Russia Recognises Rebel Regions of Ukraine as Independent

For Prelims: Location of Ukraine and the Neighbourhood, Ukraine Crisis, Russia, Donetsk, Luhansk, Minsk agreements, OSCE, NATO.

For Mains: Bilateral Groupings & Agreements, Effect of Policies & Politics of Countries on India's Interests, Ukraine Crisis and its Geopolitical Implications.

Why in News?

Recently, Russia recognised the Ukraine rebel regions in eastern Ukraine - **Donetsk and Luhansk** – as independent areas despite calls from the west to put an end to the **tensions** driven by fears that Russia may attack Ukraine.

- This paved the way to provide them **military support — a direct challenge to the West** that will fuel fears that Russia could imminently invade Ukraine.
- Tensions have peaked over the last few weeks as Russia amassed over 1,50,000 troops at Ukraine borders in one of the worst crises since the **Cold War.**
- The announcement shatters a **2015 peace deal signed in Minsk** requiring Ukrainian authorities to offer a broad self-rule to the rebel regions.

What is Russia's Stand?

- It blamed the **North Atlantic Treaty Organisation (NATO)** for the current crisis and called the US-led alliance an existential threat to Russia.
- Charged that **Ukraine had inherited Russia's historic lands** and after the Soviet collapse was used by the West to contain Russia.
- It **wants Western Countries to guarantee that NATO won't allow Ukraine** and other former Soviet countries to join as members.
- It has also **demanded the alliance halt weapons deployments to Ukraine** and roll back its forces from Eastern Europe.
    - The **western countries have rejected the demand.**

What is the Background of the Crisis?

- Ukraine and Russia **share hundreds of years of cultural, linguistic and familial links.**
    - For many in Russia and in the ethnically Russian parts of Ukraine, **the shared heritage of the countries is an emotional issue** that has been exploited for electoral and military purposes.
- As part of the Soviet Union, **Ukraine was the second-most powerful Soviet republic after Russia**, and was crucial strategically, economically and culturally. **//**

- The **Donbass region, comprising the Donetsk and Luhansk oblasts of Ukraine, has been at the centre of the conflict** since March 2014 when Moscow (Russia) invaded and annexed the Crimean Peninsula.
    - In April, **pro-Russia rebels began seizing territory** (with Russia supporting them through hybrid warfare) in Eastern Ukraine and in May 2014, the **rebels in the Donetsk and Luhansk regions held a referendum to declare independence** from Ukraine.
- Since then, these **predominantly Russian speaking regions** (more than 70% speak Russian) within Ukraine have been **witnessing shelling and skirmishes between the rebels and Ukrainian forces** leading to the loss of over 14,000 lives by most estimates, creating around 1.5 million registered Internally Displaced Persons (IDPs) and destruction of the local economy.
- What has changed now is that the **shelling has intensified since last October 2021 when Russia began amassing troops along the borders with Ukraine.**
- If the situation in the Donbass escalates, the **possibility of a war cannot be dismissed.** One way to prevent the outbreak of a war would be to implement the Minsk agreements immediately, as Russia has suggested.

What are the Minsk Agreements?

- There are two Minsk agreements, Minsk 1 and Minsk 2, named after the **Belarussian capital Minsk** where the talks were held.
- **Minsk 1:**
    - **Minsk 1 was written in September 2014** by the Trilateral Contact Group on Ukraine, i.e. Ukraine, Russia, and the **Organisation for Security and Co-operation in Europe (OSCE)** with mediation by France and Germany in the so-called Normandy Format.
    - Under Minsk 1, **Ukraine and the Russia-backed rebels agreed on a 12-point ceasefire deal,** which included prisoner exchanges, delivery of humanitarian assistance, and the withdrawal of heavy weapons.
        - However, **due to violations by both sides, the agreement did not last long.**
- **Minsk 2:**
    - As the rebels moved further into Ukraine, in February 2015, **representatives of Russia, Ukraine, the OSCE** and the leaders of Donetsk and Luhansk signed a 13-point agreement , now known as the **Minsk 2 accord.**
    - The new agreement had **provisions for an immediate cease-fire, withdrawal of heavy weaponry, OSCE monitoring, dialogue on interim self-government for Donetsk and Luhansk,** in accordance with Ukrainian law.
    - It also had provisions related to acknowledgement of special status by parliament, pardon and amnesty for fighters, exchange of hostages and prisoners, humanitarian aid etc.
        - However, these **provisions have not been implemented because of what is popularly known as the 'Minsk Conundrum'.** This essentially means that Ukraine and Russia have contradictory interpretations about the agreement.

What is the Stand of Different Nations on the Issue?

- The **United States has already announced sanctions** prohibiting "new investment, trade, and financing by US persons to, from, or in" the two breakaway regions.
- Japan is likely to **join the US-led sanctions** while **French officials have been quoted as saying in reports that the** European Union (EU) **is also in discussions for punitive actions** against Russia.
    - The EU has condemned Russia over "a blatant violation of international law as well as of the Minsk agreements."
- The **United Kingdom has also warned of further sanctions. Australia** also called Russia's actions **unacceptable, it's unprovoked, it's unwarranted.**

What is India's Stand on the Issue?

