

PRELIMS EDGE 202513-07-2025

GUJARAT INTERNATIONAL FINANCE TEC- CITY

Context: As the GIFT city is getting expanded step by step, more international players are rushing into this Special Economic Zone in Gujarat



- **GIFT (Gujarat International Finance Tec-City) City** is located in Gandhinagar, Gujarat.
- It consists of a **multi-service Special Economic Zone (SEZ)**, which houses **India's first International Financial Services Centre (IFSC)** and an exclusive **Domestic Tariff Area (DTA)**.
- GIFT city (Gujarat International Finance Tec-City) is envisaged as an **integrated hub for financial and technology**

services not just for India but for the world.

- IFSCA is the **unified regulator for the development and regulation of financial products**, financial services and financial institutions in International Financial Services Centres (IFSCs) in India.
- The social infrastructure in the city includes a school, medical facilities, a proposed hospital, GIFT City business club with indoor and outdoor sports facilities.
- It also includes integrated well-planned residential housing projects making GIFT City a truly "Walk to Work" City.

Source: Taiwan's CTBC Bank to set up IBU in GIFT City (Hindu)

TERMS IN NEWS

Alzheimer's Disease

- Alzheimer's disease is a **progressive neurodegenerative disorder** that **primarily affects memory, thinking, and reasoning abilities**.
- It is the **most common cause of dementia**, accounting for **60-80% of all dementia cases worldwide**.
- The disease disrupts communication between brain cells, leading to a decline in cognitive and functional abilities.
- Most cases of Alzheimer's occur in individuals aged 65 or older, but around 5-

10% of cases develop before this age—this is called Early-Onset Alzheimer's Disease (EOAD).

- Unlike late-onset Alzheimer's, EOAD progresses more rapidly and often affects people in their prime working years, making it particularly devastating.
- Genetic factors play a crucial role in early-onset cases, with mutations in three specific genes—APP, PSEN1, and PSEN2—linked to increased risk.
- **The Role of Amyloid Beta and Plaque Formation:** The buildup of amyloid beta proteins in the brain leads to the formation of **amyloid plaques, a hallmark of Alzheimer's disease.**
- **These plaques disrupt neural communication, trigger inflammation, and eventually lead to brain cell death.**
- Amyloid-targeting therapies aim to reduce these plaques, potentially slowing disease progression.

About Gantenerumab

- Gantenerumab is an **experimental drug that was initially discontinued but has now shown promise in new clinical trials.**
- The latest trial focused on patients with genetic mutations known to cause early-onset Alzheimer's.
- It was a randomized, placebo-controlled study, tracking disease progression using brain imaging and blood biomarkers.
- Results showed a significant reduction in amyloid plaque buildup, suggesting the drug may slow cognitive decline.

Working of the Gantenerumab

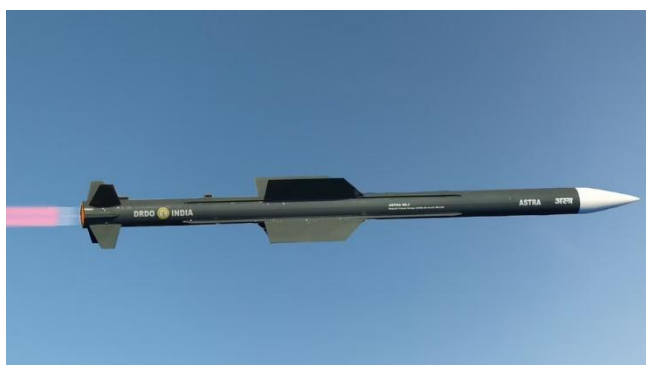
- It is a **monoclonal antibody, meaning it is lab-engineered to specifically target amyloid beta proteins.**
- Once attached to amyloid plaques, it signals the immune system to break them down and remove them from the brain.
- The drug activates microglial cells, which act as the brain's primary immune defenders, to clear toxic proteins more efficiently.
- **A major challenge in treating neurological diseases is the blood-brain barrier, which blocks many drugs from reaching the brain.**
- Gantenerumab can cross this barrier, making it more effective than some previous Alzheimer's treatments

