

WHAT IS AN H-1B VISA?

The U.S. State Department recently launched a program to renew the much sought-after H-1B foreign work visas domestically.



- It is a **non-immigrant visa** that allows **US companies** to employ **foreign workers in speciality occupations** that require theoretical or technical expertise for a specified period.

- Occupations that qualify for the H-1B visa are **typically in fields such as technology, finance, engineering, architecture, or more.**

Eligibility: In order to be eligible for the H1B visa, you will need:

- A **valid job offer from a U.S. employer** for a role that requires speciality knowledge
- **Proof of a bachelor's degree or equivalent experience** in that field
- The US employer must show that there is a **lack of qualified U.S. applicants for the role.**

Cap:

- The **annual H-1B visa limit is 85,000.** There are **65,000 regular H-1B visas** each year, and an **additional 20,000 visas** are reserved for **applicants with advanced degrees.**
- **Some exceptions to the H-1B visa cap include people entering the U.S. to work in higher education or affiliated research/non-profit organisations.**
- **Applicants are selected for adjudication via a lottery system.**

Features:

- The H-1B visa is **valid for three years** and can be **extended one time** for an additional **three years.** In general, the H-1B is valid for a **maximum of six years.**
- There is **no limit to the number of H1-B Visas** that an individual can have in his or her lifetime.
- H1-B holders can seek a **Green Card or Lawful Permanent Residency** for themselves and their families.
- If the H1-B holder is changing jobs, he or she **must reapply for a new visa.**

WHAT IS ALZHEIMER'S DISEASE?



As per a recent study, rare medical accidents can lead to the transmission of Alzheimer's from one human to another.

- It is a **brain condition** that causes a **progressive decline in memory, thinking, learning, and organising skills**.
- It is the most **common type of dementia**, accounting for 60-80% of all dementia cases.
- It involves **parts of the brain that control thought, memory, and language**.
- It can seriously affect a person's ability to carry out daily activities.
- The condition **usually affects people aged 65 years and over**, with only 10% of cases occurring in people younger than this.

Cause: The exact cause of Alzheimer's disease is **not fully understood**, but it is believed to be **influenced by a combination of genetic, environmental, and lifestyle factors**.

Symptoms:

- The **early signs** of the disease **include forgetting recent events or conversations**.
- Over time, it **progresses to serious memory problems and loss of the ability to perform everyday tasks**.
- **Treatment:** There's **no cure** for Alzheimer's, but certain **medications and therapies** can help **manage symptoms**

What is Dementia?

- Dementia is not a specific disease but is rather a **general term for the impaired ability to remember, think, or make decisions** that interfere with everyday activities.
- **Alzheimer's disease** is **the most common type** of dementia. However, there are several other types of dementia, each with its own underlying causes. Some of the common types of dementia include **Vascular Dementia, Lewy Body Dementia, Frontotemporal Dementia, and Mixed Dementia**.
- Though dementia mostly affects older adults, it is **not a part of normal ageing**.

CORRUPTION PERCEPTION INDEX (CPI) 2023

India's rank in the Corruption Perception Index (CPI) 2023 has slipped to 93 out of 180 countries, with a score of 39.



About Corruption Perception Index (CPI):

- It is an **annual index** released by **Transparency International**, a global civil society organisation.
- Since its inception in 1995, the Corruption Perceptions Index has become the leading global indicator of public sector corruption.
- The CPI ranks **180 countries** and territories by their perceived levels of public sector corruption on a scale of zero (**highly corrupt**) to 100 (**very clean**).
- It uses data from **13 external sources**, including the World Bank, World Economic Forum, private risk and consulting companies, think tanks and others.
- The scores reflect the views of experts and business people, **not the public**.
- **Highlights of CPI 2023:**
- CPI-2023 results show that most countries have made little to no progress in tackling public sector corruption.
- CPI global average score remains unchanged at 43 for the twelfth year in a row.
- **Denmark topped** the index for the sixth consecutive year.
- **Somalia was ranked last**, other countries occupying the bottom spots included: Venezuela, Syria, South Sudan and Yemen.
- **India** has tied with Maldives, Kazakhstan, and Lesotho to **rank at 93** out of 180 countries. In 2022, India was ranked at 85.
- **Pakistan** scored 29 with a **rank of 133** and **China**, scored 42 occupying rank 76.

BHARAT 5G PORTAL

Recently, the Secretary, the Department of Telecommunications (DoT), Ministry of Communications (MoC), launched the “Bharat 5G Portal- an integrated portal” on the sidelines of ‘Bharat Telecom 2024’.