- India did not join the Western powers' condemnation of Russia's intervention in Crimea and kept a low profile on the issue.
- In November 2020, India voted against a Ukraine-sponsored resolution in the **United Nations (UN)** that condemned alleged human rights violations in Crimea thereby backing old ally Russia on the issue.
- Recently, India also suggested at the UN Security Council that **"quiet and constructive diplomacy"** is the need of the hour and any step that could escalate the tension should be avoided.
    - India's stand has been **welcomed by Russia.**

Way Forward

- A practical solution for the situation is to **revive the Minsk peace process**. Therefore the West (US and Other western Countries) should push both sides to resume talks and live up to their commitments as per the Minsk agreement to restore relative peace on the border.
- While the **Minsk agreement is far from ideal, it could be a baseline from which a diplomatic solution to the current crisis could be found** and reviving it could be the 'only path on which peace can be built' as French President Emmanuel Macron has said.
- For Ukraine, **it could help it gain control over its borders and end the threat of a Russian invasion** for the time being, while for Russia it could be a way to ensure that Ukraine never becomes a part of NATO and ensure that Russian language and culture are protected under a new federal Constitution in Ukraine.

Source: TH

Enforcing Fundamental Duties

For Prelims: Fundamental Duties

For Mains: Significance of Fundamental Duties, Swaran Singh Committee, Enforcing Fundamental Duties.

Why in News?

Recently, the **Supreme Court** issued a notice to the Centre and states to respond to a **petition to enforce the** Fundamental Duties **of citizens**, including patriotism and unity of the nation, **through**

comprehensive, well-defined laws.

- Fundamental Duties are specified under **Article 51A (Part IVA)** of the Constitution, they **strive to uphold the country's ideals and contribute to its growth and betterment.**

What are Fundamental Duties?

- The idea of Fundamental Duties is inspired by the **Constitution of Russia (erstwhile Soviet Union).**
- These were incorporated in Part IV-A of the Constitution by the **42nd Constitutional Amendment Act, 1976** on the recommendations of the **Swaran Singh Committee.**
- Originally **10 in number,** one more duty was added through the **86th Constitutional Amendment Act, 2002.**
- Like the **Directive Principles of State Policy,** the Fundamental duties are also **non-justiciable in nature.**
- **List of Fundamental Duties:**
  - To abide by the **Constitution and respect its ideals and institutions,** the **National Flag and the National Anthem,**
  - To cherish and follow the **noble ideals that inspired the national struggle** for freedom,
  - To uphold and protect the **sovereignty, unity and integrity of India,**
  - To defend the **country and render national service** when called upon to do so,
  - To promote **harmony and the spirit of common brotherhood** amongst all the people of India transcending **religious, linguistic and regional or sectional diversities** and to renounce practices derogatory to the dignity of women,
  - To value and **preserve the rich heritage** of the country's composite culture,
  - To protect and improve the **natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures,**
  - To develop **scientific temper, humanism** and the spirit of inquiry and reform,
  - To safeguard **public property and to abjure violence,**
  - To strive towards **excellence in all spheres of individual and collective activity** so that the nation constantly rises to higher levels of endeavour and achievement, and
  - To provide opportunities for **education to his child or ward between the age of six and fourteen years** (added by the 86th Constitutional Amendment Act, 2002).

What is the Significance of Fundamental Duties?

- **Rights and duties are correlative.**
  - The Fundamental Duties are intended to serve as a **constant reminder to every citizen** that while the Constitution specifically conferred on them **certain** fundamental rights**,** it also requires citizens to observe **basic norms of democratic conduct and democratic behaviour.**
- These **serve as a warning to the people against the anti-social activities** that disrespect the nation like burning the flag, destroying the public property or disturbing public peace.
- These **help in the promotion of a sense of discipline and commitment towards the nation.** They help in realising national goals by the active participation of citizens rather than mere spectators.
- **It helps the Court in determining the constitutionality of the law.** For instance, any law passed by the legislatures, when taken to Court for constitutional validity of the law, if it is giving force to any Fundamental Duty, then such law would be taken as reasonable.

What is the Need to Legally Enforce Fundamental Duties?

- Since time immemorial the emphasis in **Indian society in accordance with the dictates of the ancient scriptures** has been on the individual's **'Kartavya".**
  - This is the performance of one's duties towards society, the country and especially towards one's parents.
- The **Gita and the Ramayana** enjoin people to perform their duties without caring for their rights.
- In the **erstwhile Soviet Union Constitution,** the rights and duties were placed on the same

footing.

- There is a pressing need to **enforce and implement at least some of the fundamental duties.**
- For instance, to uphold and protect sovereignty, unity and integrity of India, to defend the country and render national service when called upon to do so and to disseminate a sense of nationalism and to promote the spirit of patriotism to uphold the unity of India.
- These fundamental duties assume significance after the **emergence of China as a superpower.**

- The **Verma Committee on Fundamental Duties of the Citizens (1999) identified the existence of legal provisions** for the implementation of some of the Fundamental Duties. The committee provided with the provisions like:
  - No person can disrespect the **National flag, Constitution of India and the National Anthem under the Prevention of Insults to National Honour Act, 1971.**
  - The **Protection of Civil Rights Act (1955)** provided for punishments in case of any offence related to caste and religion.