Blood Money

- A nurse from Kerala, **Nimisha Priya**, sentenced to death in Yemen for the 2017 murder of Talal Abdo Mahdi, may be saved by 'Diyah' (blood money) under Islamic sharia law.
- Under the **Islamic Sharia law, blood money, or 'diya', means that the accused provides financial compensation to the family of the victim in serious crimes such as murder.**
- It is followed in countries that incorporate these laws in their legislation.
- The custom is practiced predominantly in **cases involving unintentional murder and culpable homicide.**
- It is also invoked in murder cases wherein the victim's kin choose not to retaliate through 'qisas' (a way of retribution under the Sharia).

- **The end-goal, as the law says, is not to put a price tag on human life but to alleviate the plight and suffering of the affected family and their potential loss of income.**
- However, it is to be noted that even if the concerned parties reconcile through 'blood money', the community and the state will retain the right to impose a deterrent punishment, including penalties.
- In its contemporary applications, 'blood money' is upheld in several Islamic countries with factors such as gender, religion, and nationality of the victim coming into play.
- In Saudi Arabia, for instance, the traffic regulations specifically mandate payment of 'blood money' to heirs of the victims who die in road accidents. In addition, the perpetrator shall be liable to a prison term.
- The system of blood money leaves the fate of the offender in the hands of the victim's family.
- **The Sharia law does not state a fixed amount for 'diya'. However, it can be negotiated by the victim's family.**

Astra Missiles



- It is an indigenous Beyond Visual Range Air-to-Air missile (BVRAAM).

- Equipped with indigenous Radio Frequency (RF) Seeker from Sukhoi Su-30 Mk-I.
- It has a **range exceeding 100 kms and is equipped with state-of-the art guidance and navigation system.**
- In addition to various laboratories of DRDO, more than 50 public and private industries including Hindustan Aeronautics Limited have contributed towards successful realisation of the weapon system.

Targets achieved

- During the tests, two launches were carried out against high-speed unmanned aerial targets at different ranges, target aspects and launch platform conditions.
- In both the cases, the missiles destroyed the targets with pin-point accuracy.
- During the tests, all subsystems performed as per expectations including the RF seeker which has been indigenously designed & developed by DRDO.
- The flawless performance of the Astra weapon system was validated through flight data captured by Range Tracking instruments deployed by Integrated Test Range, Chandipur. These successful flight tests have re-established the accuracy and reliable performance of Astra weapon system with indigenous seeker.