About Bharat 5G Portal:



- It is a comprehensive platform serving the **interests of startups, industry and academia in quantum, 6G, IPR and 5G domains.**
- It also features the **Future Tech-Experts registration portal** in collaboration with PANIIT USA, aimed to help and advise the Indian Telecom ecosystem to advance the goal of Atmanirbhar Bharat.
- It acts as a one-stop solution for all quantum, IPR, PoCs/Pilot, **5G and 6G-related works** capturing academic R&D developments, industry standards, OEMs, startups/MSMEs, and subject matter experts.
- It aims to propel India's 5G capabilities and foster innovation, collaboration, and knowledge-sharing within the telecom sector.

INDIAN STAMP BILL 2023

Why in news?

- The Centre has proposed repealing the Indian Stamp Act, 1899 and bringing in a new law for the stamp duty regime in the country.
- In this context, recently, the Ministry of Finance invited suggestions on the draft 'Indian Stamp Bill, 2023' from the public.

Stamp duty

- **About**
 - A stamp duty is essentially a govt tax, which is levied to register documents, like an agreement or transaction paper between two or more parties, with the registrar.
- **Amount**
 - Usually, the amount specified is fixed based on the document's nature or is charged at a certain percentage of the agreement value stated in the document.
- **Levied on**

- Stamp duties can be levied on bills of exchange, cheques, promissory notes, bills of lading, letters of credit, policies of insurance, transfer of shares, debentures, proxies and receipts.
- **Valid evidence in a court of law**
 - Stamp duties are accepted as valid evidence in a court of law.
- **Appropriation of stamp duties**
 - Stamp duties are levied by the Centre but appropriated by the concerned states within their territories under **Article 268 of the Constitution**.

Indian Stamp Bill, 2023

- **Need for new bill**
 - Several provisions of the Indian Stamp Act, 1899 have now become redundant or inoperative. For instance, there was a lack of provisions for digital e-stamping in the 1899 Act.
 - Also, in earlier act, there was lack of uniform legislation for all Indian states regarding stamp duties.
 - The 1899 Act extended to 30 states and Union Territories combined while six states followed their own stamp acts and rules.
- **Key features**
 - In order to equip India for a seamless digital era, the bill includes provisions for digital e-stamping.
 - It **defines an electronic stamp or e-stamp** as an electronically generated impression denoting the payment of stamp duty by electronic means or otherwise.
 - There are also provisions for digital signatures.
 - Digital or electronic signature refers to the authentication of any electronic record by a subscriber through an electronic method or procedure.
 - It seeks to increase the maximum penalty amount from Rs 5,000 to Rs 25,000 for contravening any provisions of the law and impose Rs 1,000 per day for repeated offences.

BUDGET SESSION BEGINS AND SUSPENSION OF OPPOSITION MPS REVOKED

Why in news?

- On the eve of Parliament's Budget Session, the suspension of 14 Opposition MPs — 11 from Rajya Sabha and three from Lok Sabha — was revoked.
- This was done to enable them to attend the customary President's address to both Houses of Parliament.

Parliamentary Sessions

- **Constitutional provisions with respect to Parliamentary Sessions**
 - Article 85 of the Indian Constitution states that the President can summon each House of Parliament to meet at a time and place of their choosing.
 - The President can also prorogue, or end, a parliamentary session, or dissolve the Lok Sabha.
- **Power to convene a session of Parliament**
 - The Central government has the authority to call for a session.
 - The **Cabinet Committee on Parliamentary Affairs (CCPA)**, which includes several Cabinet ministers, determines the date and number of sittings.
 - After finalising the session schedule, the President calls upon the Members of Parliament to convene for the upcoming session.
 - The MPs are informed about the number of sittings and other details about the tentative business of the House through the summons sent by the President.
- **Timetable**
 - The Constitution doesn't provide for a fixed number of sessions or days of sitting.
 - However, **three sessions are typically held each calendar year** — the Budget, Monsoon, and Winter sessions.

Suspension of MPs

- It is the role and duty of the Presiding Officer — Speaker of Lok Sabha and Chairman of Rajya Sabha — to maintain order so that the House can function smoothly.
- In order to ensure that proceedings are conducted in the proper manner, the Speaker/Chairman is empowered to force a Member to withdraw from the House.

WHAT IS LAB-GROWN FISH?