- It was argued in the petition that the **non-adherence of the Fundamental Duties** has a direct bearing upon the **Fundamental Rights guaranteed under Articles 14 (Equality before Law), 19 (Protection of certain rights regarding freedom of speech) and 21 (Right to Life) of the Constitution of India.**
  - For example, the need to enforce fundamental duties arises due to the **new illegal trend of protest by protestors** in the garb of freedom of speech and expression.

What is the Supreme Court's Stand on Fundamental Duties?

- The Supreme Court's *Ranganath Mishra judgment 2003* held that fundamental duties should not only be enforced by **legal sanctions but also by social sanctions.**
- In *AIIMS Students Union v. AIIMS 2001*, it was held by the Supreme Court that **fundamental duties are equally important like fundamental rights.**
  - Though fundamental duties are not enforceable like fundamental rights they cannot be overlooked as duties in Part IV A.
  - They are prefixed by the **same word fundamental** which was prefixed by the founding fathers of the Constitution to 'right' in Part III.

Way Forward

- There is a **need for a uniform policy** for the "proper sensitisation, full operationalisation and enforceability" of fundamental duties which would "substantially help citizens to be responsible".

Source: IE

Kisan Drones

For Prelims: Drone Technology.

For Mains: Doubling farmer's income by 2022, Uses of drone technology in agriculture & their advantages.

Why in News?

Recently, the Prime Minister has **flagged off 100 Kisan drones** in different cities and towns of India to

spray pesticides in farms across India.

- He also flagged off **"Drone Kisan Yatra"** to promote **chemical-free farming in India.**
  - The initiative was first announced in **Budget, 2022** to ensure inclusive drone development.
- Earlier, the government **banned the import of drones** to encourage their manufacturing in India **(Drone Shakti Scheme).**
- In January, 2022 revised guidelines of the **"Sub-Mission on Agricultural Mechanization" (SMAM)** scheme was issued in a move aimed at making **drones** more accessible to the farmers.

What are Kisan Drones?

- The Kisan drone will have an **unmanned tank filled with insecticides and nutrients.**
- The drones are expected to have a **high capacity of 5 to 10kg.**
- The drone will **spray the same amount of pesticide** on about one acre of land in just 15 minutes.
  - It will save time, will **require less effort and spraying will be done uniformly.**
- They will also be **used to carry vegetables, fruits, fish,** etc to the markets from the farms.
  - These items will be **supplied directly to the market with minimal damage,** consuming lesser time, resulting in more profits to farmers and fishermen.

How the use of Kisan Drones is a Significant Step?

- Kisan Drones will be **used to boost the agricultural sector** in the country.
- The use of Kisan Drones will be **promoted for crop assessment, digitization of land records** and spraying of insecticides and nutrients.
- It will usher in a **new edge revolution as high capacity drones** will be used to carry vegetables, fruits, fishes to the market directly from the farms.
- The development of the drone market in India will **generate fresh employment and new opportunities for the youth.**

What are the Associated Challenges?

- Experts in the agricultural sector are **skeptical about the benefits of drones** and how they will increase farmers' income.
  - There is not any sign of the government meeting its earlier promise of **doubling farmers' income by 2022.**
- The spraying of pesticides and fertilizers **may help in production, but it is the industries that will profit the most.**

How Drones Emerged in Recent Times?

- Until recently, there was a conception that drones were meant for **armed forces and fighting enemies.**
  - However, the **Kisan Drone Suvidha** has added a new chapter in the farming sector and it will prove to be a milestone for drone technology.
- **Garud aerospace** has set a goal of developing one lakh drones, which are being used for diverse purposes.
- Under the **"SWAMITVA scheme"**, land records are being documented through drone technology. Also medicines, vaccines are being supplied to various parts of the country and it is also being used for sprinkling pesticides etc on crops.

Source: TH

Lavender Cultivation

For Prelims: Lavender Cultivation, Lavender, Aroma Mission.

For Mains: Lavender Cultivation and its significance, Agricultural Pricing, Agricultural Resources.

Why in News?

'Lavender Cultivation' **under CSIR-IIIM's Aroma Mission** will be started i**n Ramban district (Jammu Kashmir)** as a part of **Purple Revolution.**

- Aromatic Plants include **lavender, damask rose, mushk bala, etc.**
- **Council of Scientific & Industrial Research (CSIR)** is a contemporary R&D organization under the Ministry of Science and Technology.

What is the Purple Revolution?

- **About:**
    - The Purple or Lavender Revolution was **launched in 2016 by the Union Ministry of Science & Technology** through the **Council of Scientific & Industrial Research's (CSIR) Aroma Mission.**
    - Lavender cultivation is practiced in almost all the 20 districts of Jammu & Kashmir.
    - Under the mission, **first-time farmers were given free lavender saplings**, while those who had cultivated lavender before were **charged Rs. 5-6 per sapling.**
- **Aim:**
    - To support domestic aromatic crop based agro economy by moving from imported aromatic oils to homegrown varieties.
- **Products:**
    - Main product is Lavender oil which sells for at least Rs. 10,000 per litre.
    - Lavender water, which separates from lavender oil, is used to make incense sticks.
    - **Hydrosol,** which is formed after distillation from the flowers, is used to make soaps and room fresheners.
- **Significance:**
    - It is in sync with the government policy of **doubling farm incomes** by 2022.
    - It will **help in providing means of livelihood** to budding farmers and agri-entrepreneurs and give a boost to **Start-Up India campaign** and promote a spirit of entrepreneurship in the region.
        - Over **500 youth had taken benefit from the purple revolution** and augmented their income many-fold.

