allowed earlier and manufacturers were stuck with the imported capital goods after having used them as they could not be easily re-exported.

## Rajasthan govt. declares mucormycosis an epidemic

**(Topic- GS Paper III –Science and Technology, Source- The Hindu)**

**Why in the news?**

- Amid the increasing instances of mucormycosis or black fungus, which is primarily affecting people recovering from COVID-19, the Rajasthan government declared it an epidemic and a notifiable disease under the **Rajasthan Epidemic Act, 2020**.
- It will be mandatory for the health facilities to report every case of the disease in the State.

**Related Information**

**About 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?**

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- 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.
- Mucormycosis does not spread between people or between people and animals.

**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 scans of your lungs, sinuses etc may be conducted.

**Treatment**

- Mucormycosis needs to be treated with prescription antifungal medicine.
- In some cases, it can require surgery.

**Government Initiative**

- The government has recently started engaging pharmaceutical companies manufacturing amphotericin B to raise the production of anti-fungal drug used to treat mucormycosis, the "**black fungus**" infection seen in **some covid-19 patients.**

**About Amphotericin B**

- Amphotericin B is an antifungal medication used for serious fungal infections and leishmaniasis.
- The fungal infections it is used to treat include aspergillosis, blastomycosis, candidiasis, coccidioidomycosis, and cryptococcosis.
- It is typically given by injection into a vein.

## New storage conditions for Pfizer-BioNTech vaccine

**(Topic- GS Paper III –Science and Technology, Source- The Hindu)**

**Why in the news?**

- The European Medicines Agency (EMA) has recently recommended a change to the approved storage conditions of the Pfizer-BioNTech COVID-19 vaccine which changes the way these vaccines are handled in vaccination centres across the European Union (EU).
- In February, the US Food and Drug Administration (FDA) had allowed undiluted vials of the vaccine to be stored at conventional temperatures for a period of up to two weeks.

**What is the change in the storage of these vaccines?**

- With the new recommendations, an unopened thawed vial of the Pfizer-BioNTech vaccine can be stored between 2-8 degrees Celsius for up to a month, which means that it can be stored in a regular refrigerator once it has been taken out of the deep freeze.
- Before this, an unopened thawed vaccine vial could be kept in a regular refrigerator for a period of only up to five days.

**Significance**

- This increased flexibility in storing and handling of the vaccines is expected to positively impact the vaccine rollout in the EU, which has faced some problems since the vaccination drive started.

**Reasons to stored mRNA at such low temperatures**

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a. mRNA vaccines need to be stored at much lower temperatures than some other kind of COVID-19 vaccines because RNA is much less stable than DNA, which is due to the sugars that their molecules are made up of.
b. The second reason for the relative instability of RNA is because of its shape, which is a single strand, while DNA is expressed as a double-stranded helix.

## Covid 19 risk for children

**(Topic- GS Paper III –Science and Technology, Source- The Hindu)**

**Why in the news?**

- Recently in a study it has been found that this year, more and more children have started getting affected by the coronavirus infection, as part of the second wave.

**Affected with the B.1.1.7 variant**

- The B.1.1.7 variant first detected in the United Kingdom could be causing more infections in children.
- Lab studies suggest the B.1.1.7 variant has a mutation that makes it easier for the virus to latch onto our cells and cause an infection — which could be why more kids seem to be getting the disease.
- Children have been largely spared during the pandemic, mainly because the coronavirus has a harder time binding to receptors in their cells compared to those of adults.
- Concern is growing that kids can contract the B.1.1.7 variant more easily, but there's no evidence to suggest the variant causes more severe symptoms in kids.
- Quickly vaccinating adults who are around and live with kids is crucial.

## Haiyang-2D (HY-2D) satellite

**(Topic- GS Paper III –Science and Technology, Source- Business Standard)**

**Why in the news?**

- China has recently successfully launched a **new ocean observation satellite Haiyang-2D.**
- The new ocean-monitoring satellite is a part of its effort to build an all-weather and round-the-clock dynamic ocean environment monitoring system which would provide early warning on marine disasters.

**About Haiyang-2D (HY-2D) satellite**

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- The HY-2D was developed by the China Academy of Space Technology, and the carrier rocket by the Shanghai Academy of Spaceflight Technology.
- The satellite was launched by a Long March-4B rocket from the Jiuquan Satellite Launch Centre in northwest China, the state media reported.
- The HY-2D will form a constellation with the HY-2B and HY-2C satellites to build an all-weather and round-the-clock dynamic ocean environment monitoring system of high frequency and medium and large scale.

**Benefits**

- The constellation will support the country's early warning and prediction of marine disasters, sustainable development and utilisation of ocean resources, effective response to global climate change as well as ocean research.

**Note:**

- China's space programme made significant advancements recently when it landed a spacecraft on Mars, becoming the second country after the United States to have a rover on the red planet.

## Aerosols

**(Topic- GS Paper III –Health, Source- The Hindu)**

**Why in the news ?**

- According to the government advisory on stopping the spread of COVID-19, the Aerosols can be carried in the air for up to 10 m and improving the ventilation of indoor spaces will reduce the spread of COVID-19 transmission.

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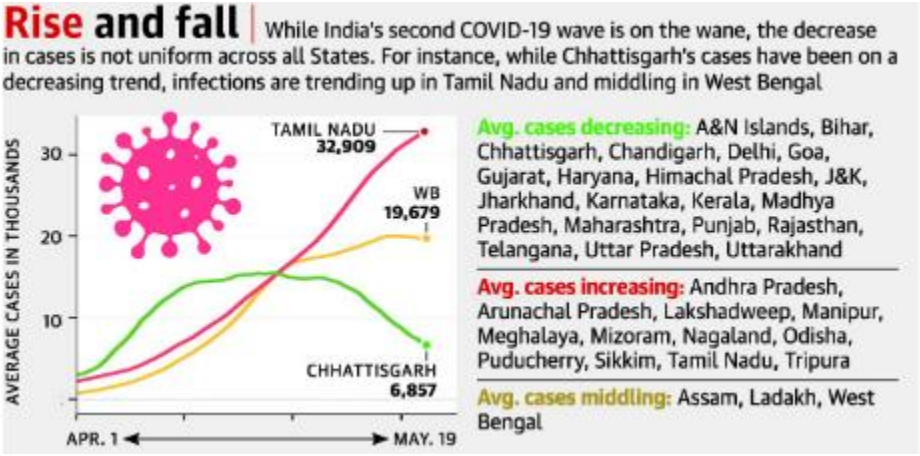


