New Pamban Bridge

Prelims – *Current Events of National Importance.*

Mains (GS III) – *Infrastructure.*

Why in News?

PM Modi to inaugurate New Pamban Rail Bridge on Ram Navami.

Old Bridge

- Pamban Bridge was a ***railway bridge*** that connected the town of Rameswaram on Pamban Island with Mandapam in mainland India.
- **Built in –** 1914 by British government.
- It is ***India's first sea bridge***, built for trade.
- It remained India's longest sea link until the Bandra-Worli sea link opened in 2010.
- **Bascule Mechanism -** It had a double-leaf bascule section with a *Scherzer rolling-type lift span* that used to be raised to let ships pass.
- It is considered a technical marvel as the bridge was constructed with lesser availability and the corrosive environment it withstood.
- **Life span –** 108 years until 2022.

New Bridge

- **Built by -** Rail Vikas Nigam Limited (RVNL).
- The new bridge is ***India's first vertical lift sea bridge***, which will replace the century-old original Pamban Bridge.
- It is a state-of-the-art infrastructure project, ensuring faster rail movement and seamless maritime navigation.
- **Expected lifespan -** 58 years.
- **Key Features**
- The bridge features a vertical lift span that can be raised in just 5 minutes to allow ships to pass.
- Built with stainless steel reinforcements and *Polysiloxane Paint*, the bridge is designed to withstand harsh marine conditions.
- Trains can now travel at speeds of up to 75 kmph, a much higher speed from the previous 10 kmph limit.
- With a clearance of 22 meters above sea level, surpasses the old bridge's 1.5-meter clearance, allowing larger vessels to pass.
- Designed to support future railway electrification, the bridge ensures seamless upgrades to modern rail systems.

References

1. The Indian Express | New Pamban Bridge
2. Tamil Nadu Tourism | Pamban Bridge