What is an Aroma Mission?

- **About:** The CSIR Aroma Mission is envisaged to **bring transformative change in the aroma sector** through desired interventions in the areas of agriculture, processing and product development for fuelling the growth of aroma industry and rural employment.
    - The mission will **promote the cultivation of aromatic crops** for essential oils that are in great demand by the aroma industry.
    - It is expected to **enable Indian farmers and the aroma industry to become global leaders in the production** and export of some other essential oils in the pattern of menthol mint.
    - It aims to **provide substantial benefits to the farmers** in achieving higher profits, utilization of waste lands and protection of their crops from wild and grazing animals.
- **Aroma Mission Phase-I and II:**

- During Phase-I, CSIR helped **cultivate 6000 hectares of land** and covered 46 Aspirational districts across the country. Further, more than 44,000 people were trained.
- On 9th February 2021 CSIR launched **Phase-II of Aroma Mission** in which it is proposed to engage over 45,000 skilled human resources and will benefit more than 75,000 farming families across the country.
  - **Nodal Agencies:**
    - The nodal laboratory is **CSIR-Central Institute of Medicinal and Aromatic Plants (CSIR-CIMAP),** Lucknow.
  - **Intended Outcomes:**
    - Bring about **5500 ha of additional area under captive cultivation of aromatic cash** crops particularly targeting rain-fed /degraded land across the country.
    - **Provide technical and infrastructural support for distillation** and values-addition to farmers/growers all over the country.
    - **Enabling effective buy-back mechanisms to assure remunerative prices** to the farmers/growers.
    - **Value-addition to essential oils and aroma ingredients** for their integration in global trade and economy.

Source: PIB

Non Fungible Tokens

For Prelims: Non-Fungible Tokens (NFTs), Cryptocurrency, Blockchain Technology.

For Mains: Non Fungible Tokens working and associated risks, Blockchain technology (Advantages and Challenges).

Why in News?

According to a report, the sales of **Non-Fungible Tokens (NFTs)** surged **USD 25 billion in 2021** as the crypto asset exploded in popularity. However, some experts believe NFTs are a **bubble that might pop.**

What are NFTs?

- **About:** Anything that can be converted into a digital form can be an NFT.
  - Everything from **drawings, photos, videos, GIFs, music, in-game items, selfies, and even a tweet** can be turned into an NFT, which can then be traded online using cryptocurrency.
- **Working of NFT:** If anyone converts its digital asset to an NFT, he/she will get proof of ownership, powered by **Blockchain.**
  - There is a need for a cryptocurrency wallet and an NFT marketplace where one can buy and sell NFTs.
    - Some of the NFT marketplaces are OpenSea.io, Rarible, Foundation.
  - NFTs are **different from other digital forms** in that they are backed by Blockchain technology.
  - NFTs can have only one owner at a time.
  - Apart from exclusive ownership, NFT owners can also **digitally sign their artwork and store specific information in their NFTs metadata.**
  - This will be **only viewable to the individual who bought the NFT**.
- **History of NFT: Terra Nulius** was the first NFT(started in 2015) on **Ethereum Blockchain,**

although this project was merely an idea that only allowed to customise a short message which was then recorded on the blockchain.
  - Then came **Curio Cards, CryptoPunks and CryptoCats** in 2017, before NFTS slowly moved into public awareness, then expanding into mainstream adoption in early 2021.

How is an NFT different from a cryptocurrency?

- Apart from **NFTs and cryptocurrencies being built on Blockchain**, both are different from each other.
- Cryptocurrency is a **currency and is fungible**, meaning that it is interchangeable.
  - For instance, if one holds one crypto-token, say one Ethereum, the next Ethereum that the one holds will also be of the same value.
- However, NFTs are **non-fungible, which means the value of one NFT is not equal to another.**
  - Nonfungible means NFTs aren't mutually interchangeable.
  - Every art is different from others, making it non-fungible, and unique.

What are the risks associated with buying NFTs?