**Key highlights of the Government Advisory**

- Ventilation can decrease the risk of transmission from one infected person to the other.
- Just as smells can be diluted from the air through opening windows and doors and using exhaust systems, ventilating spaces with improved directional air flow decreases the accumulated viral load in the air, reducing the risk of transmission.
- Ventilation is a community defence that protects all of us at home or at work.
- It recommended adding outdoor air in offices, homes and public spaces. Droplets and aerosols were the key transmission modes of the virus.
- While droplets **fell up to 2 m from an infected person, aerosols could travel up to 10 m.**
- Ventilation in hutments could be improved by adding "jaali or other simple air outlets", apart from installing exhaust fans.
- **For workplaces, it** recommended keeping doors and windows open while air-conditioners were on.
- **For rural or semi-urban areas,** every person entering the area should undergo a Rapid Antigen Test before entry for which ASHA and Anganwadi workers should be trained and protected.
- These workers should be given N95 masks even if they are vaccinated.
- Hospitals should ensure that vaccinations were carried out in well-ventilated areas and public transport like buses should keep windows open and use exhaust fans.

**About Aerosol**

- An aerosol is a suspension of fine solid particles or liquid droplets in air or another gas. Aerosols can be natural or anthropogenic.
- Examples of natural aerosols are fog or mist, dust, forest exudates and geyser steam.

## FinMin grants 'infrastructure' status for convention centres

**(Topic- GS Paper III –Economics, Source- The Hindu)**

**Why in the news?**

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

**More on the news**

- '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,**.
- However, 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.

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- This includes primary facilities such as exhibition centres, convention halls, auditoriums, plenary halls, business centres, meeting halls etc.
- As of now, the major projects under way in the sector are backed by the government – the International Exhibition-cum-Convention Centres at Dwarka as well as Pragati Maidan in the capital.

**Benefits**

- The infrastructure tag no longer involves significant tax breaks but would help such projects get easier financing from banks.
- Becoming a MICE (Meetings, Incentives, Conferences and Exhibitions) destination can generate significant revenue with several global companies active in India but it will take time to become a preferred destination.
- It will enable more such projects to come up across India's tourist destinations, though it may make sense to review the prescribed floor area so we can have convention centres of different sizes for varying needs.

**Related Information**

**About the Harmonized Master List**

- The Harmonized Master list approved by the cabinet committee on infrastructure has five main sectors and 29 infra subsectors.
- The five sectors include transport, energy, water sanitation, communication and social and commercial infrastructure.
- The infra tag allows certain benefits including access to easier borrowings overseas, the ability to raise funds through tax-free bonds, tax concessions, and access to dedicated lenders such as IIFCL, and the debt funds.

## Galwan valley standoff in first week of May

**(Topic- GS Paper III –Defense, Source- The Hindu)**

**Why in the news?**

- Recently Army denies any face-off took place between Indian and Chinese troops in the no-patrolling zone at Galwan Valley in Eastern Ladakh in the first week of May.

**More on the news**

**No-patrolling zone**

- It was created after the June 15, 2020 incident when 20 Indian army personnel were killed in violent clashes with the Chinese.
- It is extending to around 3 kilometres, around 1.5 km each, on either side of the clash site near the Y-junction of the Galwan Valley.
- The patrols are sent at different times.
- On the particular day, the Indian and Chinese patrols reached the area at the same time, a minor face-off happened but they returned quickly.

**Recent development**

- China still has camps beyond the no-patrolling zone and there has not been any reduction in troop deployment since last year.

## New Disengagement Agreement in Eastern Ladakh

- Recently, the China's Defence Ministry announced that Chinese and Indian troops on the southern and northern shores of Pangong Tso began "synchronized and organized disengagement".

**What is the new disengagement plan in eastern Ladakh?**

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- According to the statement from India and China, troops from both sides have started disengaging from the Pangong Tso area in eastern Ladakh.
- Currently, the disengagement process seems restricted to the north and south banks of Pangong Tso.

**What does new disengagement process entail?**

- The Union Defence Ministry of India has stated that both sides will remove the forward deployment in a phased, coordinated and verified manner.
- China will pull its troops on the north bank towards the east of Finger 8 and India will also position its forces at its permanent base at the Dhan Singh Thapa post near Finger 3.
- It also provides that all the construction done by both sides on the north and south banks of the lake since April 2020 will be removed.

**Significance**

- It is the first major breakthrough in talks to resolve the nine-month military standoff along the Line of Actual Control (LAC) in Ladakh.
- Both sides have also agreed that the area between Finger 3 and Finger 8 will become a no-patrolling zone temporarily, till both sides reach an agreement.
- It is important to note that the process will send Indian and Chinese troops back to their traditional bases on the north bank.

**About Pangong Lake**

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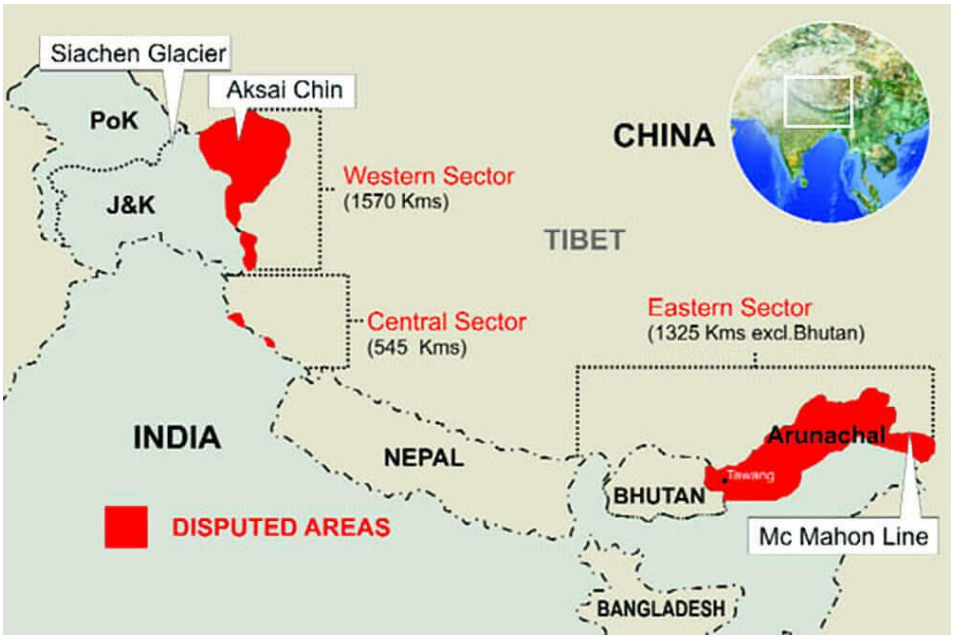


