

Prelim Bits 31-03-2022 | Daily UPSC Current Affairs

Aphasia

- Aphasia is a **brain disorder** caused by damage in a specific area of the brain that controls language expression and comprehension.
- Aphasia leaves a person unable to communicate effectively with others.
- It is a language disorder that leads to problems with speaking, reading and writing.
- Both men and women are affected equally, and most people with aphasia are in middle to old age.
- **Types of aphasia** - People with **Broca aphasia** have damage to the front portion of the language-dominant side of the brain.
- Those with **Wernicke aphasia** have damage to the side portion of the language-dominant part of the brain.
- Those with **Global aphasia** have damage to a large portion of the language-dominant side of the brain.
- **Causes** - A stroke, tumor, head injury or other damage to the language centers of the brain can cause aphasia.
- A brain infection or Alzheimer's disease can trigger it.
- For most, the cause is a stroke that has cut off blood to part of the brain.
- Without oxygen and nutrients, brain cells die, which leads to the difficulty retrieving words. Aphasia does not affect intelligence.
- **Recovery** - Some people improve dramatically in a few months.
- Others may need to find other ways to communicate. Speech and language therapy can help.
- Researchers are looking into new types of speech therapy and noninvasive methods such as a procedure that uses **magnetic pulses** to stimulate brain cells.
- **Diagnosis** - A comprehensive language tests done by a speech-language pathologist can diagnose the disease.
- Making a diagnosis may also include the use of imaging procedures to look at the brain, such as: Computed tomography (CT), Magnetic resonance imaging (MRI), and Positron emission tomography (PET).

Reference

1. <https://indianexpress.com/article/explained/what-is-aphasia-bruce-willis-7845375/>
2. <https://www.hopkinsmedicine.org/health/conditions-and-diseases/aphasia#:~:text=Aphasia%20is%20a%20language%20disorder,as%20a%20result%20of%20stroke.>
3. <https://www.mayoclinic.org/diseases-conditions/aphasia/symptoms-causes/syc-20369518>

Bamiyan Valley & Bamiyan Buddhas

The Taliban regime in Afghanistan has said that it would protect the ancient Buddha statues in Mes Aynak (Bamiyan), which is also the site of a copper mine.

Previously, the hardline Islamist Taliban wanted to bring down the Bamiyan Buddhas

what they saw as symbols of idol worship.

Taliban's apparent change of heart over the Mes Aynak statues seems to be driven by economic interests, with the regime in desperate need of the income Chinese investment in the copper mines could generate.

Bamiyan Valley

- Bamiyan Valley, in the Hindu Kush Mountains and along the river Bamiyan, is emerging as a hub of both commercial & cultural exchange.
- It was a key node of the early Silk Routes.
- The rise of Bamiyan was closely connected with spread of Buddhism across Central Asia, and that in turn was linked to the political and economic currents of that time.
- Early in the 1st century AD, the **Kushans** made themselves the **unavoidable middlemen between China, India and Rome**.
- This semi-nomadic tribe prospered on the revenues of the Silk Road.

Bamiyan Buddhas

- Bamiyan Buddha statues are two 5th-century AD monumental statues.
- Both were built when the Hephthalites ruled the region.
- They were carved into the side of sandstone cliffs in the Bamiyan valley of central Afghanistan.
- In their Roman draperies and with two different mudras, the statues were great examples of a confluence of Gupta, Sassanian and Hellenistic artistic styles.
- Called **Salsal** (Western Buddha) and **Shamama** (Eastern Buddha) by the locals, they rose to heights of 55 and 38 metres respectively.
 1. Salsal means "light shines through the universe".
 2. Shamama means "Queen Mother".
- In 2003, UNESCO included the remains of the Bamiyan Buddhas in its list of **World Heritage Sites**.
- It was proposed that the statues should be reconstructed with the pieces that were still available, and restored in their niches, but it was met with opposition.

Reference

1. <https://indianexpress.com/article/explained/everyday-explainers/explained-what-were-the-bamiyan-buddhas-and-why-did-the-taliban-destroy-them-7844925/>
2. <https://www.wionews.com/south-asia/post-bamiyan-taliban-looks-to-preserve-buddhist-ruins-to-attract-chinese-money-466092>
3. <https://www.theguardian.com/books/2013/may/31/mes-aynak-afghanistan-buddhist-treasure>

Seagrasses

- Seagrasses are flowering plants are found in sea beds and ocean floors.
- These are underwater plants that evolved from land or terrestrial plants.
- They are like land plants in that they have leaves, flowers, seeds, roots, and connective tissues, and they make their food through photosynthesis.
- However, unlike terrestrial plants, they do not have strong stems to hold themselves up - instead they're **supported by the buoyancy of the water** that surrounds them.
- Seagrasses can reproduce sexually or asexually.
- **Habitat** - Seagrasses prefer to grow in shallow, sheltered, soft-bottomed coastal waters—both

tropical and temperate.

