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GS 2 : Polity, Governance, International Relations

1. Outreach and overreach

Context:

- Supreme Court order forming a **national task force** for the effective and transparent allocation of medical oxygen to the States and Union Territories.

Background:

Judicial intervention:

- There have been numerous **proceedings in different High Courts** relating to the allocation and availability of oxygen.
 - Example – The Karnataka High Court ordered the Centre to supply 1,200 tonnes of medical oxygen daily to the State.
- Several High Courts and even the Supreme Court are also examining different aspects of the pandemic response, including the availability of beds.

Concerns expressed by the executive:

- The centre has been arguing that if every High Court started entertaining petitions on the equitable allocation of oxygen, **pandemic management would become unworkable**.
- The increasing trend of judicial orders by the High Courts has raised concerns about the **judiciary encroaching on the executive domain**.
 - The allocation of resources based on a formula related to the present and projected requirements of each State comes across as an executive function.
- The Central government while challenging the orders by the various High Courts at the Supreme Court had submitted that an **expert committee may be constituted, consisting of persons drawn from public and private healthcare institutions**, to facilitate a fresh assessment of the basis for the allocation.

Counter arguments:

- Given the steep rise in daily infections and death toll, the judiciary felt obliged to take it upon itself to **protect the right to life and good health of the population.**
- The Bench hearing the suo motu proceedings, has clarified that the Court was **not usurping the executive's role**, but only wanted to facilitate a dialogue among stakeholders.

Mandate of the task force:

- The 12-member national task force would work towards **effective and transparent allocation of medical oxygen** to the States and Union Territories "on a scientific, rational and equitable basis". It would facilitate audits by sub-groups within each State and UT.
- The task force would make **recommendations on augmenting the supply** based on present and projected demands.
- It is also mandated to **review and suggest measures for ensuring the availability of essential drugs and remedial measures** to meet future emergencies during the pandemic.

Conclusion:

- The national task force has become a judicially empowered group that may significantly guide the handling of the health crisis set off by the second pandemic wave.
- Judicial intervention should be seen as a response to the ongoing health crisis. As long as the court does not usurp the executive's role, **action to mitigate a crisis is welcome and the present intervention need not be seen as a dangerous judicial overreach.**

2. Hakki-Pikki Tribe

- The Hakki Pikkis are a **nomadic tribe based largely in Karnataka.**
- They were rehabilitated in the 1970s once their trade of bird hunting was banned.
- They now live in villages in Karnataka.
- The origin of Hakki-pikki tribal communities have got a rich history and they are said to have ancestral relations with the **legendary Ranapratap Singh.**
- They are said to have **migrated to southern India after their defeat with the Mughal king.**

3. 'FCRA amendments crippling our work'

Issue:

The amendments to the Foreign Contribution Regulation Act (FCRA) enacted in 2020 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.

Details:

- An NGO has now moved the Delhi High Court seeking exemption from the Union Home Ministry's March 31 deadline to open an FCRA account with the SBI branch in New Delhi.
- The petitioner argued that it applied to open the account before the March 31 deadline but the **administrative delays on the part of the bank and the Ministry severely restricted its activities** including providing COVID-19 relief and paying of urgent salaries of staff and also affected its charitable and educational activities.
- Many NGOs are affected by **the new regulations as they are hampering charitable work** during the pandemic.

Foreign Contribution (Regulation) Amendment, 2020:

- Foreign Contribution (Regulation) Amendment Bill, 2020 was passed in the Parliament in September 2020.
- The Home Ministry had directed all NGOs seeking foreign donations to **open a designated FCRA account at the State Bank of India's New Delhi branch by March 31, 2021.**
- The NGOs registered under FCRA shall not receive any foreign donations in any other bank account from April 1, 2021.

Note:

- An FCRA registration is mandatory for NGOs to receive foreign funds.

Way Forward:

- The pandemic has underscored **the importance of Vasudhaiva Kutumbakam** (the whole earth is one family) as a framework for India's global engagement.
- Thousands of NGOs **serve extremely disadvantaged sections**, at times filling in for the state, at others, supplementing it.
- Further **relaxations are necessary in terms of opening an FCRA account with the SBI branch in New Delhi.**
- For a global community to function, there is a **need for a seamless sharing of ideas and resources across national boundaries.**
- It **should not be discouraged unless there is reason to believe the funds are being used to aid illegal activities.**

4. South Sudan President dissolves Parliament as part of peace accord

What's in News?

South Sudan's President Salva Kiir has dissolved Parliament, opening the way for lawmakers from opposing sides of the country's civil war to be appointed under a 2018 peace accord.