- It is an **endorheic lake (landlocked)** that is partly in India's Ladakh region and partly in Tibet.
- It is a brackish water lake.
- The Karakoram Mountain range, which crosses Tajikistan, Afghanistan, Pakistan, China and India, ends at the north bank of Pangong Tso.
- Its southern bank too has high broken mountains sloping towards Spangur Lake in the South.

**Tactical significance of the lake:**

- It lies in the path of the Chushul approach, one of the main approaches that China can use for an offensive into Indian-held territory.

**Fingers in the lake**

- The barren mountain called Chang Chenmo has palm like formations called 'fingers'.

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- India claims that the LAC is coterminous with Finger 8, but China claims that it starts from Line 2.
- **India physically controls area only up to Finger 4.**

## UK is testing sewage to detect the presence of Covid-19

**(Topic- GS Paper III –Science and Technology, Source- Indian Express)**

**Why in the news ?**

- Recently the UK government is expanding its testing of wastewater to detect the presence of coronavirus and its emerging variants.

**Why test wastewater?**

- Over a year ago, researchers in Australia developed an early warning surveillance system to track the community transmission of COVID-19 by tracing the presence of the virus's genes in raw sewage.
- This was possible because some infected individuals may shed the virus in their stool or urine.
- This method is especially useful in identifying the scale of spread of the disease in a community.
- By detecting and quantifying the amount of virus found in the samples gives an indication of how widespread the virus is in an area, information that can be used by decision-makers to put restrictions on movement for certain people or start testing in an area more aggressively.
- Even in areas where widespread testing may not be feasible, adopting this method can point out the efficacy of containment measures.

## RBI approves transfer of Rs 99,122 crore as surplus to Centre

**(Topic- GS Paper III –Economics, Source- The Hindu)**

**Why in the news?**

- Recently, the Reserve Bank of India Central Board has approved transfer of Rs 99,122 crore as surplus to the central government.
- The decision has been taken during its 589th meeting of the Central Board of Directors of Reserve Bank of India .

**More on the news**

- The RBI also decided to maintain a Contingency Risk Buffer at 5.50% in line with recommendations of the Bimal Jalan Committee report.

**Background**

**Bimal Jalan Committee**

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- The RBI had formed a committee chaired by former Governor Bimal Jalan to review its economic capital framework and suggest the quantum of excess provision to be transferred to the government.

**Suggestions and Recommendations of Bimal Jalan committee**

- The panel recommended a clear distinction between the two components of the economic capital of RBI i.e. Realized equity and Revaluation balances.
    a. Revaluation reserves comprise of periodic marked-to-market unrealized/notional gains/losses in values of foreign currencies and gold, foreign securities and rupee securities, and a contingency fund.
    b. Realized equity, which is a form of a contingency fund for meeting all risks/losses primarily built up from retained earnings. It is also called the Contingent Risk Buffer (CBR).
- The Surplus Distribution Policy of RBI that was finalized is in line with the recommendations of the Bimal Jalan committee.
- The committee has given a range of 5.5-6.5% of RBI's balance sheet for Contingent Risk Buffer.
- Adhering to the recommendations, the RBI has decided to set the CBR level at 5.5% of the balance sheet, while transferring the remaining excess reserves worth ₹52,637 crore to the government.
- If CBR is below the lower bound of requirement, risk provisioning will be made to the extent necessary and only the residual net income (if any) transferred to the Government.
- However keeping CBR at a lower range of 5.5%, will reduce RBI's space to manoeuvre monetary policy.

**About Economic Capital Framework (ECF)**

- Economic capital framework refers to the capital requirement by the central bank while taking into account different risks.
- 27 per cent of ECF reserves holding by RBI.

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- At the time of economic depression in the country, this ECF amount can be used which can increase more liquidity in the market to tackle capital requirement issues.

## DIPCOVAN kit

**(Topic- GS Paper III –Science and Technology, Source- The Hindu)**

**Why in the news?**

- The Defence Research and Development Organisation (DRDO) have recently developed an antibody detection kit called 'DIPCOVAN kit' for spotting SARS-CoV-2 virus.

**About DIPCOVAN kit**

- DIPCOVAN was intended for the qualitative detection of IgG antibodies in human serum or plasma, targeting SARS-CoV-2 related antigens.

**Timing**

- It offers a significantly faster turnaround time as it required just 75 minutes conducting the test without any cross-reactivity with other diseases.

**Sensitivity and Specificity**

- It is a high sensitivity of 97% and specificity of 99%.
- The kit has a shelf life of 18 months.
- The kit would be very useful for understanding COVID-19 epidemiology and assessing an individual's previous SARS-CoV-2 exposure.

## FDI received in FY21

**(Topic- GS Paper III –Economics, Source- The Hindu)**

**Why in the news?**

- According to the Commerce and Industry Ministry Recently, the Foreign direct investment (FDI) flows into India grew 10% in 2020-21 to touch a record $81.72 billion, with FDI equity inflows rising 19% to almost $60 billion.

**Key highlights**

**Top Investor**

- Singapore emerged as the top investor with almost a third of all investments, followed by the U.S. which accounted for 23% of FDI and Mauritius from where 9% of the capital flows originated.

