Prelim Bits 10-05-2023 | UPSC Daily Current Affairs

Maharana Pratap

PM pays tributes to Maharana Pratap on his Jayanti.

- **Birth –** Maharana Pratap was born in Rajasthan on May 9th, 1540.
- Maharana Udai Singh II, the king of the Kingdom of Mewar was his father.
- **Early life –** Pratap was the Crown Prince as he was the eldest of 25 sons and after his father's death he ascended the throne of Mewar.
- Maharana Pratap was a Hindu Rajput King who belonged to the Sisodiya clan of Rajputs.
- He is revered and worshipped by many royal families in Rajasthan for his bravery and courage.
- The legendary king is revered as a true patriot who initiated the country's first war of independence.
- **Against Mughals –** In the battle of Haldighati, he fought alongside Akbar, one of the most famous Mughal Emperors.
- Maharana Pratap was eventually forced to flee.
- **Jayanti –** Every year on the third day of the Jyeshtha Shukla phase, the third month of the Hindu calendar, his birth anniversary is observed as Maharana Pratap Jayanti.

References

1. Live Mint – Maharana Pratap Jayanti 2023
2. Economic Times – Maharana Pratap Jayanti 2023

Chlamydia

Australian scientists have begun vaccinating wild koalas against chlamydia in an ambitious field trial in New South Wales.

Chlamydia

- Chlamydia is a common sexually transmitted disease (STD).
- It is caused by bacteria called Chlamydia trachomatis and anyone can get Chlamydia.
- Chlamydia can be treated with Antibiotics.
- A pregnant person can also pass chlamydia to the baby during childbirth.

Symptoms	
Women	**Men**

• Abnormal vaginal discharge, which may have a strong smell. • A burning sensation when urinating.	• Discharge from male genitals. • A burning sensation when urinating. • Pain and swelling in one or both testicles.

Chlamydia in Koalas

- The origins of chlamydia in koalas aren't confirmed.
- However, scientists believe it's likely the marsupials initially caught the disease from exposure to the feces of infected sheep and cattle.
- Then it's spread sexually, or passed from mother to offspring.
- While humans and livestock infected with the bacteria that causes chlamydia can be treated with antibiotics, it's not so simple for koalas.
- Chlamydia is killing koalas because they become so sick they can't climb trees to get food, or escape predators, and females can become infertile. The complex microbes inside the stomachs of koalas are designed to neutralize toxins in eucalyptus leaves that are their main food source.
- However, their digestive systems can also neutralize some medicines which means they don't respond well to antibiotics treatment.

Reference

1. The Indian Express – Koalas vaccinated against chlamydia

Time-Resolved Observations of Precipitation structure and storm Intensity with a Constellation of Smallsats (TROPICS) Mission

NASA launches 'TROPICS' mission to improve understanding about hurricanes, cyclones.

- TROPICS is a constellation of observing platforms that will measure temperature, humidity and precipitation with spatial resolution on hourly basis.
- It also provides real-time data on hurricanes and cyclones which enables timely evacuation of people in coastal areas.
- The mission will provide rapid microwave measurements over the tropic regions to observe the thermodynamics of the troposphere.
- The mission consists of four Cubesats in three low earth orbital planes.
- These Cubesats are different from other weather tracking satellites in frequency of observations, as they collect data more frequently for scientists involved in weather forecasts.
- The objective of the mission is to focus on terrestrial disasters, tropical cyclone analysis, and cyclone modelling and data assimilation and understand tropical cyclones and tropical dynamics.
- The missions measures environments and inner core of tropical cyclones on global scale and serve as model for future missions.

References

1. CNN – Loaf-size mission launches to improve hurricane forecasting.
2. NASA – TROPICS Mission

WTO Information Technology (IT) Agreement

The WTO's IT Agreement has done little for India's IT services and India's hardware sector was hit instead of benefitting from the pact.

- The Information Technology Agreement (ITA) was concluded by 29 participants at the Singapore Ministerial Conference in December 1996.
- It entered into force on 1st July 1997.
- Since then, the number of participants has grown to 82, representing about 97% of world trade in IT products.
- It seeks to accelerate and deepen the reduction of trade barriers for the critically important ICT industry.
- India is a signatory to the agreement.
- The participants are committed to completely eliminating tariffs on IT products covered by the Agreement.

Information Technology Agreement-II

- At the Nairobi Ministerial Conference 2015, over 50 members concluded the expansion of the Agreement, which now covers an additional 201 products valued at over $1.3 trillion per year.
- The aim of this agreement is to increase the coverage of IT products on which customs duty would be bound at zero.

References

1. The Hindu Business Line – Signing the WTO IT pact, a big mistake.
2. WTO – Information Technology Agreement

Carbon Border Adjustment Mechanism (CBAM)

European Union proposes to introduce carbon tax on imports that rely on non-green processes, where carbon emissions are deemed to have not been adequately priced.

- The CBAM will initially apply to imports of certain goods and selected precursors whose production is carbon intensive.
- The goods which have most significant risk of carbon leakage include, cement, iron and steel, aluminium, fertilisers, electricity and hydrogen.
- With this enlarged scope, CBAM will eventually, when fully phased in, capture more than 50% of the emissions in ETS covered sectors.
- Under the political agreement, the CBAM will enter into force in its transitional phase as of 1 October 2023.
- The permanent system enters into force on 1 January 2026.
- After the 1 January 2026, importers will need to declare each year the quantity of goods imported into the EU in the preceding year and their embedded GHG.
- They will then surrender the corresponding number of CBAM certificates.
- The price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in €/tonne of CO_2 emitted.
- The phasing-out of free allocation under the EU ETS will take place in parallel with the

phasing-in of CBAM in the period 2026-2034.

References

1. The Hindu – On the impact of the European Union's Carbon Border Adjustment Mechanism.
2. The Hindu – Why is the EU's carbon border tax worrying other countries?