SCHEMES IN NEWS

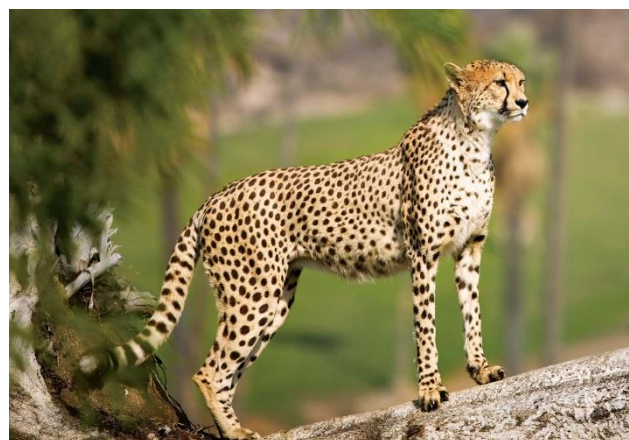
Sanchar Mitra Scheme



- It is focused on **student volunteers**—designated as Sanchar Mitras—will be **empowered to raise awareness among the public about key telecom issues**.
 - Under this scheme Sanchar Mitras will raise awareness about issues, such as **digital safety, cyber fraud prevention, and EMF radiation concerns, while also promoting responsible mobile usage and digital literacy**.
 - The expanded Sanchar Mitra Scheme not only aims to **enhance public awareness but also provides participating students with exposure to cutting-edge telecom technologies including 5G, 6G, Artificial Intelligence, and Cyber Security**.
 - Through structured training, project participation, and engagement with real-world telecom initiatives, the scheme seeks to build a digitally aware, skilled, and research-oriented youth workforce.
 - Participating institutions will be identified in consultation with local DoT field units, and students from relevant academic backgrounds—telecom, electronics, computer science, cyber security—will be nominated as Sanchar Mitras.
- Sanchar Mitras will receive necessary training from experts from field and from the National Communications Academy–Technology (NCA-T) and DoT’s Media Wing.
 - Sanchar Mitras will carry out grassroots-level awareness drives, engage with communities and NGOs, and act as catalysts for informed digital behavior in their surroundings.
 - To encourage excellence, participants will be assessed periodically based on innovation, consistency, and outreach impact.
 - Outstanding performers may be offered exclusive opportunities including internships, involvement in national telecom projects, participation in high-level forums such as India Mobile Congress, and engagements with ITU standards and policy work.
 - It is being implemented by the **department of Telecommunications (DoT), Government of India**

PLACES IN NEWS

Kuno National Park



- It is located in the Sheopur district of **Madhya Pradesh**.
- It is nestled near the **Vindhyan Hills**.
- It derives its name from the meandering **Kuno River** (one of the main tributaries of the Chambal River), which flows from south to north and divides the park into two sections.
- It was selected under the 'Action Plan for Introduction of Cheetah in India'.

Flora:

- Kuno National Park has a rich floral diversity with more than 129 species of trees.
- These tropical dry deciduous forests mainly consist of *Anogeissus pendula* (Kardhai), *Senegalia catechu* (Khair), *Boswellia serrata* (Salai), and associated flora.

Fauna:

- The protected area of the forest is home to the jungle cat, Indian leopard, sloth bear, Indian wolf, striped hyena, golden jackal, Bengal fox, and dhole, along with more than 120 bird species.
- A total of 20 cheetahs were introduced in Kuno National Park (NP), eight from **Namibia** in September 2022, followed by 12 more from South Africa in February 2023 under the Cheetah Project.
- A recent death of another Chettah in Kuno national park raises concerns of the success of the Cheetah reintroduction project in India.

PRACTICE QUESTIONS

Q1 : Consider the following statements regarding The GIFT City.

1. It is being located in Nagpur district of Maharashtra.
2. It consists of a multi-service Special Economic Zone (SEZ), which houses India's first International Financial Services Centre (IFSC) and an exclusive Domestic Tariff Area (DTA).

How many of the above statements are correct?

- A. Only Statement 1
- B. Only Statement 2
- C. Both the statements
- D. None of the Above

Q2 : The Kuno National Park is located in which of the following regions?

- A. Vindyan Hills
- B. Kaimur Hills
- C. Kutch Region
- D. Sundarbans Delta

Q3 : With regard to India's defense capabilities, Identify the odd one from the following options

- A. Astra
- B. Nag
- C. Agni
- D. Arihant

Q4 : Gantenerumab is an experimental drug that is often seen in the news as an expected breakthrough to treat one of the very serious non communicable diseases that humans face today. Identify the disease from the given options

- A. Tuberculosis
- B. Type 2 Diabetes
- C. Hypertension
- D. Alzheimer's disease

Q5 : Consider the following statements regarding Sanchar Mitra Scheme

1. It is focused on student volunteers—designated as Sanchar Mitras—will be empowered to raise awareness among the public about key telecom issues.
2. The expanded Sanchar Mitra Scheme not only aims to enhance public awareness but also provides participating students with exposure to cutting-edge telecom technologies including 5G, 6G, Artificial Intelligence, and Cyber Security.
3. It is being implemented by the Ministry of Education, Government of India

How many of the above statements are incorrect?

- A. Only One
- B. Only Two
- C. All of the Above
- D. None of the Above

Answers

1. B
2. A
3. D
4. D
5. A