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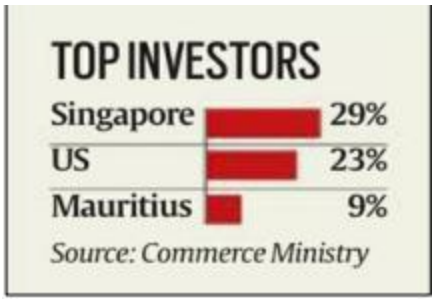



**Sharp growth**

- However, the sharpest growth among the top 10 FDI-origin countries was recorded from Saudi Arabia.
- Investments from the oil-rich nation jumped from a mere $90 million in 2019-20 to $2.8 billion last year.

**Top FDI destination**

- Gujarat was the top FDI destination in FY21, accounting for 37% of the foreign equity inflows, followed by Maharashtra that got 27%.
- Karnataka accounted for another 13% of the equity investments, indicating that the rest of the country got a disproportionately less 23% of foreign equity capital.

**Top Sector**

- Computer software and hardware has emerged as the top sector during 2020-21 with about 44% share of the total FDI equity inflow followed by construction (infrastructure) activities (13%) and services sector (8%), respectively," the Ministry said.

**About Foreign direct investment (FDI)**

- FDI is the process whereby residents of one country (the home country) acquire ownership of assets for the purpose of controlling the production, distribution and other activities of a firm in another country (the host country).
- Generally, FDI takes place when an investor establishes foreign business operations or acquires foreign business assets, including establishing ownership or controlling interest in a foreign company.

**FDI has three components:**

a. **Equity capital** is the foreign direct investor's purchase of shares of an enterprise in a country other than its own.

b. **Reinvested** earnings comprise the direct investors' share (in proportion to direct equity participation) of earnings not distributed as dividends by affiliates, or earnings not remitted to the direct investor.
    - Such retained profits by affiliates are reinvested.

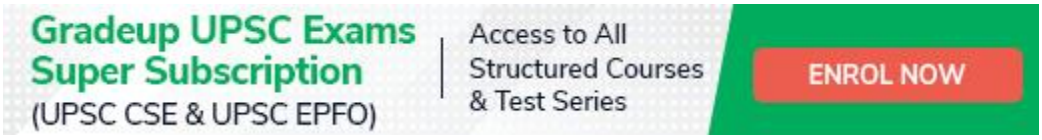
c. **Intra-company loan**s or intra-company debt transactions refer to short- or long-term borrowing and lending of funds between direct investors (or enterprises) and affiliate enterprises

**Where is FDI made?**

- Foreign Direct Investments are commonly made in open economies that have skilled workforce and growth prospect.
- FDIs not only bring money with them but also skills, technology and knowledge.

**FDI in India**

- FDI is an important monetary source for India's economic development. Economic liberalisation started in India in the wake of the 1991 crisis and since then, FDI has steadily increased in the country.



- India today is a part of top 100-club on Ease of Doing Business (EoDB) and globally **ranks number one in the Greenfield FDI ranking**.

**Routes through which India gets FDI**

- **Automatic route: The** non-resident or Indian company does not require prior nod of the RBI or government of India for FDI.
- **Government route**: In this, the foreign entity has to take the approval of the government

## Yellow Fungus

**(Topic- GS Paper III – Science and Technology, Source- TOI)**

**Why in the news**?

- Recently, at a time when several states are witnessing surge in number of black and white fungus cases, a 45-year-old patient in Uttar Pradesh's Ghaziabad found infected with yellow fungus.

**What Causes Yellow Fungus Infection?**

- It is believed that poor hygiene standards or consumption of unhygienic food causes yellow fungus infection.
- Excess use of steroids or anti-fungal medicines is also a possible reason behind sudden surge in such infections in Covid-19 patients, even if recovered.

**Symptoms**

- Initially, the patient suffering from yellow fungus complains of
    a. extreme tiredness
    b. Low or no appetite at all which leads to weight loss.
- Subsequently, the weight of the patient starts decreasing rapidly and it becomes quite fatal.

**Treatment**

- Anti-fungal drug Amphotericin-B is being considered as a primary treatment of yellow fungus.
- The same injection is being used currently to treat black or white fungus cases in the country.

**Is Yellow Fungus More Dangerous than Black or White Fungus?**

- In case of black fungus or white fungus, the symptoms are facial swelling, blackening or discolouration over the nose, blurred or double vision, chest pain, breathing difficulties, coughing blood and severe headache.
- However, the doctors have reportedly said that the yellow fungus starts infecting the patient internally and disturbing vital bodily processes.
- Hence, the patients are advised to seek the medical treatment at the earliest once they experience symptoms such as body fatigue, low appetite and weight loss.

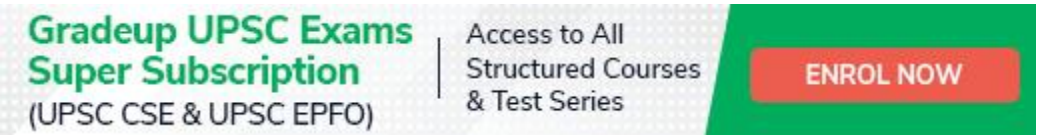
**How does it spread?**

- Fungal infections spread when a person inhales moulds, and are found in the environment.
- Now, yellow fungus infections could also be spread via high levels of humidity or presence of old, contaminated food.
- However, poor hygiene and unsanitary conditions remain to be the prime reasons for infection.

**Related Information**

**About White Fungus or Candidiasis**

- It 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).



- **The most common species that causes infection is Candida albicans.**

**Symptoms**

- People experience symptoms similar to COVID- 19 if it reaches the lungs such as chest infection, despite testing negative for the virus.
- White fungus affects the lungs as well as other parts of the body including the nails, skin, stomach, kidney, brain, private parts and mouth.

**About 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.
- Mucormycosis does not spread between people or between people and animals.

**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 scans of your lungs, sinuses etc may be conducted.

**Treatment**

- Mucormycosis needs to be treated with prescription antifungal medicine.
- In some cases, it can require surgery.

## WHO nod for Covaxin likely in July-September

**(Topic- GS Paper III – Health, Source- The Hindu)**

**Why in the news?**

- Recently, the Bharat Biotech expects to receive regulatory approvals from the World Health Organization (WHO) for Covaxin in the July-September quarter.
- It had already submitted an application to the WHO seeking Emergency Use Listing for the vaccine.