- **Fraud Risks**: In the recent past, several incidents of NFT scams have been reported including the emergence of fake marketplaces, unverified sellers often impersonating real artists and selling copies of their artworks for half price.
- **Environmental Risks:** In order to validate transactions, crypto mining is done, which requires high powered computers that run at a very high capacity, affecting the environment ultimately.
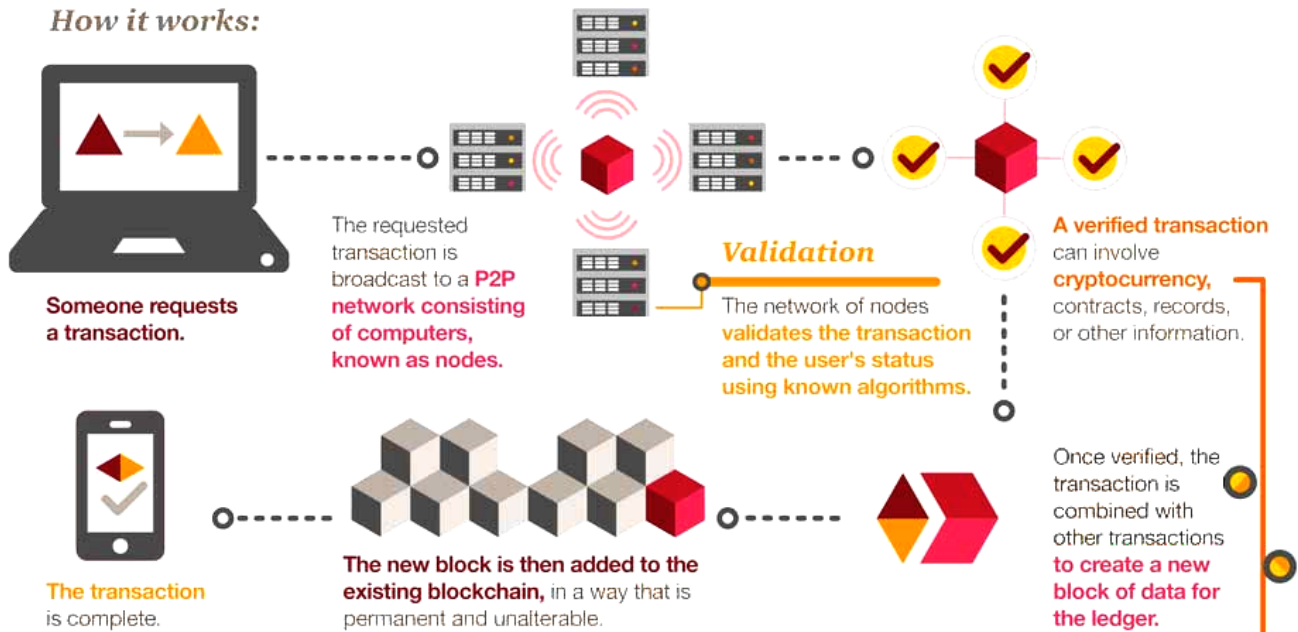
What is Blockchain Technology?

- Blockchain is a **type of shared database that differs from a typical database** in the way that it stores information, blockchains store data in blocks that are then linked together via cryptography.
- As new data comes in, it is entered into a fresh block. Once the block is filled with data, it is chained onto the previous block, which makes the data chained together in chronological order.
- Different types of information can be stored on a blockchain, but the **most common use so far has been as a ledger for transactions.**
- In Bitcoin's case, blockchain is used **in a decentralized way** so that no single person or group has control—rather, all users collectively retain control.
- Decentralized blockchains are immutable, which means that the data entered is irreversible. For Bitcoin, this means that transactions are permanently recorded and viewable to anyone.

A look at blockchain technology

What is it?

The blockchain is a decentralized ledger of all transactions across a peer-to-peer network. Using this technology, participants can confirm transactions without the need for a central certifying authority. Potential applications include fund transfers, settling trades, voting, and many other uses.

How it works:

Someone requests a transaction.

The requested transaction is broadcast to a **P2P** network consisting of computers, known as nodes.

Validation
The network of nodes validates the transaction and the user's status using known algorithms.

A verified transaction can involve **cryptocurrency,** contracts, records, or other information.

Once verified, the transaction is combined with other transactions **to create a new block of data for the ledger.**

The new block is then added to the **existing blockchain,** in a way that is permanent and unalterable.

The transaction is complete.

[Source: IE](#)

GMRT Reveals Fast Radio Bursts

Why in News?

Recently, the Astronomers of National Center of Radio Astrophysics (NCRA-TIFR) in Pune and the University of California in the US have used the **[Giant Metrewave Radio Telescope (GMRT)](#)** to map the distribution of atomic hydrogen gas from the host galaxy of a **Fast Radio Burst (FRB)** for the first time.

What are Fast Radio Bursts?

- The **first FRB was discovered in 2007**, since when scientists have been **working towards finding the source of their origin.**
- Essentially, FRBs **are bright bursts of radio waves** (radio waves can be produced by astronomical objects with changing magnetic fields) **whose durations lie in the millisecond-scale**, because of which it is difficult to detect them and determine their position in the sky.
- These extraordinary events **generate as much energy in a thousandth of a second as the Sun does in a year.**

- Locating where these blasts are coming from, and in particular, what galaxies they originate from, is important in determining what kinds of astronomical events trigger such intense flashes of energy.
- **One of the best-known fast radio bursts is FRB20180916B.**

    - This FRB was discovered in 2018 and is only 500 million light-years away from us in another galaxy.
    - The FRB is the closest so far and has a burst pattern that repeats every 16 days: four days of bursts, 12 days of relative quiet. That predictability makes it an ideal object for researchers to study.

What does the Study Suggest?

- The **FRB (FRB20180916B) host galaxy has undergone a recent merger and that the FRB progenitor is most likely a massive star** formed due to this merger event.
- The **atomic hydrogen gas contained by the host galaxy was found to be ten times more than the nearby galaxies.** But despite such large atomic hydrogen gas, **the number of stars were relatively fewer**. It thus indicates that the **surplus hydrogen gas was recently acquired after a possible merger between two galaxies**.

