

1. Bavar-373

Context: Iran has officially unveiled Bavar-373 air defense system

About:

- ▶▶ It is Iran's new home-grown air defence system. It is being touted as Islamic republic's 1st domestically produced long-range missile defence system.
- ▶▶ Features: It is a long-range mobile surface-to-air missile system.
- ▶▶ Range: more than 200 kilometres.

2. Bt Cowpea

Context: Nigeria has become the first country to approve Bt cowpea

About:

- ▶▶ Nigeria has become the first country to approve open cultivation of genetically modified (GM) Bt cowpea.
- ▶▶ Bt Cowpea is **pest-resistant** GM food crop can also help combat malnutrition rates, especially in children.
- ▶▶ It contains the transgene Cry1Ab, which can be toxic for human liver cells and also alter immune systems of lab animals, anti-GM groups claimed.

3. Baltic Nations

Context: Vice-President of India recently concluded his tri-nation tour to the Baltic Nations-**Lithuania, Latvia and Estonia**

About Baltic Nations:

- ▶▶ Baltic Nations is a **geopolitical term**, typically used to group the three sovereign states in **Northern Europe** on the **eastern coast of the Baltic Sea: Estonia, Latvia, and Lithuania.**
- ▶▶ These countries **do not form an official union**, but engage in intergovernmental and parliamentary cooperation.
- ▶▶ The most important areas of cooperation between the three countries are foreign and security policy, defence, energy and transportation.

- ▶▶ All three countries are members of the European Union, NATO, the eurozone and the OECD.
- ▶▶ All three are classified as **high-income economies** by the World Bank and maintain a very high Human Development Index.



4. Amazon Rainforests

Context: Amazon rainforest has been burning at record rate.

About:

- ▶▶ These are large tropical rainforest occupying the drainage basin of the Amazon River and its tributaries in northern South America and covering an area of 6,000,000 square km.
- ▶▶ Tropical forests are closed-canopy forests growing within 28 degrees north or south of the equator.
- ▶▶ They are very wet places, receiving more than 200 cm rainfall per year, either seasonally or throughout the year.
- ▶▶ Temperatures are uniformly high - between 20°C and 35°C.
- ▶▶ Such forests are found in Asia, Australia, Africa, South America, Central America, Mexico and on many of the Pacific Islands.

- ▶▶ Comprising about 40% of Brazil's total area, it is bounded by the Guiana Highlands to the north, the Andes Mountains to the west, the Brazilian central plateau to the south, and the Atlantic Ocean to the east.



5. Order of Zayed

Context: Prime Minister Narendra Modi was conferred with the Order of Zayed by UAE during his recent visit.

About:

- ▶▶ It is **United Arab Emirates' highest civilian award** which is awarded to kings, presidents and heads of states.
- ▶▶ It was bestowed upon the Prime Minister of India by UAE Crown Prince, Mohamed bin Zayed Al Nahyan **to recognise his "pivotal role" in strengthening ties between the two nations.**
- ▶▶ The medal has been previously conferred to Russian President Vladimir Putin, Chinese President Xi Jinping, and Queen of the United Kingdom Elizabeth II.

6. RuPay Card

Context: PM Modi launches RuPay card in UAE.

About RuPay Card:

- ▶▶ RuPay card is the first-of-its-kind India's domestic Debit and Credit Card payment network launched by **National Payments Corporation of India (NPCI)** in 2012.
- ▶▶ It was created to fulfil the Reserve Bank of India's (RBI) vision to have a domestic, open and multilateral system of payments.
- ▶▶ RuPay facilitates electronic payment at all Indian banks and financial institutions.
- ▶▶ NPCI maintains ties with Discover Financial, JCB to enable RuPay card scheme to gain international acceptance.
- ▶▶ It has been developed to offer secure, user friendly and cost-effective solutions to facilitate low value payments and build a cashless transaction environment.
- ▶▶ Today, there are close to 500 million RuPay cards in circulation in India.
- ▶▶ RuPay has also tied-up with international players like Discover, Japan Credit Bureau and China Union Pay to enhance its international acceptance and recently achieved a milestone of issuing 25 million RuPay – Discover global cards.

7. Gravitational Lensing

Context: NASA plans to use gravitational lensing to study how Sun formed.



About:

- ▶▶ Normal lenses such as the ones in a magnifying glass or a pair of spectacles work by bending light rays that pass through them in a process known as refraction, in order to focus the light somewhere (such as in your eye).
- ▶▶ Gravitational lensing works in an analogous way and is an effect of Einstein's theory of general relativity – simply put, **mass bends light**.
- ▶▶ The gravitational field of a massive object will extend far into space, and cause light rays passing close to that object (and thus through its gravitational field) to be bent and refocused somewhere else.
- ▶▶ The more massive the object, the stronger its gravitational field and hence the greater the bending of light rays - just like using denser materials to make optical lenses results in a greater amount of refraction.
- ▶▶ Gravitational lensing happens on all scales – the gravitational field of galaxies and clusters of galaxies can lens light, but so can smaller objects such as stars and planets.
- ▶▶ Even the mass of our own bodies will lens light passing near us a tiny bit, although the effect is too small to ever measure.