**Regular procedure for drug approval:**

Vaccines and medicines, and even diagnostic tests and medical devices, require the approval of a regulatory authority before they can be administered.

1. In India, the regulatory authority is the Central Drugs Standard Control Organisation (CDSCO).
2. For vaccines and medicines, approval is granted after an assessment of their safety and effectiveness, based on data from trials.

**When can emergency use authorisation (EUA) be granted?**

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- In the US, the Food and Drug Administration (FDA) grants EUA only after it has been determined that the "known and potential benefits outweigh the known and potential risks of the vaccine" (or medicine).
- This means that a EUA application can be considered only after sufficient efficacy data from phase 3 trials had been generated.
- A EUA cannot be granted solely on the basis of data from phase 1 or phase 2 trials.

**What is an Emergency Use Authorization (EUA)?**

- An Emergency Use Authorization (EUA) is a mechanism to facilitate the availability and use of medical countermeasures, including vaccines, during public health emergencies, such as the current COVID-19 pandemic.
- Under an EUA, Food and Drug Administration (FDA) may allow the use of unapproved medical products, or unapproved uses of approved medical products in an emergency to diagnose, treat, or prevent serious or life-threatening diseases or conditions when certain statutory criteria have been met, including that there are no adequate, approved, and available alternatives.
- Taking into consideration input from the FDA, manufacturers decide whether and when to submit an EUA request to FDA.
- Once submitted, FDA will evaluate an EUA request and determine whether the relevant statutory criteria are met, taking into account the totality of the scientific evidence about the vaccine that is available to FDA.

## Cheetah to be re-introduced in India from Africa in November

**(Topic- GS Paper III –Environment, Source- The Hindu)**

**Why in the news?**

- Recently, Cheetah is expected to be re-introduced into the country in November 2021 at the **Kuno National Park in Madhya Pradesh.**

**Cheetah Scenario in India**

- Cheetah, the world's fastest land animal which was declared extinct in India in 1952.
- The country's last spotted cheetah died in Chhattisgarh in 1947**.**

**Background**

- The Wildlife Institute of India (WII) some years back prepared a cheetah re-introduction project.
- The Supreme Court had earlier given its approval to introduce African cheetahs from **Namibia** into a suitable habitat in India on an experimental basis.
- The Supreme Court had also set up a three-member committee to guide the NTCA on the cheetah re-introduction project.
- The panel has asked the WII to carry out a technical evaluation of all possible sites for the re-introduction of cheetah in the country.

**Conservation Status**

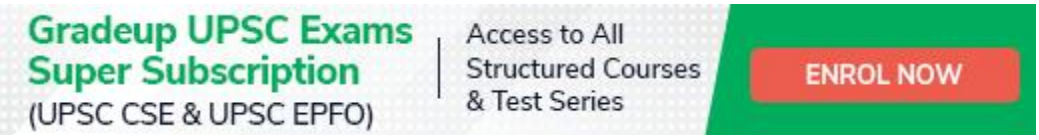
- According to the United Nations, Cheetahs are listed as "Vulnerable" by the International Union for Conservation of Nature (IUCN) Red List of Threatened Species.
- In North Africa and Asia, they are considered to be "**Critically Endangered."**

**CITES status**

- Both the **Cheetah African as well as Asian** are listed in the **Appendix-I.**

## NASA Earth System Observatory

**(Topic- GS Paper III – Science and Technology, Source- The Hindu)**



**Why in the news?**

- NASA will recently design a new set of Earth-focused missions to provide key information to guide efforts related to climate change, disaster mitigation, fighting forest fires, and improving real-time agricultural processes.

**About the NASA Earth System Observatory**

- It is a program by US Space Agency, NASA consisting of series of artificial satellite missions and scientific instruments in Earth orbit.
- It is designed for long-term global observations biosphere, land surface, atmosphere, and oceans.
- Satellite component of this program was launched in 1997.
- The observatory follows recommendations from the 2017 Earth Science Decadal Survey by the National Academies of Sciences, Engineering and Medicine, which lays out ambitious but critically necessary research and observation guidance.

**Purpose**

- With the Earth System Observatory, each satellite will be uniquely designed to complement the others, working in tandem to create a 3D, holistic view of Earth, from bedrock to atmosphere.
- The observatory will provide drought assessment and forecasting, associated planning for water use for agriculture, as well as supporting natural hazard response.
- It will also help in understanding climate changes that impact food and agriculture, habitation, and natural resources, by answering open questions about the fluxes of carbon, water, nutrients, and energy within and between ecosystems and the atmosphere, the ocean, and the Earth.
- NASA's new Earth System Observatory will expand that work, providing the world with an unprecedented understanding of our Earth's climate system, arming us with next-generation data critical to mitigating climate change, and protecting our communities in the face of natural disasters."

## National Mission on use of Biomass in coal based thermal power plants

**(Topic- GS Paper III – Environment, Source- PIB)**

**Why in the news?**

- Recently, Ministry of Power has decided to set up a National Mission on use of Biomass in coal based thermal power plants.

**Objective**

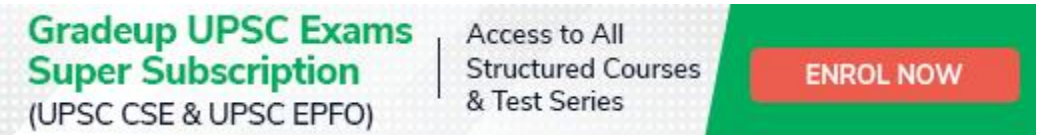
The "National Mission on use of biomass in thermal power plants" will have the following objectives;
(a) To increase the level of co-firing from present 5% to higher levels to have a larger share of carbon neutral power generation from the thermal power plants.
b) To take up R&D activity in boiler design to handle the higher amount of silica, alkalis in the biomass pellets.
c) To facilitate overcoming the constraints in supply chain of bio mass pellets and agro- residue and its transport upto to the power plants.
(d) To consider regulatory issues in biomass co-firing.

**Duration**

- The duration of proposed National Mission would be a minimum 5 years.

**Significance**

- The proposed National Mission on biomass will also contribute in the National Clean Air Programme (NCAP).



