

## Prelim Bits 25-10-2023 | UPSC Daily Current Affairs

### Preventive detention

Supreme court, in at least 3 separate instances, has red-flagged the Telangana government's usage of the stringent preventive detention law.

Preventive detention	Pre-trial detention	Punitive detention
Detention of a person <b>without trial</b> and conviction by court, but merely on suspicion.	Detention of an accused <b>under trial</b> .	Detention <b>after trial</b> and conviction by a court.

- **Preventive detention** - To prevent an individual from committing an offense in the future.

Article 22 of the Indian Constitution contains provisions for preventive detention.

- **Central Legislations** - The National Security Act, the Conservation of Foreign Exchange and Prevention of Smuggling Activities Act, 1974 (COFEPOSA) are examples of laws under which preventive detention can be ordered.
- **Suspension of Fundamental rights** - Part III of the Constitution gives the state the power to suspend fundamental rights for preventive detention.
- A detainee under preventive detention can have no right of personal liberty guaranteed by Article 19 or Article 21.
- **Grounds for Preventive Detention**
  - Security of state, maintenance of public order,
  - Maintenance of supplies and essential services and defense,
  - Foreign affairs or security of India.
- **Duration** - The detention of a person cannot exceed **3 months** unless an advisory board (consist of judges of a high court) reports sufficient cause for extended detention.
- **Rights for Detenu** - The grounds of detention should be communicated to the detenu.
- However, the facts considered to be against the public interest need not be disclosed.
- The detenu should be afforded an opportunity to make a representation against the detention order.
- **Judicial Review** - There are very narrow grounds of judicial review because the Constitution emphasises the state's "**subjective satisfaction**" when ordering a detention.
- In countries such as Britain, United States and Canada, preventive detention is a wartime measure.

## References

[The Indian Express | How preventive detention works?](#)

## Ghost particles

*China is building the World's largest neutrino detector called "**Trident**" in the Western Pacific Ocean.*

- **About - Neutrinos**, also known as the Ghost Particles, are a type of electron but they ***do not have any charge***.
- **Family** - Neutrinos belong to the family of particles known as ***leptons***. There are 3 main leptons, namely electrons, muons and tau particles.
- **Symbol** - Neutrinos are denoted by the Greek symbol  $\nu$ , or **nu**.
- **Mass** - They are among the most abundant and tiniest particles in the universe and ***have very small mass***.
- **Source** - Neutrinos come from all kinds of different sources and are often the product of heavy particles turning into lighter ones, a process called ***decay***.
- **Interactions** - Neutrino's weak charge and almost non-existent mass have made it difficult to observe and impossible to track.
- **Underwater Telescope** - Neutrinos sometimes interact with water molecules that is why ***China*** is building its ghost molecule telescope ***underwater***.

*Currently, the largest neutrino-detecting telescope is the University of Madison-Wisconsin's "IceCube" telescope situated in the Antarctic.*

## References

1. [The Indian Express | world's largest 'ghost particle' detector](#)
2. [NDTV | Scientists Detect 'Ghost Particles'](#)
3. [Space | what are neutrinos?](#)

## Vikram 1 Rocket

*Hyderabad-based space startup Skyroot Aerospace has recently unveiled 'Vikram-1' with an expected space launch in early 2024.*

Vikram-1
<ul style="list-style-type: none"><li>• <b>Stages</b> - Multi-stage launch vehicle</li><li>• <b>Body</b> - All-carbon-fibre.</li><li>• <b>Payload</b> - 300 kg payloads</li><li>• <b>Orbit</b> - Low Earth Orbit.</li></ul>

- **Fuel** - Mixture of solid fuel at the lower stage and a mixture of liquid fuel in the upper

stages to propel the rocket into the orbit.

- It has a Raman-II engine in the 4<sup>th</sup> stage.
- The Raman-II engine is regeneratively cooled and uses Mono Methyl Hydrazine and Nitrogen Tetroxide as propellants.
- It also features **3D-printed liquid engines**.
- The Vikram-1 is expected to perform its first flight to space in the first quarter of 2024. It will launch satellites.
- It is the second rocket from the company after '**Vikram-S**,' the country's first privately-built rocket.
- The 'Vikram' in the launch vehicles' name is a tribute to **Vikram Sarabhai**, the father of India's space programme.

## References

1. [The Hindu | Vikram 1](#)
2. [Hindustan Times | Vikram 1](#)
3. [Times of India | Skyroot unveils Vikram-1](#)

## International Migration Outlook 2023

*India saw the highest migration flows to OECD countries in 2021 and 2022, according to the 'International Migration Outlook 2023' released recently.*

- The 2023 edition of International Migration Outlook analyses recent developments in migration movements and the labour market inclusion of immigrants in OECD countries.
- It also monitors recent policy changes in migration governance and integration in OECD countries.

*Organisation for Economic Co-operation and Development (OECD) is an association of 38 member countries, most being rich developed nations that attract migrant workers and students.*

- **India** - India saw the highest migration flows to OECD countries in 2021 and 2022.
- India replaced China as the main country of origin of new migrants to OECD countries in 2020.
- In 2021, for the 2<sup>nd</sup> consecutive year, India, with 0.41 million new migrants, was the top country of origin.
- India was followed by China and Romania in terms of new migrants.
- **Inflows of refugees** - Due to the ongoing Russia-Ukraine war, inflows of refugees from Ukraine reached the highest level on record.



## References

1. [Down to Earth | Indians migrated to OECD countries](#)
2. [OECD | International Migration Outlook 2023](#)

## **Vajra Mushti Kalaga**

*Vajra Mushti Kalaga, a martial art form of the Wadiyars was in declining trend.*

- The “vajra mushti kalaga” is a form of wrestling different from the conventional grappling.
- It is a traditional Indian martial art that uses a small metal weapon called a knuckleduster. The name literally means "Thunderbolt Fist".
- It entails two jettys taking a swipe at each other's head with a knuckleduster.
- The art incorporates various hand-to-hand combat techniques, such as grappling, wrestling, and striking.
- Vajra Mushti matches are still held during the annual Mysore Dasara festival at Mysore Palace.
- The tradition dates back to the Wadiyar dynasty in 1610.
- Modern combatants use knuckle-dusters with blunt studs. The weapon is sometimes called Indra-musti, which means "Indra's fist".
- Whosoever draws the blood from the opponent's head first is declared the winner.
- Medieval travellers from Portuguese noticed this form of wrestling during the Navaratri celebrations in Vijayanagar empire and have left detailed accounts of it.

## **References**

[The Hindu | 'vajra mushti kalaga'](#)