What is GMRT?

- GMRT is **an array of thirty fully steerable parabolic radio telescopes** of 45 meter diameter. It is operated by the National Center for Radio Astrophysics of the Tata Institute of Fundamental Research (NCRA-TIFR).
- GMRT is **an indigenous project. Its design is based on the `SMART' concept -** for Stretch Mesh Attached to Rope Trusses.
- It functions at the meter wavelength part of the radio spectrum because man-made radio interference is considerably lower in this part of the spectrum in India and there are many outstanding astrophysics problems which are best studied at metre wavelengths.
- The **location for GMRT, Pune meets several important criteria** such as low man-made radio noise, availability of good communication, vicinity of industrial, educational and other infrastructure and,a geographical latitude sufficiently north of the geomagnetic equator in order to have a reasonably quiet ionosphere and yet be able to observe a good part of the southern sky as well.

Source: TH

Shivaji Jayanti 2022

For Prelims: Shivaji Jayanti.

For Mains: Chhatrapati Shivaji's Valor and the Administration under his reign.

Why in News?

Chhatrapati Shivaji Maharaj Jayanti is celebrated each year on 19th February to remember and praise his courage, warfare tactics and administrative skills.

- He carved an enclave from the declining Adilshahi sultanate of Bijapur that formed the genesis of

- the Maratha Kingdom.
- In 1870, social reformer **Mahatma Jyotirao Phule** initiated the celebration Shiv Jayanti in Pune which is now known as Chhatrapati Shivaji Maharaj Jayanti.

Chhatrapati Shivaji Maharaj
(19 February 1630 – 3 April 1680)

What are the Key Points Related to Chhatrapati Shivaji Maharaj?

- **Birth:**
  - He was born on 19th February, 1630 at Shivneri Fort in District Pune in the present-day state of Maharashtra.
  - He was **born to Shahaji Bhonsle, a Maratha general** who held the jagirs of Pune and Supe under the Bijapur Sultanate and Jijabai, a pious woman whose religious qualities had a profound influence on him.
- **Early Life:**
  - He displayed **his military zeal for the first time in 1645** when as a teenager, he successfully got control of the Torna Fort which was under Bijapur.
  - He also acquired the Kondana Fort. Both these forts were under Adil Shah of Bijapur.
- **Important Battles:**

Battle of Pratapgad, 1659	- Fought at the fort of Pratapgad near the town of Satara, Maharashtra, between the forces of the Maratha king Chhatrapati Shivaji Maharaj and the Adilshahi general Afzal Khan.
Battle of Pavan Khind, 1660	- Fought at a mountain pass in the vicinity of fort Vishalgad, near the city of Kolhapur, Maharashtra, between the Maratha Sardar Baji Prabhu Deshpande and Siddi Masud of Adilshahi.
Sacking of Surat, 1664	- Fought near the city of Surat, Gujarat, between Chhatrapati Shivaji Maharaj and Inayat Khan, a Mughal captain.
Battle of Purandar, 1665	- Fought between the Mughal Empire and Maratha Empire.
Battle of Sinhagad, 1670	- Fought on the fort of Sinhagad near the city of Pune, Maharashtra between Tanaji Malusare, a commander of Maratha ruler Shivaji Maharaj and Udaybhan Rathod, fortkeeper under Jai Singh I who was a Mughal Army Chief.
Battle of Kalyan, 1682-83	- Bahadur Khan of the Mughal Empire defeated the Maratha army and took over Kalyan.
Battle of Sangamner, 1679	- Fought between the Mughal Empire and Maratha Empire. This was the last battle in which the Maratha King Shivaji fought.

- **Conflict with Mughals:**
  - He raided Mughal territory near Ahmednagar and in Junnar, 1657.
  - Aurangzeb responded to the raids by sending Nasiri Khan, who defeated the forces of Shivaji at Ahmednagar.
  - Shivaji defeated a large force of Shaista Khan (Aurangzeb's maternal uncle) and the Bijapur army in Pune,1659.
  - In 1664, the wealthy Mughal trading port of Surat was sacked by Shivaji.
  - In June 1665, the **Treaty of Purandar was signed** between Shivaji and Raja Jai Singh I (representing Aurangzeb).
    - As per this treaty, many forts were relinquished to the Mughals and it was agreed that Shivaji would meet Aurangzeb at Agra. Shivaji also agreed to send his son Sambhaji as well.
- **Arrest of Shivaji:**
  - When Shivaji went to meet the Mughal emperor at Agra in 1666, the Maratha warrior felt he was insulted by Aurangzeb and stormed out of the court.
  - He was arrested and kept prisoner. The **clever escape of Shivaji and his son from imprisonment in disguise** out of Agra is legendary today.
  - After that there was peace between the Marathas and the Mughals until 1670.
  - The jagir of Berar which was granted to Sambhaji by the Mughals was taken back from him.
  - Shivaji in response attacked and recovered many territories from the Mughals in a short span of four months.
  - Through his military tactics, Shivaji acquired a large part of the land in the Deccan and western India.
- **Granted Title:**
  - He took on the titles of Chhatrapati, Shakakarta, Kshatriya Kulavantas and Haindava Dharma Dharak.
  - The Maratha Kingdom founded by **Shivaji grew larger over time and became the dominant Indian power** in the early 18th century.
- **Death:**
  - Shivaji passed away in Raigad in 1680 and was cremated at the Raigad Fort.