**Note:**

- **The Sub-Groups are also proposed to be formed under the Mission.**

## Kyasanur forest disease

**(Topic- GS Paper III – Science and Technology, Source- Indian Express)**

**Why in the news?**

- Recently, ICMR-NIV, Pune, collaborated with Molbio Diagnostics Pvt Ltd, Goa, which has developed the microchip-based TruenatTM KFD Point of Care Test (PoCT) for Kyasanur forest disease (KFD), also known as monkey fever.

**About point-of-care test**

- The point-of-care test would be useful in quick patient management and controlling further spread of the virus.
- The point-of-care test includes a battery-operated PCR analyser, which is a portable, lightweight and universal cartridge-based sample pre-treatment kit and nucleic acid extraction device that aid in sample processing at the point of care.
- The PoCT was found to be highly sensitive, specific with a limit of detection of up to 10 copies of KFD viral RNA.
- Results on screening of human, monkey and tick specimens demonstrated 100 per cent concordant with the compared assays.

**Abou Kyasanur forest disease**

- It is caused by Kyasanur Forest disease Virus (KFDV).
- It was first identified in 1957 in a sick monkey from the Kyasanur Forest in Karnataka.
- It is endemic to the Indian state of Karnataka.

**Transmission**

- To humans, it may occur after a tick bite or contact with an infected animal (a sick or recently dead monkey).

**Treatment and Prevention**

- There is no specific treatment for KFD although a vaccine is available.

## WHO set up "One Health" panel to advise on animal disease risks

**(Topic- GS Paper III – Science and Technology, Source- Indian Express)**

**Why in the news?**

- Recently, the World Health organization has formed One Health High-Level Expert Panel to investigate zoonotic diseases

**About the One Health High-Level Expert Panel**

- It was an initiative launched by France and Germany with the Collabaoration of WHO in 2020.

**Purpose**

- To study the emergence and spread of zoonotic diseases like H5N1, avian influenza, MERS, Ebola, Zika and possibly the novel coronavirus disease (COVID-19).

**One Health Approach**

- The panel will operate under the One Health Approach.

**Advisory Nature**

- It will advise the WHO, the Food and Agriculture Organization, the World Organization for Animal Health and the United Nations Environment Programme on developing "risk assessment and surveillance frameworks" and establish "good practices to prevent and prepare for zoonotic outbreaks."

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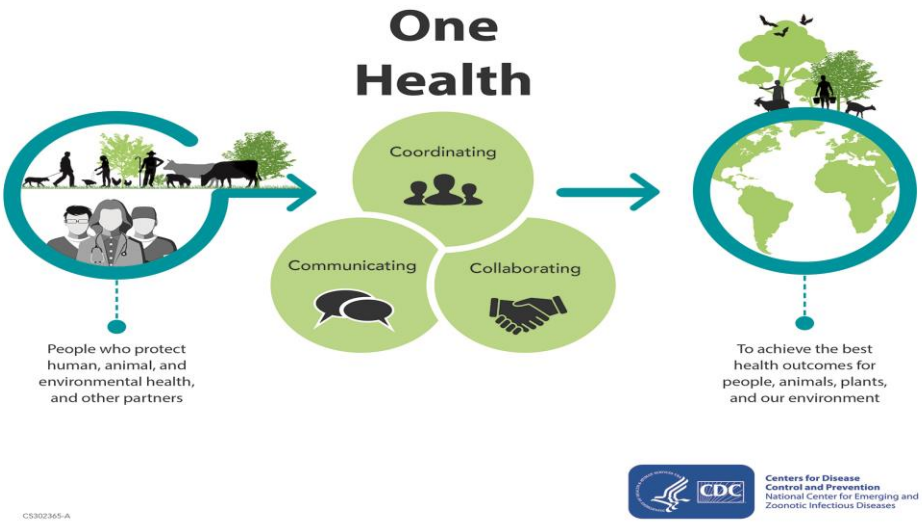
- The panel will also consider potential transmission risks in food production and distribution, urbanization and the construction of infrastructure, international travel and trade and activities that lead to biodiversity loss and climate change.

**About One Health Approach**

- One Health is a collaborative, multisectoral, and trans-disciplinary approach - working at local, national, and global levels – to achieve optimal health and well-being outcomes recognizing the interconnections between people, animals, plants, and their shared environment.




**About Zoonotic Disease**

- It is a disease that passes into the human population from an animal source directly or through an intermediary species.
- Zoonotic infections can be bacterial, viral, or parasitic in nature, with animals playing a vital role in maintaining such infections.
- Examples of zoonoses include HIV-AIDS, Ebola, Malaria, and the current Covid-19 disease.

## 3rd version of Ayush Sanjivani App

**(Topic- GS Paper III – Health, Source- The Hindu)**

**Why in the news ?**

- Recently, Union Minister Kiren Rijiju has launched the Ayush Clinical Case Repository portal and the third version of Ayush Sanjivani App.

**About Ayush Clinical Repository portal**

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- The Ayush Clinical Repository portal will serve as a platform to support both Ayush practitioners and general public.

**Aims**

- This portal aims to aggregate information about clinical outcomes achieved by Ayush practitioners on a large scale.
- It will not only benefit the practitioner community and the public, but will also help widen the solid scientific base of all streams of Ayush.

**About Ayush Sanjivani App**

The third version of Ayush Sanjivani App will facilitate a significant study and documentation regarding the efficacy of selected Ayush interventions, including Ayush-64 and Kabasura Kudineer medicines in the management of asymptomatic and mild to moderate COVID-19 patients.

## Pfizer vaccine supply may start in July

**(Topic- GS Paper III – Science and Technology, Source- The Hindu)**

**Why in the news ?**

- Recently, the NITI Aayog Member (Health) V.K. Paul has been said that the Centre was in talks with various vaccine manufacturers and that Pfizer may start supply by July.

**About the Pfizer vaccine**

- It is jointly developed by Pfizer and BioNTech.
- It has been developed by using messenger RNA (mRNA) technology which relies on synthetic genes that can be generated and manufactured in weeks.
- Unlike traditional vaccines, which work by training the body to recognise and kill proteins produced by pathogens, mRNA tricks the patient's immune system to produce viral proteins itself.
- The proteins are harmless, but sufficient to provoke a robust immune response.

**Efficacy**

- It has been 90 per cent effective in preventing Covid-19 infections in ongoing Phase 3 trials.