- Since they produce energy through photosynthesis they do best where the water is clear enough to allow sunlight to penetrate.
- **Indicator** - Seagrasses are very sensitive to water quality and are an indicator of the overall health of coastal ecosystems.
- Pollution, sedimentation, excessive nutrients, storms, disease, and overgrazing by herbivores all pose threats to seagrasses.
- **Significance** - Seagrasses are known for providing many ecosystem services. They are considered to be '**Ecosystem Engineers**'.
- Seagrass ecosystems are recognized globally for their ability to sequester carbon.
- They are a very important food source and habitat for wildlife, supporting a diverse community of organisms.
- Seagrasses have been called "**the lungs of the sea**" because they release oxygen into the water through the process of photosynthesis.
- Seagrasses were used as fertiliser for sandy soil.
- **Threats** - Seagrass beds are facing decline all over the world at the rate of 2-5% annually.
- They face natural disturbances like grazing, storms, ice-scouring and desiccation.
- Human disturbances like eutrophication, mechanical destruction of habitat, overfishing and release of nutrients play havoc on seagrasses.
- Siltation, trawling, coastal engineering construction, pollution, etc, are considered to be significant causes for the deterioration of seagrasses.
- **India** - The major seagrass beds of India exist along
 1. Coastline of Gulf of Mannar and Palk Bay regions on the east coast,
 2. Gulf of Kachchh region on the west coast,
 3. The lagoons of islands in Lakshadweep in the Arabian Sea and
 4. Andaman and Nicobar Islands in the Bay of Bengal.
- The National Centre for Sustainable Coastal Management has estimated the total extent of seagrass ecosystem in India to be 516.59 km².
- The CO₂ sequestration rate of seagrass ecosystem is estimated to be up to 434.9 tonnes/km²/year with an annual net CO₂ sink of 0.75 million tonnes for an area of 517 km².

Reference

1. <https://pib.gov.in/PressReleasePage.aspx?PRID=1810578>
2. <https://www.nwf.org/Educational-Resources/Wildlife-Guide/Plants-and-Fungi/Seagrasses#:~:text=Seagrasses%20are%20underwater%20plants%20that,make%20their%20food%20through%20photosynthesis.>
3. <https://www.downtoearth.org.in/blog/wildlife-biodiversity/why-we-must-protect-the-world-s-seagrasses-73852>

Shrinkflation

- "Shrinkflation" is a combination of the words shrink and inflation.
- The "shrink" refers to the change in the size of the product, while the "flation" part refers to inflation i.e. the rise in the price level.
- Shrinkflation is a form of hidden inflation. It refers to **downsizing a product while keeping its price the same**.
- Companies facing higher prices for their supplies may try to pass that onto the consumer.
- Downsizing a product reduces costs for manufacturers.
- Downsizing comes in waves, and it tends to happen during times of increased inflation.

Companies use a Price Pack Purchase (PPP) model to determine how to target products in specific channels for the right prices.



Reference

1. <https://www.ft.com/content/042af8db-a201-4d9d-9f61-cc783be0d725>
2. <https://www.weforum.org/agenda/2022/03/how-companies-are-hiding-inflation-without-charging-you-more/>
3. <https://medium.com/@the.think.box/shrinkflation-how-brands-manage-to-keep-the-product-prices-the-same-over-a-period-of-time-5b8c1def8185>

Common University Entrance Test

The University Grants Commission (UGC) issued a public notice on the proposed Common University Entrance Test (CUET), for which application forms will be available in the first week of April 2022.

- From the academic session 2022-23, admission to undergraduate programmes in **all 45 central universities** in the country will take place through a common entrance test, **CUET**.
- Even state, private and deemed-to-be universities are free to adopt the CUET.
- The CUET will be conducted in 13 languages: Hindi, Marathi, Gujarati, Tamil, Telugu, Kannada, Malayalam, Urdu, Assamese, Bengali, Punjabi, Odia and English.
- For now, admissions to postgraduate courses are not mandated to be held under any common entrance.

Reference

1. <https://indianexpress.com/article/explained/explained-cuet-indias-campuses-7831832/>
2. <https://www.hindustantimes.com/education/competitive-exams/cuet-2022-23-decoded-here-is-all-you-need-to-know-about-the-entrance-test-101648550223810.html>