- The **setting up of a new legislative body** was part of an accord signed in September 2018 between the President Mr. Kiir and Vice-President Riek Machar, for years on opposite sides during the **five-year civil war** that left 3,80,000 people dead and four million displaced.
- In accordance with the 2018 accord, the **new assembly will number 550 lawmakers**, the majority from Mr. Kiir's governing SPLM party.
- The parliamentarians will be nominated by the different parties.

5. Post Devolution Revenue Deficit

Why in News

The **Ministry of Finance** has released the **second monthly instalment of Post Devolution Revenue Deficit (PDRD) Grant** of Rs. 9,871 crore for the year 2021-22 to 17 States.

Key Points

- **About the Post Devolution Revenue Deficit (PDRD):**
 - The Centre provides the Post Devolution Revenue Deficit Grant to the States under **Article 275 of the Constitution**.
 - The grants are released as per the **recommendations of the Finance Commission in monthly installments to meet the gap in Revenue Accounts** of the States post-devolution (of the divisible tax pool of the Centre).
 - The **15th Finance Commission** has recommended **post devolution revenue deficit grants amounting to about Rs. 3 trillion over the five-year period ending FY26**.
 - The **number of states qualifying** for the revenue deficit grants **decreases from 17 in FY22**, the first year of the award period **to 6 in FY26**, the last year.
 - The eligibility of States to receive this grant and the quantum of grant was decided by the Commission **based on the gap between assessment of revenue and expenditure of the State**.

- **States Recommended for PDRD Grants:**
 - Over the five-year period, Andhra Pradesh, Assam, Haryana, Himachal Pradesh, Karnataka, Kerala, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, Uttarakhand and West Bengal are recommended to be provided with the deficit grants. The Ministry of Finance has accepted the recommendation.
- **Article 275 of the Constitution:**
 - It **provides for the payment of such sums** as Parliament may by law provide as grants-in aid to **such States** as Parliament may determine to be in need of assistance.
 - The grants are **paid out of the Consolidated Fund of India** in each year, and **different sums may be fixed for different States**.
 - These grants are to be of the **nature of capital and recurring sums** as may be necessary.
 - These aim to enable that **State to meet the costs of such schemes of development** as may be undertaken by it with the approval of the Government of India for the purpose of **promoting the welfare of the Scheduled Tribes in that State** or **raising the level of administration of the Scheduled Areas** there in to that of the administration of the rest of the areas of that State.
 - Grants are primarily **intended to correct Inter-State disparities** in financial resources and to coordinate the maintenance and expansion of the welfare schemes of the State Governments on a uniform national level.

Revenue Account and Capital Account

- A **revenue account** includes all the revenue receipts also known as current receipts of the government. These receipts include tax revenues and other revenues of the government.
- A **capital account** is an account that includes the capital receipts and the payments. It basically includes assets as well as liabilities of the government. Capital receipts comprise the loans or capital that are raised by governments by different means.

Centre State Financial Relations

- **Constitutional Provisions:**
 - Indian Constitution has made elaborate provisions, relating to the **distribution of the taxes as well as non-tax revenues** and the **power of borrowing**, supplemented by **provisions for grants-in-aid** by the Union to the States.

- **Article 268 to 293 in Part XII** deals with the provisions of financial relations between Centre and States.
- **Taxing Powers:** The Constitution divides the taxing powers between the Centre and the states as follows:
 - The Parliament has exclusive power to levy taxes on subjects enumerated in the Union List, the state legislature has exclusive power to levy taxes on subjects enumerated in the State List.
 - Both can levy taxes on the subjects enumerated in Concurrent List whereas residuary power of taxation lies with Parliament only.
- **Distribution of the Tax Revenue:**
 - **Duties Levied by the Union but Collected and Appropriated by the States (Article 268):**
 - Includes stamp duties on bills of exchange, cheques, etc.
 - **Taxes Levied as well as Collected by the Union, but Assigned to the States (Article 269):**
 - These include taxes on the sale and purchase of goods (other than newspapers) in the course of inter-state trade or commerce or the taxes on the consignment of goods in the course of inter-state trade or commerce.
 - **Levy and Collection of Goods and Services Tax in Course of Inter-State Trade or Commerce (Article 269-A):**
 - The Goods and Services Tax (GST) on supplies in the course of inter-state trade or commerce are levied and collected by the Centre.
 - But, this tax is divided between the Centre and the States in the manner provided by Parliament on the recommendations of the GST Council.
 - **Taxes Levied and Collected by the Union but Distributed between the Union and the States (Article 270):**
 - This category includes all taxes and duties referred to in the Union List except the following:
 - Duties and taxes referred to in Articles 268, 269 and 269-A.
 - Surcharge on taxes and duties referred to in Article 271 (this goes to the Centre exclusively).
 - Any cess levied for specific purposes.
- **Grants-in-Aid:** Besides sharing of taxes between the Centre and the States, the Constitution provides for Grants-in-aid to the States from the Central resources. There are two types of grants:
 - **Statutory Grants (Article 275):** These grants are given by the Parliament out of the Consolidated Fund of India to such States which are in need of assistance. Different States may be granted different sums.