Recently, ICAR-Central Marine Fisheries Research Institute (CMFRI) has entered into a collaborative research agreement with a private-sector start-up offering cultivated meat technology solutions to grow fish meat in the laboratory.



About Lab-grown fish:

- It is merely a type of lab-grown — or **cultivated/cultured** — meat.
- Seafood without the sea is ‘grown’ in the same way as other cultivated meats are grown — without the need to raise and kill an animal.
- **Process:** Cultivated fish meat is produced by **isolating specific cells** from fish and growing them in a laboratory setting using media that is free of animal components.
- The final product is expected to replicate the flavour, texture, and nutritional qualities of ‘real’ fish meat.
- **Role of Central Marine Fisheries Research Institute:**
- It will focus on the **genetic, biochemical, and analytical work** related to the project.
- In its cell culture lab, it will carry out research on early **cell line development** of high-value marine fish species — a process that involves isolating and cultivating fish cells for further research and development.
- It will initially focus on developing cell-based meat of fish such as pomfret, kingfish, and seerfish.
- Recently, a number of countries have made great strides in this pioneering technology.
- Israel is the frontrunner, followed by Singapore, the United States and China.



ERAVIKULAM NATIONAL PARK

Eravikulam National Park (ENP), the natural habitat of the Nilgiri tahr, will soon be closed for the calving season of the species.

- **Location:** It is located along the **Western Ghats** in the Idukki district of **Kerala**.
- It was declared a National Park in 1978.

- The Park covers an area of 97 sq. km.
- This is also the **land of “Neelakurinji”**, the **flower that blooms once every twelve years.**

Climate: The park receives heavy showers during the southwest (June/July) and retreating (October/November) monsoons and is **one of the wettest areas in the world.**

Vegetation: The **major part** of the park is **covered with rolling grasslands**, but several **patches of shola forests are also found** in the upper part of the valley.

Flora:

- Important flora includes **Actinodaphne bourdilloni**, **Microtropis ramiflora**, **Pittosporum tetraspermium**, **Sysygium aronottianum**, **Chrysopogon Zelanicus**, etc.
- The **shola grasslands** are **exceptionally rich in balsams and orchids**, including the long-thought-extinct variety **Brachycorythis wightii**.

Fauna:

- The **Nilgiri Tahr**, **Gaur**, **Sloth Bear**, **Nilgiri Langur**, **Tiger**, **Leopard**, **Giant Squirrel**, and **wild dog** are the common species.
- **Half of the world** population of the endangered **Nilgiri Tahr** **lives here.**
- The **Atlas moth**, the **largest of its kind** in the world, is seen in this park.
- 140 species of birds, of which 10 are unique to the Western Ghats. More than **100 varieties of butterflies** have been recorded here.

Key Facts about Nilgiri Tahr:

- It is an **endangered mountain ungulate endemic to the southern part of the Western Ghats.**
- Scientific Name: **Nilgiritragus hylocrius**
- Locally, the animal is **called ‘Varayaadu’.**
- They are known for their **gravity-defying skills in climbing steep cliffs**, earning them the **nickname Mountain Monarch.**
- It is the **state animal of Tamil Nadu.**

KEY FACTS ABOUT SNOW LEOPARD



The first scientific survey of the snow leopard in India shows the country is home to 718 of the elusive cats, the government said recently.

About Snow Leopard:

- It is a large, **long-haired Asian cat**, classified as either *Panthera uncia* or *Uncia uncia* in the family Felidae.

Geographic Range:

- Snow leopards live across a vast area in **northern and central Asia's high mountains**, including the **Himalayan region**.
- **In the Himalayas, they live in high alpine areas**, mostly **above the tree line** and up to 18,000 feet in elevation.
- They are **found in 12 countries**, including **China, Bhutan, Nepal, India, Pakistan, Russia**, and Mongolia.
- In India, it is seen in Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Sikkim and Arunachal Pradesh.

Features:

- Measuring from nose to tail, the length of an average adult is 1000 to 1300 mm.
- They have **thick grey and yellow-tinged fur**, with **solid spots on their head, neck, and lower limbs** and rosettes over the rest of the body.
- They also have very **long, thick tails** that they **use for balancing on rocks and wrapping around their bodies for protection from the cold**.
- They are **solitary**, and the only prolonged social contact occurs while females are raising their cubs.
- **Conservation status:**
- **IUCN Red List: Vulnerable**
- CITES: Appendix I
- Wildlife (Protection) Act 1972: Schedule I