

1. Gaja Bandhu Scheme of Odisha

Context: Odisha Govt is contemplating 'Gaja Bandhu' initiative to curb elephant deaths.

About:

- ▶▶ With rising incidents of wild elephants straying into human habitation and causing damage, the **Odisha government** is contemplating a **Gaja Bandhu, friend of elephant, scheme** to involve local people in detecting jumbo herds in their locality.
- ▶▶ The scheme will involve locals residing close to forest areas in tracking elephant movements.
- ▶▶ Under the new plan, the Forest department has planned to engage the local public to keep tab on the movement of the elephants in their localities.
- ▶▶ A person on such duty would be identified as Gaja Bandhu and would be entitled to incentives.
- ▶▶ Apart from this, the government has also decided to install CCTV cameras, Speed Breakers, Rumpers at selected elephant movement zones in designated corridors.

2. International Normalized Ratio (INR)

Context: India's premier anti-terrorism agency summoned one of the country's top interventional cardiologists, seemingly for an explanation of the words "INR 2.78" in an exchange of text messages between him and the Kashmiri separatist leader Yasin Malik, which although most commonly understood by laypersons as "Indian Rupee", has a totally different connotation in clinical pathology and bioscience.

About INR:

- ▶▶ INR in medical parlance stands for '**International Normalized Ratio**'. It is a test of how efficiently an individual's blood clots. It is closely related to a measure known as Standardized Prothrombin Time.
- ▶▶ INR is a standardised number that the laboratory determines after testing the sample. Keeping a close watch on INR is especially important for patients who are administered oral blood thinners, commonly referred to as anti-clotting medicines or anticoagulants.

- ▶▶ In laboratory testing, an individual's INR is determined from the results of the Prothrombin Time, or PT, test. This test measures the time it takes for a sample of an individual's blood to clot. The INR is an internationally accepted standard for PT.
- ▶▶ A blood thinner is a medicine that helps in the smooth flow of blood through the arteries and veins in the body, and prevents blood clots from forming, or existing blood clots from becoming bigger.

3. Michael Faraday and Electromagnetic Induction

Context: On August 29 in 1831, British scientist Michael Faraday discovered electromagnetic induction, a seminal breakthrough which laid the groundwork for later researchers such as James Clerk Maxwell, and led to important inventions such as electric motors, transformers, inductors, and generators.

About:

- ▶▶ Michael Faraday is regarded as one of the greatest scientists produced by 19th century England, with pioneering contributions in both chemistry and electromagnetism. Apart from electromagnetic induction, Faraday also discovered diamagnetism, electrolysis, and the effect of magnetism on light.
- ▶▶ Faraday wrapped a thick iron ring with two coils of insulated wire, one on each side of the ring. One coil was connected to a battery, and the other to a galvanometer. When the battery circuit was closed, Faraday saw a momentary deflection on the galvanometer. A similar momentary deflection but in the opposite direction was seen when the battery circuit was opened.
- ▶▶ This observation led to the discovery that a **change in a magnetic field produces an electromotive force and current in a nearby circuit**. This phenomenon, called electromagnetic induction, was **later mathematically modelled by James Clerk Maxwell** and came to be known as **Faraday's Law**.
- ▶▶ The foundation laid by Faraday helped Maxwell further investigate electromagnetic field theory, and the latter's contribution then significantly influenced 20th century physics.

4. Mamallapuram

Context: The historic coastal town of Mamallapuram in Tamil Nadu is expected to be the venue for the second India-China informal summit between Prime Minister Narendra Modi and Chinese President Xi Jinping, scheduled in October this year.

About:

- ▶▶ Mamallapuram, also known as **Seven Pagodas or Mahabalipuram**, is a town in **Chengalpattu** district of Tamil Nadu.
- ▶▶ Mamallapuram was one of two major port cities by the 7th century within the Pallava kingdom. Along with economic prosperity, it became a center of a group of battle monuments carved out of rock.
- ▶▶ An ancient historic town and a bustling seaport in the 1st millennium CE, now a beachside tourism center with a group of Tamil monuments declared as UNESCO world heritage site, it is one of the most visited towns in South India.

5. Rashtriya Poshan Maah

Context: The entire month of September is to be celebrated as the Rashtriya Poshan Maah.

About:

- ▶▶ Poshan Abhiyaan (National Nutrition Mission) is India's flagship programme, launched by the Prime Minister, Narendra Modi in March 2018 to improve nutritional status of children up to 6 years, adolescent girls, pregnant women and lactating mothers to achieve specific targets for reduction in low birth weight babies, stunting growth, undernutrition and prevalence of anemia over next three years.
- ▶▶ **Poshan Maah is an initiative of Ministry of Women and Child Development and NITI Aayog to give a push to Poshan Abhiyan.**
- ▶▶ During Poshan Maah, activities like Prabhat Pheri, Poshan Melas, Nukkad Nataks, School Based Events will be held to take the message of importance of nutrition to every household.
- ▶▶ It focuses on 8 themes: Antenatal Care, Optimal Breastfeeding, Complementary Feeding, Anaemia, Growth Monitoring, Girls-education, diet, right age of Marriage, Hygiene & Sanitation, Food Fortification.

6. Kalimantan

Context: Indonesia's president, Joko Widodo has announced the national capital will move from Jakarta, on the island of Java, to the province of East Kalimantan, on Borneo.

About:

- ▶▶ Kalimantan is the Indonesian portion of the island of Borneo. It comprises 73% of the island's area. The non-Indonesian parts of Borneo are Brunei and East Malaysia. In Indonesia, "Kalimantan" refers to the whole island of Borneo.

- ▶▶ Recently the Indonesian President Joko Widodo proposed that Indonesia's capital be moved to Kalimantan.

7. Foetus in Foetu

Context: When a 17-year-old Indian girl recently went to get a “lump” in her abdomen treated, it was found to be her twin growing inside her. This is a condition called foetus in foetu (FIF), or foetus within a foetus.

About:

- ▶▶ Doctors say this is the first reported case of FIF in an adult woman worldwide, and the eighth such case in an adult in India (the previous cases were in adult men).
- ▶▶ In this condition, **a malformed parasitic foetus is usually found in the abdominal cavity of the living twin (host)**. Fewer than 200 cases of this condition have been reported in medical literature and it occurs in about 1 in 5,00,000 live births. While FIF can occur in various age groups, it is most commonly diagnosed in patients younger than 18 months.
- ▶▶ According to BMJ Journals, there are **Two Theories about the origins of FIF**.
 - ❖ The first is where a parasitic twin’s malformed foetus is formed inside the body of the host twin and both share the blood supply.
 - ❖ The other is that FIF is a “highly differentiated” form of teratoma – tumours made from tissues foreign to the area or part of the body in which they are found.
- ▶▶ What differentiates a FIF from a tumour is that the lumps in the case of FIF are benign (do not spread to other organs and tissues) in nature, and are of embryological origin.