- Specific grants are also given to promote the welfare of scheduled tribes in a state or to raise the level of administration of the Scheduled areas therein.
- **Discretionary Grants (Article 282):** It empowers both the Centre and the states to make any grants for any public purpose, even if it is not within their respective legislative competence.
 - Under this provision, the Centre makes grants to the states. These grants are known as discretionary grants, the reason being that the Centre is under no obligation to give these grants and the matter lies within its discretion.
 - These grants have a two-fold purpose: to help the state financially to fulfil plan targets; and to give some leverage to the Centre to influence and coordinate state action to effectuate the national plan.

GS 3 : Economy, Science and Technology, Environment

6. China rocket debris falls in Indian Ocean near Maldives

Context:

Debris from the last stage of China's Long March rocket fell into the waters of the Indian Ocean west of the Maldives.

Details:

- China Manned Space Agency (CSMA) said that the vast majority of the device burned up during the re-entry, and the rest of the debris fell into the sea.

Concerns:

- The re-entry of the rocket was described by astrophysicists as the **fourth-largest uncontrolled re-entry in history**.
- It was on a par with the **first Long March rocket that in 2020 fell in the Ivory Coast** where there were reports of debris damaging homes in villages.
- This has evoked **concerns about possible damage should it have fallen on land**.
- It has been criticised by the National Aeronautics and Space Administration (NASA) in the U.S. for failing to meet responsible standards.

Note:

- The **Long March-5B Y2 rocket** was carrying the **Tianhe**, or Heavenly Harmony, the **first of three key components for the construction of China's space station**.
- The space station, which will be only the second after the International Space Station (ISS), has been designed with a lifespan of 10 years but could last 15 years, or until 2037.

7. Green panel allows Great Nicobar plan to advance

Context:

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.**

Details:

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

Parivesh Portal

- **PARIVESH** is a **web-based, role-based workflow application** that has been developed for **online submission and monitoring of the proposals submitted by the proponents for seeking Environment, Forest, Wildlife and CRZ Clearances** from Central, State and district level authorities.
- The Parivesh Portal was **launched** by the **Ministry of Environment, Forest and Climate Change (MoEFCC).**

Concerns on Site:

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

Action points:

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

Giant Leatherback turtle



- Giant Leatherback turtles are the largest of the seven species of sea turtles on the planet.
- The most long-ranging leatherbacks are found in all oceans except the Arctic and the Antarctic.
- Within the Indian Ocean, they nest only in Indonesia, Sri Lanka and the Andaman and Nicobar Islands.
- South Bay and West Bay on Little Andaman and Galathea on Great Nicobar, along with other nesting beaches in the islands are Important Marine Turtle Habitats in India and the largest Leatherback nesting grounds in India.
- They are listed in Schedule I of India's Wildlife Protection Act, 1972, according to the highest legal protection.

Nicobar megapode



- It is a bird species found only in the Nicobar Islands.
- Nicobar megapode (*Megapodius nicobariensis*) is a large-footed bird that builds nests on the ground.
- It is categorized as Vulnerable on the IUCN Red List.

8.NITI Aayog's Project for Great Nicobar Island

Why in News

Recently, the Environment Appraisal Committee which flagged concerns over the project has now 'recommended' it 'for grant of terms of reference' for **Environmental Impact Assessment (EIA)** studies.

- In August, 2020 the Prime Minister had declared that the Andaman and Nicobar islands will be developed as a "**maritime and startup hub**".

Key Points

- **About the Project:**
 - The proposal includes an **international container trans-shipment terminal, a greenfield international airport, a power plant and a township complex spread over 166 sq. km. (mainly pristine coastal systems and tropical forests).**
 - It is estimated to cost Rs. 75,000 crore.
- **Issues with Project:**
 - Lack of details on **seismic and tsunami hazards, freshwater requirement details, and details of the impact on the Giant Leatherback turtle.**
 - **No details of the trees to be felled** – a number that could run into millions since 130 sq. km. of the project area has some of the finest tropical forests in India.