How was the Administration under Shivaji?

- **Central Administration:**
  - It was founded by Shivaji for the sound system of administration which was greatly inspired from the Deccan style of administration.
  - Most of the administrative reforms were inspired from Malik Amber reforms in Ahmednagar.
  - The King was the supreme head of state who was assisted by a group of eight ministers known as the **'Ashtapradhan'.**
  - The peshwa, also known as the mukhya pradhan, originally headed the advisory council of the raja Shivaji.
- **Revenue Administration:**
  - Shivaji **abolished the Jagirdari System and replaced it with Ryotwari System**, and changes in the position of hereditary revenue officials which was popularly known as Deshmukhs, Deshpande, Patils and Kulkarnis.
  - Shivaji strictly supervised the Mirasdars who had hereditary rights in land.
  - The revenue system was **patterned on the Kathi system of Malik Amber** in which every piece of land was measured by Rod or Kathi.
  - **Chauth and Sardeshmukhi** were other sources of income.
    - Chauth amounted to 1/4th of the standard which was paid to Marathas as a safeguard against Shivaji's forces raiding Non-Maratha territories.
    - Sardeshmukhi was an additional levy of 10% demanded from areas outside of the kingdom.
- **Military Administration:**
  - Shivaji organized **a disciplined and efficient army.**
  - The ordinary soldiers were paid in cash, but the chief and military commander were paid **through jagir grants (Saranjam or Mokasa).**

- The army consists of Infantry i.e. Mavali foot soldiers, Cavalry i.e. Horse riders and equipment holders, Navy.

International Mother Language Day

For Prelims: International Mother Language Day, Indian Initiatives to protect Indian Languages, University Grants Commission, Eighth Schedule.

For Mains: Education, Government Policies & Interventions, Significance of International Mother Language Day.

Why in News

Every year, the **United Nations Educational, Scientific and Cultural Organization (UNESCO)** celebrates 21st February as **International Mother Language Day** to promote mother tongue-based multilingual education.

- The **theme of 2022** is: ***"Using technology for multilingual learning: Challenges and opportunities",*** it focuses on the potential role of technology to advance multilingual education and support the development of quality teaching and learning for all.
- The world has **over 7,000 languages whereas India alone has about 22 officially recognized languages,** 1635 mother tongues, and 234 identifiable mother tongues.

What is International Mother Language Day?

- UNESCO declared 21st February as **International Mother Language Day** in 1999 and the World has been **celebrating the same since 2000.**
- The day also commemorates **a long struggle by Bangladesh to protect its mother language Bangla.**
- The resolution to mark 21st February as the International Mother Language Day was suggested by **Rafiqul Islam, a Bangladeshi living in Canada.**
    - He proposed the said date to commemorate the 1952 killings in Dhaka during the **Bangla Language Movement.**
- The aim is to protect the **diverse culture and intellectual heritage of different regions** of the world.
    - According to the **United Nations (UN)**, every two weeks, a language disappears and the world loses an entire cultural and intellectual heritage.
    - Due to **globalisation,** the rush for learning foreign languages for better job opportunities is a major reason behind the disappearance of mother languages.

What are Global Efforts for Protection of Languages?

- The UN has designated the period between 2022 and 2032 as the **International Decade of Indigenous Languages.**
    - Earlier, the **United Nations General Assembly** had proclaimed 2019 as the International Year of Indigenous Languages (IYIL).
- The **Yuelu Proclamation**, made by UNESCO at Changsha (China) in 2018, plays a central role in

guiding the efforts of countries and regions around the world to protect linguistic resources and diversity.

What are India's Initiatives to Protect Mother Tongues?

- The recently announced **National Education Policy 2020** has given maximum attention to the development of mother tongues.
- The Commission for Scientific and Technical Terminology (CSTT) is providing **publication grants towards the publications of University Level Books** in regional languages.
    - It was established in 1961 to evolve technical terminology in all Indian Languages.
- The **National Translation Mission (NTM) is being implemented** through the Central Institute of Indian Languages (CIIL), Mysore under which the text books of various subjects prescribed in Universities and Colleges are being translated in all languages of the Eighth Schedule.
- **"Protection and Preservation of Endangered Languages"** scheme for conservation of threatened languages.
- The **University Grants Commission (UGC)** also promotes regional languages in higher education courses in the country and supports nine Central Universities under the scheme "Establishment of Centre for Endangered Languages in Central Universities".
- Other Initiatives by the Government of India include the **Bharatavani project** and the proposed setting up of a Bharatiya Bhasha Vishwavidyalaya (BBV).
- Recently, an initiative **Namath Basai** by Kerala State Government has proved to be very beneficial in educating children from tribal areas by adopting vernacular languages as medium of instruction.
- Google's Project Navlekha uses technology to protect mother language. The project is aimed at increasing the online content in Indian local languages.

What are the Related Constitutional and Legal Provisions?