## Uncertainty, risks cloud outlook: RBI

**(Topic- GS Paper III –Economics, Source- The Hindu)**

**Why in the news?**

- Reserve Bank of India (RBI) in its annual report cited that the global and domestic economic outlook has once again turned grim and overcast with extreme uncertainty and downside risks.

**Key findings of the report**

**Consumption revival key**

- A durable revival of private consumption and investment would be critical for sustaining economic growth post-pandemic.
- "For a self-sustaining GDP growth trajectory post-COVID-19, a durable revival in private consumption and investment demand together would be critical as they account for around 85% of GDP.

**Price pressures**

- The RBI also cautioned that demand-supply imbalances could continue to exert pressure on the prices of pulses and edible oils, even as prices of cereals could likely see softening on the back of bumper food grains production in 2020-21.
- The RBI also expects global crude oil prices remaining volatile in the near term.

**'Monitor bad loans'**

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- The regulator also asked banks to closely monitor bad loans and prepare for higher provisioning in the wake of the second COVID wave and the Supreme Court order lifting the ban on classification of non-performing assets.
- The waiver of compound interest on all loan accounts that had opted for moratorium during March-August 2020 may put stress on banks' financial health.

**Non-performing assets ratio**

- The gross non-performing assets ratio of scheduled commercial banks declined to 6.8% by end-December 2020, from 8.2% in March 2020.
- The Reserve Bank said prudent provisioning had resulted in an improvement in the **provision coverage ratio to 75.5% from 66.6%.**

## SeHAT OPD portal

**(Topic- GS Paper III –Defence, Source- The Hindu)**

**Why in the news ?**

- Recently, Defence Minister has launched the SeHAT OPD portal.

**About SeHAT OPD portal**

- It is an online medical consultation service for the armed force personnel, veterans and their families through video conferencing.
- The 'Services e-Health Assistance & Tele-consultation (SeHAT) OPD portal' will provide telemedicine services to the beneficiaries.

**Significance**

- The portal will help reduce the load on hospitals and patients will be able to get contactless consultations in an easy and effective manner.
- This will provide additional services and ensure greater convenience to the Armed Forces personnel.

## WHO BioHub initiative

**(Topic- GS Paper III – Health, Source- The Hindu)**

**Why in the news?**

- The World Health Organization (WHO) and Switzerland has recently signed a Memorandum of Undersatnding (MoU) to launch a BioHub facility.

**About BioHub Facility**

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- It has been launched to enhance the rapid sharing of viruses and other pathogens between laboratories and partners globally.
- It is based in **Spiez, Switzerland.**

**Key features of BioHub Facility**

- It will allow rapid sharing of pathogens between laboratories and partners to facilitate a better analysis and preparedness against them.
- The facility will help in safe reception, sequencing, storage and preparation of biological materials for distribution to other laboratories, so as to facilitate global preparedness against these pathogens.
- It will enable member states to share biological materials with and via the BioHub under pre-agreed conditions, including biosafety, biosecurity, and other applicable regulations.
- This will ensure timeliness and predictability in response activities.

**Significance**

- The move is significant in the view of the novel coronavirus disease (COVID-19) pandemic and the need to underline the importance of sharing pathogen information to assess risks and launch countermeasures.

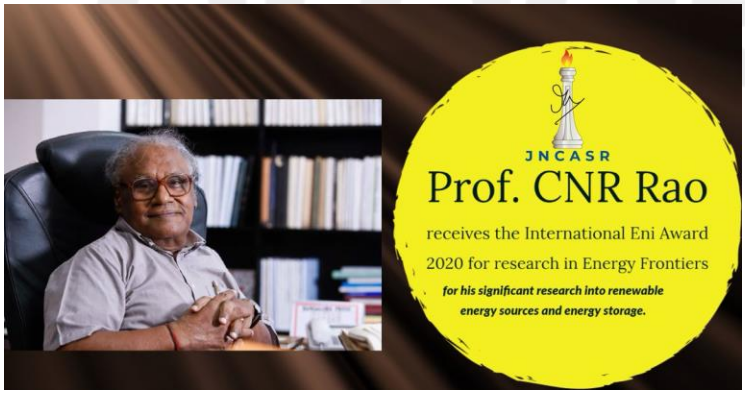
## Eni International Award for renewable energy research

**(Topic- GS Paper III – Environment, Source- The Hindu Business Line)**

**Why in the news?**

- Recently, Bharat Ratna Professor C.N.R. Rao has received International Eni Award 2020 for research into renewable energy sources and energy storage.

**About the Eni International Award**




- The Eni Award is a prize awarded by the Italian oil and gas company Eni with the aim of encouraging better use of energy sources and increased environmental research**.**
- It is also called the Energy Frontier award.
- This award is considered to be the **Nobel Prize in Energy Research.**

## Tianzhou-2 cargo spacecraft

**(Topic- GS Paper III –Science and technology, Source- The Hindu)**

**Why in the news?**

- China took another step towards completing the construction of its first space station by the end of next year following the launch and docking of a cargo spacecraft **Tianzhou-2 cargo spacecraft** recently.