- A number of additional issues include about **Galathea Bay**, the site of the port and the centrepiece of the NITI Aayog proposal.
 - **Galathea Bay** is an iconic nesting site in India of the **enigmatic Giant Leatherback, the world's largest marine turtle** – borne out by surveys done over three decades.
 - Ecological surveys in the last few years have reported **a number of new species**, many restricted to just the Galathea region.
 - **These include** the critically endangered Nicobar shrew, the Great Nicobar crane, the Nicobar frog, the Nicobar cat snake, a new skink (*Lipinia* sp), a new lizard (*Dibamus* sp,) and a snake of the *Lycodon* sp that is yet to be described.
- The site selection for the port had been done **mainly on technical and financial criteria, ignoring the environmental aspects.**
- **Action Points listed out by the Committee:**
 - There is a need for **an independent assessment of terrestrial and marine biodiversity**, a study on the impact of dredging, reclamation and port operations, including oil spills.
 - The **need for studies of alternative sites for the port** with a focus on environmental and ecological impact, especially on turtles, analysis of risk-handling capabilities.
 - A **seismic and tsunami hazard map, a disaster management plan, details of labour**, labour camps and their requirements, an assessment of the cumulative impact, and a **hydro-geological study** to assess impact on ground and surface water regimes.

Great Nicobar

- **About:**
 - Great Nicobar is the **southernmost island** of the Nicobar Islands Archipelago.
 - **It covers 1,03,870 hectares of unique and threatened tropical evergreen forest ecosystems.**
 - It is home to a very rich ecosystem, including 650 species of angiosperms, ferns, gymnosperms, bryophytes, among others.
 - In terms of fauna, there are over 1800 species, some of which are endemic to this area.
- **Ecological Characteristics:**
 - The **Great Nicobar Biosphere Reserve** harbours a wide spectrum of ecosystems comprising **tropical wet evergreen forests**, mountain ranges reaching a height of 642 m (**Mt. Thullier**) above sea level, and coastal plains.
- **Tribe:**

- The **Mongoloid Shompen Tribe**, about 200 in number, live in the forests of the biosphere reserve particularly along the rivers and streams.
 - They are hunters and food gatherers, dependent on forest and marine resources for sustenance.
- Another Mongoloid Tribe, **Nicobarese**, about 300 in number, used to live in settlements along the west coast.
 - After the tsunami in 2004, which devastated their settlement on the western coast, they were **relocated to Afra Bay in the North Coast and Campbell Bay**.

9. A TRIPS waiver is useful but not a magic pill

Context:

- The **United States' declaration of 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).
 - Article IX of the WTO Agreement allows for **waiving obligations in 'exceptional circumstances'**.

Challenges:

- While the U.S.'s decision is to be welcomed, the article argues that there continue to be many challenges in ensuring that this move would be truly effective in meeting its stated **objective of ensuring faster, equitable and quality vaccine access to everyone**.

Time-consuming text-based negotiations approach:

- Given the **consensus-based approach of the WTO**, the complexity of the issues involved and given the **lack of political will** of the developed countries that house the giant pharmaceutical corporations producing COVID-19 vaccines and medicines, the negotiations are bound to be time-consuming.

Possibility of high degree of regulation:

- Previous experience of negotiating such waivers, especially on TRIPS, point to **gross ineffectiveness**.
- In the aftermath of the **HIV/AIDS crisis in Africa in the 1990s**, the WTO adopted a decision in **2003 waiving certain TRIPS obligations** to increase the accessibility of medicines in countries that lacked manufacturing capability. Article 31(f) of TRIPS was waived.

- Article 31(f) of TRIPS mandates that medicines produced under a **compulsory licence** are predominantly for the domestic market of that country.
- However, this waiver was subject to **several stringent requirements** such as the drugs so manufactured are to be exported to that nation only; the medicines should be easily identifiable through different colour, or shape; only the amount necessary to meet the requirements of the importing country are to be manufactured; the importing country has to notify to the WTO's TRIPS Council, etc. Given these **cumbersome requirements**, hardly any country, in the last 17 years, was able to make effective use of this waiver.

Limited scope of the waiver:

- As against the original proposal made by India and South Africa at WTO calling for a waiver for vaccines, medicines and other therapeutics and technologies related to the treatment of COVID-19, it appears that the U.S. supports waiving intellectual property (IP) protections only on COVID-19 vaccines.
- This amounts to **narrowing down the scope of the waiver considerably by restricting it to vaccines**. Medicines useful in treating COVID-19 and other therapeutics must be also included in the waiver.

