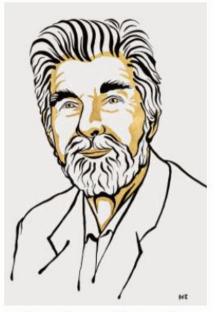


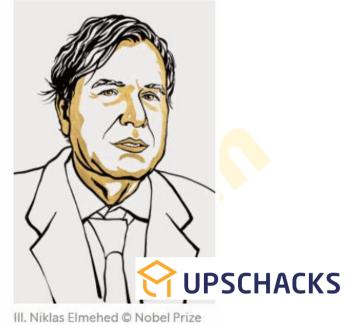
The Nobel Prize in Physics 2021 announced



III. Niklas Elmehed © Nobel P Outreach Syukuro Manabe



III. Niklas Elmehed © Nobel Prize
Outreach
Klaus Hasselmann



Giorgio Parisi

- The Royal Swedish Academy of Sciences has decided to award the Nobel Prize in Physics 2021. Syukuro Manabe, Klaus Hasselmann, Giorgio Parisi jointly won the 2021 Nobel Prize in Physics for groundbreaking contributions to our understanding of complex physical systems.
- The Nobel Prize in Physics is awarded by the Royal Swedish Academy of Sciences, Stockholm, Sweden.
- The prestigious award comes with a gold medal and 10 million Swedish kronor (over \$1.14 million).

Brahmaputra heritage centre



- The residence of the British Deputy Commissioner of Kamrup, the iconic DC Bungalow of Guwahati, was recently opened to the public as a heritage centre.
- It is located atop Barphukanar Tilla, a small hillock named after the most famous Ahom general Lachit Barphukan.
- It is the site from where the Ahom forces planned and launched attacks on the Mughal army during the Battle of Saraighat in 1671, which the latter lost.
- Saraighat is regarded as the "greatest naval battle ever fought in a river".
- After the British annexed Assam in 1826 (after the Treaty of Yandaboo), the post of DC was created for Guwahati in 1839.

- Captain Archibald Bogle, posted as the Assistant Commissioner and Collector of Kamrup district in the 1850s, had the bungalow built.
- Post-Independence, it continued to be the Deputy Commissioner's Bungalow until 2011.
- A project to convert it into a heritage museum was later taken up under the Brahmaputra Riverfront Development plan.
- The heritage centre today has on display the heritage of boats, an amphitheatre, an exhibition space, a cafeteria etc...
- The other attractions include a collection of traditional fishing equipment, photographs and artifacts related to the history of Guwahati and river transport.



Plan to bring back woolly mammoth



- Recently a company named Colossal, announced that it has started a landmark de-extinction project to resurrect the woolly mammoth, which went extinct roughly 10,000 years ago.
- The team of scientists led by George Church, a geneticist at Harvard Medical School, will use genetic engineering to develop a cold-resistant elephant or an 'Arctic elephant'.
- The team has selected over 50 traits that will enhance the cold-resistant ability of an Asian elephant.
- These include shaggy coats, smaller ears, cold-adapted forms of haemoglobin and excess adipose tissue production.
- The idea is to use these genes and with the help of CRISPR technology insert them into the Asian elephant's genome.
- The team will then create an embryo that carries the traits of a woolly mammoth.

- The embryo will be implanted into a surrogate African elephant.
- The gestation in the elephant's womb will take place for around 18-22 months and a hybrid 'Arctic elephant' would be born.
- One of the core goals for reviving the mammoth is to revert the now-overshrubbed forests into natural arctic grasslands, which will help with carbon emissions.
- The grazing mammoths would help re-establish the grassland ecosystem and prevent the thawing and release of greenhouse gases that are now trapped in the arctic permafrost.
- The woolly mammoth (Mammuthus primigenius) is a species of mammoth that lived during the Pleistocene age.
- Its closest extant relative is the Asian elephant.
- It was identified as an extinct species of elephant by Georges Cuvier in 1796.
- It was roughly the same size as modern African elephants and was well adapted to the cold environment during the last ice age.
- It was covered in fur, with an outer covering of long guard hairs and a shorter undercoat.

- The ears and tail were short to minimise frostbite and heat loss.
- It had long, curved tusks and four molars and it used its tusks and trunk for manipulating objects, fighting, and foraging.
- The diet of the woolly mammoth was mainly grasses and sedges.



LAKHIMPUR KHERI



 Lakhimpur Kheri is the largest of the 75 districts of Uttar Pradesh in terms of area, and contributes the most to the agricultural Gross Domestic Product (GDP) of the state.

UPSCHACKS

- Lakhimpur Kheri is also home to the largest Sikh population in the state. According to Census 2011, of the state's total 6,43,500 Sikh population, 94,388 — or 15 per cent — were living in Lakhimpur Kheri.
- The 7,680-sq-kilometre (2,970-sq-mile) district in the central part of the state shares a border with Nepal, and comes under the Lucknow administrative division.
- It is home to UP's only national park, Dudhwa.

Who is NCB officer Sameer Wankhede probing Bollywood-drugs nexus?



- NCB Mumbai Director Sameer Wankhede has been probing drug cases involving several Bollywood actors including Rhea Chakraborty, Deepika Padukone and Arjun Rampal since Sushant Singh Rajput's death.
- The 40-year-old IRS officer has also served in the NIA. While working in customs, Wankhede ensured that the 2011 Cricket World Cup trophy was released at Mumbai airport only after duty was paid.