- **Article 29 of the Constitution** (Protection of interests of minorities) gives all citizens right to conserve their language and **prohibits discrimination on the basis of language.**
- **Article 120** (Language to be used in Parliament) provides for use of Hindi or English for transactions of Parliament but gives the right to members of Parliament to **express themselves in their mother tongue.**
- **Part XVII** of the Indian Constitution deals with the **official languages** in Articles 343 to 351.
    - **Article 350A (Facilities for instruction in mother-tongue at primary stage)** provides that it shall be the endeavour of every State and of every local authority within the State to provide adequate facilities for **instruction in the mother-tongue at the primary stage of education** to children belonging to linguistic minority groups.
    - **Article 350B (Special Officer for linguistic minorities)**: The President should appoint **a special officer for linguistic minorities** to investigate all matters relating to the constitutional safeguards for linguistic minorities and to report to him.
        - The President should place all such reports before the Parliament and send them to the state government concerned.
- **The Eighth Schedule** recognises following 22 languages: Assamese, Bengali, Gujarati, Hindi, Kannada, Kashmiri, Konkani, Malayalam, Manipuri, Marathi, Nepali, Oriya, Punjabi, Sanskrit, Sindhi, Tamil, Telugu, Urdu, Bodo, Santhali, Maithili and Dogri.
- **Right to Education (RTE) Act, 2009** says that the medium of instruction shall, as far as practicable, be in a child's mother tongue.

Source: PIB

Leprosy

Why in News?

According to the latest report by the Leprosy **Mission Trust India**, the **Covid-19 pandemic** and its ensuing recommendations on **social distancing and** lockdowns caused a fall of **62.5% in the detection of active leprosy cases** between April and September 2020 in four States — **Andhra Pradesh, Odisha, Bihar and Madhya Pradesh.**

- The **second wave has put brakes on the Leprosy Case Detection Campaign** and the scope for getting healthcare and disability management services in institutional setup reduced.
- Further, the pandemic highlighted that the **'vulnerable population'** is not a homogenous entity. Their vulnerability is sometimes a complex intersection of **different social variables: poverty, disability, stigma, exclusion, etc.**

What is Leprosy?

- **Bacterial Infection:** Leprosy is a **chronic, progressive bacterial infection.** It is caused by a bacterium called **Mycobacterium Leprae**, which is an acid-fast rod-shaped bacillus.
    - It is also known as **Hansen's Disease.**
- **One of Oldest Disease:** It is **one of the oldest diseases** in recorded history, afflicting humanity since time immemorial.
    - A written account of Leprosy dates as far back as **600 B.C.**
    - It was **well recognized in the oldest civilizations of China, Egypt and India** thousands of years ago.
- **Areas of Infection**: Skin, Peripheral nerves, Upper respiratory tract and Lining of the nose.
    - It is a disease that **leaves a terrifying image in its wake of mutilation, rejection, and exclusion** from society.
- **Mode of Transmission:** Mainly by breathing airborne droplets from the affected individuals. It can be contacted at any age.
- **Symptoms:**
    - Red patches on the skin.
    - Skin Lesion
    - Numbness in arms, hands, and legs.
    - Ulcers on the soles of feet.
    - Muscle Weakness and excessive weight loss.
- **Long Incubation Period:** It usually takes about **3-5 years for symptoms to appear after coming into contact with Leprosy causing bacteria.** The long incubation period makes it difficult for doctors to determine when and where the person got infected.
- **Cure:** Leprosy is curable with the **combination of drugs known as Multi-Drug Therapy (MDT).**

What are Steps Taken by India for its Eradication?

- The Government of India started the National **Leprosy Control Programme in 1955.** It was only in the 1970s that a definite cure was identified in the form of **MultiDrug Therapy.**
- The 1st Phase of the **World Bank supported National Leprosy Elimination Project** started from 1993-94.
- The **National Leprosy Eradication Programme** is being continued with Government of India

- funds from January 2005 onwards.
- The National Health Policy **2002,** Government of India had set the goal of elimination of leprosy i.e. to reduce the no. of cases to < 1/10,000 population by the year 2005.
- The **National Leprosy Eradication Programme achieved the goal of elimination of leprosy** as a public health problem, defined as less than 1 case per 10,000 Population, at the National Level in the month of December, 2005.
    - World Health Organisation **Global Leprosy strategy document for 2016–2020** calls for promoting inter-sectoral collaboration within countries.
- In 2017, **SPARSH Leprosy Awareness Campaign** was launched to promote awareness and address the issues of stigma and discrimination.
    - The measures included in the campaign like **contact tracing, examination, treatment, and chemoprophylaxis** are expected to bring down the number of Leprosy cases.
    - The special emphasis on **women, children and those with disabilities** are expected to flush out more hidden cases.
    - In addition to continuing to administer MDT to patients, **new preventive approaches such as Chemoprophylaxis and immunoprophylaxis** are being considered to break the chain of transmission and reach zero disease status.
- In **2018 the Supreme Court directed states and the Central government** to roll out awareness programmes about leprosy.
    - The court said campaigns should utilise positive images and stories of those who had been cured.
- In 2019, Lok Sabha passed a bill seeking to **remove Leprosy as a ground for divorce.**
- In commemoration of the **150th birth anniversary of Mahatma Gandhi on 2nd October 2019**, the NLEP has prepared the comprehensive plan to reduce the grade of disability to less than one case per million people by October 2019.

Source: TH