Non IP challenges:

Technology transfer:

- While the TRIPS waiver would lift the legal restrictions on manufacturing COVID-19 vaccines, it would not solve the problem of the **lack of access to technological 'know-how' related to manufacturing COVID-19 vaccines**.
- Waiving IP protection does not impose a legal requirement on pharmaceutical companies to transfer or share technology.
- This might lead to individual countries adopting coercive legal measures for a forced transfer of technology, which could turn out to be draconian and also counterproductive in the long run.

Production constraints:

- A considerable amount of time, even several years could be needed for production plants to become operational at optimal capacity.

Logistical challenges:

- Logistical challenges such as **inadequacy of supply chains and unavailability of raw materials** to manufacture vaccines and medicines could derail the production process.

Recommendations:

- The governments would have to be proactive in **negotiating with pharmaceutical companies** to transfer technology using various legal and policy tools including **financial incentives**.
- Countries should start working towards making suitable **changes in their domestic legal framework to operationalize and enforce the TRIPS waiver**.

Conclusion:

- Though the U.S.'s support of the TRIPS waiver is a significant step forward in the global fight against the pandemic, the waiver will have an effect only if countries simultaneously address non-IP bottlenecks among other things.

GS 2 : Polity, Governance, International Relations

1. Rabindranath Tagore

Why in News

The Prime Minister paid tribute to **Gurudev Rabindranath Tagore** on **160th Jayanti** on 7th May, 2021.

Key Points

- **Birth:**
 - He was born in **Calcutta** on **7th May 1861**.
- **About:**
 - He was also referred to as '**Gurudev**', '**Kabiguru**', and '**Biswakabi**'
 - He is regarded as the outstanding creative artist of modern India and hailed by W.B Yeats, Rabindranath Tagore was a **Bengali poet, novelist, and painter**, who was highly influential in introducing Indian culture to the west.
 - He was an exceptional **literary figure and a renowned polymath** who singlehandedly reshaped the region's literature and music.
 - He was a **good friend of Mahatma Gandhi** and is said to have **given him the title of Mahatma**.
 - He had always stressed that **unity in diversity** is the only possible way for India's national integration.
 - He had spoken at the **World Parliament for Religions in the years 1929 and 1937**.
- **Contributions:**
 - He is said to have **composed over 2000 songs** and his songs and music are called '**Rabindra Sangeet**' with its own distinct lyrical and fluid style.
 - He is responsible for modernising Bengali prose and poetry. His notable works include **Gitanjali, Ghare-Baire, Gora, Manasi, Balaka, Sonar Tori**, He is also remembered for his song '**Ekla Chalo Re**'.
 - He published his first poems aged 16 under the pen-name '**Bhanusimha**'.
 - He not only gave the **national anthems for two countries, India and Bangladesh**, but also **inspired a Ceylonese student of his, to pen and compose the national anthem of Sri Lanka**.

- Besides all his literary achievements he was also a philosopher and educationist who in **1921 established the Vishwa-Bharati University**, a university that challenged conventional education.
- **Awards:**
 - In **1913** he was awarded the **Nobel Prize in Literature** for his work on Gitanjali.
 - He was the **first non-European** to receive the Nobel Prize.
 - In 1915 he was awarded **knighthood** by the British King George V. In 1919, following the **Jallianwalla Bagh massacre** he renounced his Knighthood.
- **Death:**
 - He died on **7th August 1941** in Calcutta.

2. Birth Anniversary of Maharana Pratap

Why in News

The Prime Minister of India paid tributes to Maharana Pratap on his Jayanti.

Key Points

- **Description:**
 - **Rana Pratap Singh** also known as **Maharana Pratap** was born on **9th May 1540** in **Kumbhalgarh, Rajasthan**.
 - He was the **13th King of Mewar** and was the **eldest son of Udai Singh II**
 - Maharana Udai Singh II ruled the kingdom of Mewar, with his capital at Chittor.
 - Udai Singh II was also a founder of the city of Udaipur (Rajasthan).
- **Battle of Haldighati:**
 - The Battle of Haldighati was **fought in 1576 between Rana Pratap Singh of Mewar and Raja Man Singh of Amber** who was the general of the Mughal emperor Akbar.
 - Maharana Pratap fought a brave war, but was **defeated by Mughal forces**.
 - It is said that **Maharana Pratap's loyal horse named Chetak**, gave up his life as the Maharana was leaving the battlefield.
- **Reconquest:**
 - **After 1579**, the Mughal pressure relaxed over Mewar and Pratap recovered Western Mewar including Kumbhalgarh, Udaipur and Gogunda.

- During this period, he also built a **new capital, Chavand**, near modern Dungarpur.
- **Death:**
 - He died on 19th January, 1597. He was **succeeded by his son Amar Singh**, who submitted in 1614 to Emperor Jahāngīr, son of Akbar.