**About Tianzhou-2 cargo spacecraft**

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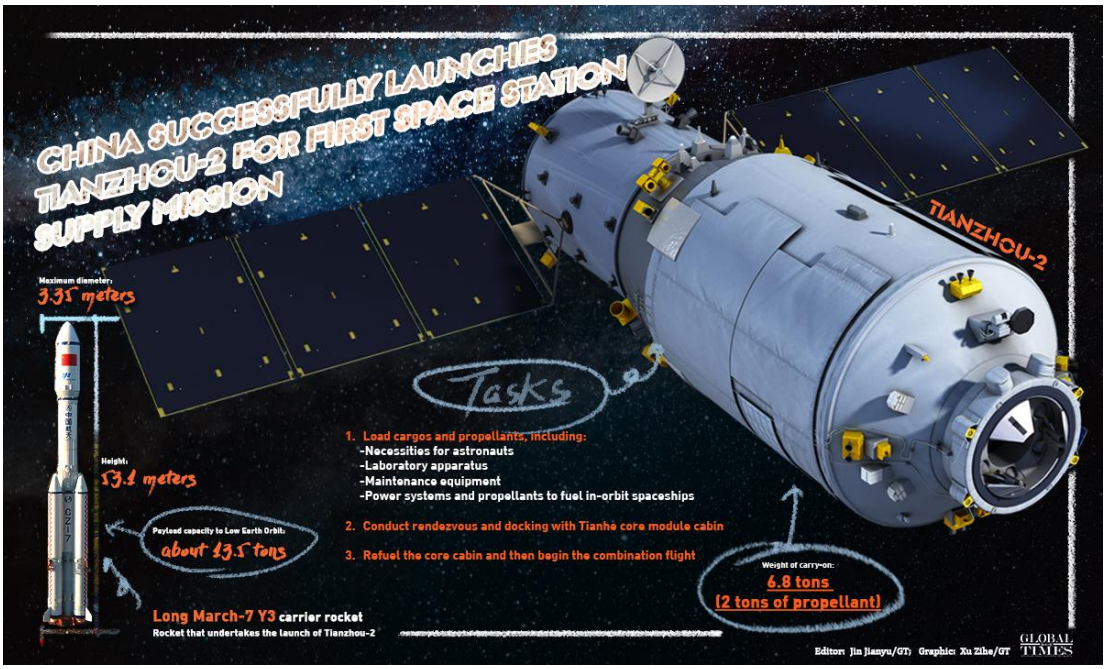


- It has been described by China's state media as "**the delivery guy for China's space station**.
- It was launched by a Long March-7 rocket from the island of Hainan.
- The Tianzhou-2 spacecraft carried a range of supplies, the China Manned Space Agency (CMSA) said, and will be followed by the launch of another cargo spacecraft, Tianzhou-3, and two manned missions, Shenzhou-12 and Shenzhou-13, this year, each carrying three astronauts who will spend several months in orbit.
- The Shenzhou-12 launch is slated for mid-June.

**Background**

- The launch was a third landmark for China's space programme in recent weeks.
- China landed a spacecraft in Mars on May 15 carrying its first Mars rover, Zhurong.
- The Tianhe module, which the cargo spacecraft docked with on Sunday, was launched on April 29.
-

## Jayanti: new spider cricket

**(Topic- GS Paper III – Environment, Source- The Hindu)**

**Why in the news?**

- Recently, Jayanti has become the twelfth subgenus, or species, of cricket identified under the genus Arachnomimus Saussure, 1897.
- It has been found in the Kurra caves of Chhattisgarh in April 2021.

**About the New Spider Cricket**

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- The new species of cricket has been identified under the genus Arachnomimus Saussure, 1897.
- The new species was named after Professor Jayant Biswas, one of the leading cave explorers in the country.
- **Jayanti has led to the new subgenus 'Indimimus'.**
- Males of the new Jayanti subgenus cannot produce sound and their females don't have ears.
- They may be communicating by beating their abdomen or any other body part on the cave walls.
- **Another Species are noticeable for their loud calls, especially at night.**
- Male crickets produce this sound by rubbing their wings against each other to attract females.

**What is Arachnomimus Saussure, 1897?**

- Arachnomimus is the genus name given by Swiss Entomologist Henri Louis Frédéric de Saussure in 1878 to crickets that resembled spiders.

**Significant of the discovery**

- Their skills of vibrational communication may help in **designing hearing aids for human** which can capture quietest signals and amplify to an audible hearing range.
- **Vibrational communication** is one of the softest but fastest modes of signal transmission.
- Vibrational communication can be regarded as an interaction between the physical properties of the environment and insect's anatomy and physiology and resulting behavior.

## Monsoon onset over Kerala delayed: IMD

**(Topic- GS Paper III –Environment, Source- The Hindu)**

**Why in the news?**

- According to the India Meteorological Department (IMD), the arrival of the southwest monsoon over Kerala has been delayed to June 3.

**More on the news**

- Skymet, a private weather forecast agency, however, said the monsoon had arrived. This was because two of the three criteria — as defined by the IMD — had been met.

**These two criteria are**

a. The criteria are rain-bearing westerlies being at a minimum depth and speed; at least 60% of the available 14 stations in Kerala and coastal Karnataka.

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**b.** certain degree of clouding, indicated by a parameter called '**outgoing longwave radiation' (OLR), being below 200 W/square metre.**

**Models for Forecasting**

**a. Dynamical Model**

- It is also called the **Monsoon Mission Coupled Forecast System.**
- It was deployed by the India Meteorological Department under National Monsoon Mission (NMM).
- It relies on the supercomputers, mathematically simulating the physics of the ocean and the atmosphere.

**b. Statistical Model**

- It takes into consideration the global weather models pointing to negligible chances of El Nino, a warming of the central equatorial Pacific which is associated with the drying up of monsoon rain.
- **The India Meteorological Department relies on this model.**

**About National Monsoon Mission**

- It was has launched by Union Ministry of Earth Sciences.
- The Ministry has bestowed the responsibility of execution and coordination of this mission to Indian Institute of Tropical Meteorology (IITM), Pune.

**Mission Objective:**

a. To build an ocean atmospheric model for
   - Improved prediction of monsoon rainfall on extended range to seasonal time scale of up to 16 days to about one season
   - Improved prediction of rainfall, temperature as well as extreme weather events on short to medium range time scale up to 15 days.

**About India Meteorological Department (IMD)**

- It is an agency of the Ministry of Earth Sciences.
- It is responsible for meteorological observations, weather forecasting and seismology.
- It is headquartered in Pune with regional offices at Mumbai, Kolkata, Nagpur and Delhi.

**Also in news**

**Govt. cited 'Indian double mutant strain' in SC affidavit**

- The Centre used the term "Indian double mutant strain" in an affidavit filed in the Supreme Court just days before it officially objected to affixing nationality to the virus variant.
- The affidavit was filed in the court three days prior to a Ministry of Health statement on May 12, taking exception to media reports which referred to the B.1.617 variant as an "Indian variant".
- It said the World Health Organization (WHO) had not associated B.1.617 with the term "Indian variant".
- Instead, it considered the virus a variant of "**global concern".**
- In fact, the affidavit calls variants "UK variant, Brazil variant, South African variant" and caps the list with the "Indian double mutant strain".

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# UPSC Monthly Current Affairs

## May 2021

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