3. India-EU Leaders' Meeting

Why in News

Recently, Indian Prime Minister participated in the **India-European Union (EU) Leaders' Meeting**.

- The meeting was held in a **hybrid format** with the participation of leaders of all the **27 EU Member States** as well as the **President of the European Council and the European Commission**.
- This is the **first time** that the EU hosted a meeting with India in the **EU+27 format**.
 - The meeting was the **initiative of the Portuguese Presidency of the Council of the EU**.

Key Points

- **Free Trade Negotiations:**
 - Agreed to **relaunch free trade negotiations** by resuming talks that were suspended for the **Bilateral Trade and Investment Agreement (BTIA)**.
 - India and EU had launched talks for having a wide-ranging **Free Trade Agreement (FTA)**, officially called broad-based BTIA, long ago in 2007.
 - The BTIA was proposed to **encompass trade in goods, services and investments**.
 - However, the talks **stalled in 2013** over **differences on market access and movement of professionals**.
 - The **EU was India's largest trading partner in goods 2019-20**, ahead of China and the US, with total trade close to USD 90 billion.
- **Connectivity Partnership:**
 - Launched an ambitious and comprehensive '**Connectivity Partnership**' which is **focused on enhancing digital, energy, transport and people-to-people connectivity**.

- It is based on the **shared principles** of social, economic, fiscal, climate and environmental sustainability, and respect for international law and commitments.
- It will **catalyse private and public financing for connectivity projects**. It will also **foster new synergies for supporting connectivity** initiatives in third countries, including in the **Indo-Pacific**.
- Also signed the contract for the second tranche of **USD 150 million from the EU for the Pune Metro rail project**.
- **Climate Change:**
 - Reiterated their commitment to achieving the goals of the **Paris Agreement** and agreed to **strengthen joint efforts for mitigation, adaptation and resilience to the impacts of climate change**, as well as providing means of implementation including finance in the context of **Conference of the Parties (COP 26)**.
 - India welcomed the EU's decision to join the **Coalition for Disaster Resilient Infrastructure (CDRI)**.
- **Technology:**
 - Agreed to enhance bilateral cooperation on digital and emerging technologies such as **5G, Artificial Intelligence (AI), Quantum and High-Performance Computing** including through the **early operationalization of the Joint Task Force on AI and the Digital Investment Forum**.
- **Strengthening Partnership:**
 - Desired to **further strengthen the India-EU Strategic Partnership** based on a shared commitment to democracy, fundamental freedoms, rule of law and multilateralism.
 - India appreciated the prompt assistance provided by the EU and its member states to combat its **second Covid wave**.
 - India also **requested the EU's support** for its joint proposal with South Africa for a **Trade Related Aspects of Intellectual Property (TRIPS) waiver** on vaccine production-related patents in the **World Trade Organisation (WTO)**.
 - Recently, the **US has supported the proposal**. However, India **failed to secure the support of the European leaders**.

Way Forward

- India-EU Leaders' Meeting has set a **significant milestone** by providing a new direction to the Strategic Partnership and **giving a fresh impetus for implementing the ambitious India-EU Roadmap 2025** adopted at the **15th India-EU Summit** held in July 2020.

- There is a **need for comprehensive trade agreement** that brings in strong rules, removes barriers to trade in goods and services and investments and opens up free markets. **Addressing the mutual trust deficit**, facilitating people's mobility and connectivity can improve mutual understanding and create **opportunities for innovation and growth**.
- **Enhanced business cooperation between EU and India** can diversify their strategic value chains and **reduce economic dependency** – notably on China.

GS 3 :Economy, Science and Technology,Environment

4.Third Arctic Science Ministerial

Why in News

Recently, India participated in the **3rd Arctic Science Ministerial (ASM)** and shared plans for research and long-term cooperation in the **Arctic Region**.

- The first two meetings – **ASM1 and ASM2** – were held in the **USA in 2016** and **Germany in 2018**, respectively.

Arctic Region

- The Arctic region comprises the **Arctic Ocean** and parts of countries such as **Canada, Denmark (Greenland), Norway, Russia, USA (Alaska), Finland, Sweden and Iceland**.
- These countries together form the **core of the Arctic Council**, an intergovernmental forum.
 - **HQ: Norway**

Key Points

- **Third Arctic Science Ministerial Conference:**
 - **Host Countries:** It was jointly organised by **Iceland and Japan**.
 - It was the **first Ministerial meeting** being held in **Asia (Tokyo in Japan)**.
 - **Objective:** It provides **opportunities to various stakeholders**, including academia, indigenous communities, governments and policymakers, to enhance collective understanding of the Arctic region, emphasize and engage in constant monitoring, and strengthen observations.

- **Theme:** 'Knowledge for a Sustainable Arctic'.
- **India's Stand:**
 - To **contribute observing systems in the Arctic**, both in-situ and by remote sensing.
 - Would **deploy open ocean mooring in the Arctic** for long-term monitoring of upper ocean variables and marine meteorological parameters.
 - The launch of **NISAR (NASA-ISRO Synthetic Aperture Radar)** satellite mission, in collaboration with the USA, is underway.
 - Contributions to the **Sustained Arctic Observational Network (SAON)** would continue.

NASA-ISRO Synthetic Aperture Radar

- **NISAR** will scan the globe every 12 days over the course of its three-year mission of imaging the Earth's land, ice sheets and sea ice to give an unprecedented view of the planet.
- It aims to conduct **global measurements** of the **cause and consequences** of land surface changes using advanced **radar imaging**.

Sustaining Arctic Observing Network

- It is a joint activity of the **International Arctic Science Committee (IASC)** and the **Arctic Council**.
 - **IASC** is a **non-governmental, international scientific organization**.
- The purpose is to support and strengthen the development of multinational engagement for sustained and coordinated pan-Arctic observing and data sharing systems.
- **India's Engagement in the 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 had a **permanent research station** in the Arctic called **Himadri** at NyAlesund, Svalbard Area in **Norway**.
 - India received the '**Observer**' country status in the **Arctic Council** in **2013** and is one among the 13 countries across the world, including China, to have that position which was again **renewed in 2018**.
 - 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.

- Recently, India drafted a **new Arctic policy** that aims at expanding scientific research, sustainable tourism and exploration of mineral oil and gas in the Arctic region.
- **Significance of Arctic Study for India:**
 - Though none of India's territory directly falls in the Arctic region, it is a crucial area as the **Arctic influences atmospheric, oceanographic and biogeochemical cycles of the earth's ecosystem.**
 - **Arctic warming and its ice melt are global concerns** as they play a pivotal role in regulating climate, sea levels, and maintaining biodiversity.
 - There is **growing evidence of connection between the Arctic and the Indian Ocean** (which modulates the Indian monsoon). Hence, improving the understanding of physical processes and quantifying the impact of **Arctic ice melt on the Indian summer monsoon** is very important.

5. Mucormycosis

Why in News

A number of **Covid-19 patients** are developing a **serious fungal infection** known as **Mucormycosis** also called **black fungus**.

Key Points

- **Mucormycosis:**
 - It is a serious but rare fungal infection **caused by a group of molds called mucormycetes**, 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.
 - The **types of Mucormycosis** are: Rhinocerebral (Sinus and Brain), Pulmonary (Lung), Gastrointestinal, Cutaneous (Skin), and disseminated Mucormycosis.
- **Transmission:**
 - It **occurs through** inhalation, inoculation, or ingestion of spores from the environment.
 - Mucormycosis **does not spread between people or between people and animals.**
- **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.
- **Prevention:**
 - Avoiding areas with a lot of dust like construction or excavation sites, avoiding direct contact with water-damaged buildings and flood water after hurricanes and natural disasters and avoiding activities that involve close contact to soil.
- **Treatment:**
 - Mucormycosis needs to be treated with **prescription antifungal medicine**.
 - In some cases, it can **require surgery**.

6. Renewables stage a power-packed show

According to data from the **Central Electricity Authority** power generation from renewable sources of energy increased in the country.

- In FY21, total power generation from thermal, hydro, nuclear and renewables stood at **1372.9 billion units** compared with **1383.33 billion units** in FY20.

Factors:

- The thrust given to renewable energy by the government.
- The growing environmental awareness in the country
- Investments from both domestic and foreign sectors.

Key Points:

- The total power generation from **renewable energy sources** (including solar, wind, bagasse, biomass, small hydro and others) stood at **147.25 billion units in FY21** compared with **138.34 billion units in FY20**, an increase of **six per cent**.
- The **solar power segment** overtook the **wind power sector** in generation in **FY21**.
- Thermal sector's generation dropped to **1,032.4 billion units** FY21 from **1,042.75 billion units**.
- Hydro and nuclear segments stood at **150.3 billion units** (155.77 billion units in FY20) and **42.95 billion units** (46.47 billion units), respectively.

Central Electricity Authority

- The Central Electricity Authority of India (CEA) is a **statutory organisation** constituted under section 3(1) of Electricity Supply Act 1948, which has been superseded by section 70(1) of the Electricity Act 2003.

Duties:

- CEA prescribes the **standards on matters** such as construction of **electrical plants, electric lines and connectivity** to the grid, installation and operation of meters and safety and grid standards.
- The CEA is also responsible for concurrence of **hydro power development schemes of central, state and private sectors** taking into consideration the factors which will result in efficient development of the river and its tributaries for power generation, consistent with the requirement of drinking water, irrigation, navigation and flood control.
- **Preparation of technical standards** for construction of electrical plants, electric lines and connectivity to the grid.
- The CEA seeks to **promote integrated operations** of the regional power grids and the evolution of a national grid.
- The CEA **advises central government, state governments and regulatory commissions** on all technical matters relating to generation, transmission and distribution of electricity.
- It also **advises state governments, licensees or generating companies on matters** which enable them to operate and maintain the electricity system under their ownership or control in an improved manner.
- CEA responsibility also **includes reliable data collection/management/dissemination** of the power sector.

Prelims Practice Questions

Q1. The National Strategy for Artificial Intelligence report has been prepared by:

- a. NITI Aayog
- b. Ministry of Electronics & Information Technology
- c. Ministry of Science and Technology
- d. PM scientific advisory council

Answer: a

Explanation:

- NITI Aayog has prepared a discussion paper on National Strategy on Artificial Intelligence identifying following five sectors to be focused upon: Healthcare, Agriculture, Education, Smart Cities and Infrastructure, Smart Mobility and Transportation.

Q2. Which of the following types of power plants are capable of handling sudden changes in demand loads?

- 1. Coal based power plants
- 2. Wind turbine power plant
- 3. Gas fired power plants
- 4. Hydropower based plants
- 5. Nuclear power plants
- 6. Solar photovoltaic based plants

Options:

- a. 1,3 and 5
- b. 2,3,4 and 6
- c. 3 and 4
- d. 1 and 5

Answer: c

Explanation:

- Different types of power plants have different abilities to handle sudden increase or decrease in load. The control we have on these plants varies.

- Unlike, coal fired plants and nuclear plants, where it is hard to suddenly reduce or increase their power generation, hydro plants and gas fired plants are capable of catering to fast changing loads more effectively.
- The solar photovoltaic and wind turbine based power plants too are not capable of handling fluctuating demands.

Q3. Which of the following constitutes the largest share among the renewable energy capacity in India?

- Hydroelectricity
- Solar power
- Wind power
- Bio energy

Answer: a

Explanation:

- Previously hydroelectric power plants above 25MW (classified as large hydro power plants) were outside the definition of renewable energy. With the reclassification and inclusion of hydro plants above 25MW also under renewable energy, hydroelectricity now constitutes the largest proportion of renewable energy capacity in India. It is followed by wind energy and solar power in terms of installed capacity.

Q4. Which of the following states has the largest percentage of forest cover with respect to its total geographical area?

- Madhya Pradesh
- Arunachal Pradesh
- Mizoram
- Assam

Answer: c

Explanation:

- While Madhya Pradesh has the largest area of forest cover, it is Mizoram which has the largest percentage of forest cover with respect to its total geographical area. It stands around 85% according to the India State of Forest Report (ISFR) of 2019.

Q5. Right to vote in a presidential election is a

- a) Natural right
- b) Constitutional right
- c) Fundamental right
- d) Legal right

Answer: d

Explanation:

- Constitutional rights are those which are explicitly mentioned in the constitution.
- Article 54 mentions about the presidential elections and the members of Electoral College but not right of vote to them. This is taken care under the Representation of the People Act. So it is a legal right.

Q6. Arnesh Kumar judgment is related to which of the following?

- a. Defection of legislators
- b. Shortage of oxygen in the hospitals
- c. Guidelines related to arrests
- d. Euthanasia

Answer: c

Explanation:

- Arnesh Kumar v. the State of Bihar is a landmark judgment, which was pronounced by the Apex Court imposing checks and balances on the powers of the police before an arrest.
- The judgment had laid guidelines related to arrests holding that arrests should be an exception in cases where the offences are punishable with less than 7 years imprisonment.

Mains Practice Questions

1Q. Is carbon tax regressive in nature? Give reasons to justify your answer. (150 words)

Approach

- Describe Carbon tax.
- State reasons for justifying need for Carbon tax.
- Give conclusion.

2Q. What do you understand by Quantum Supremacy? What can be the possible applications of quantum computing? (250 words)

Approach

- Define Quantum Supremacy and recent advancements in this field.
- Briefly mention how quantum computing is different from traditional super-computing.
- Mention the possible applications of quantum computing.