

## Daily News Decode

03.01.21

### National Metrology Conclave



- Prime Minister will deliver the inaugural address at the National Metrology Conclave on 4th January 2021
- He will also dedicate 'National Atomic Timescale', and 'Bhartiya Nirdeshak Dravya' to the nation, and lay the foundation stone of the 'National Environmental Standards Laboratory'.
- The National Atomic Timescale generates Indian Standard Time with an accuracy of 2.8 nanosecond.
- Bhartiya Nirdeshak Dravya is supporting testing and calibration of laboratories for quality assurance, at par with international standards.
- The National Environmental Standards Laboratory will aid self-reliance in the certification of ambient air and industrial emission monitoring equipment.
- National Metrology Conclave 2021 is being organised by Council of Scientific and Industrial Research-National Physical Laboratory (CSIR-NPL), New Delhi, which is entering into its 75th year of inception.
- The theme of the conclave is 'Metrology for the Inclusive Growth of the Nation'.

### Iran plans to enrich uranium to up to 20% purity at Fordow Fuel Enrichment Plant: IAEA



- UN nuclear watchdog - International Atomic Energy Agency (IAEA) has revealed that Iran plans to enrich uranium to up to 20 percent purity at Fordow Fuel Enrichment Plant.
- It would take Iran's nuclear enrichment program to pre-2015 levels, when it entered the Joint Comprehensive Plan of Action (JCPOA) with the P51 countries.
- Iran was prohibited enrichment at the Fordo facility until 2031. It also committed to converting the underground facility into a nuclear, physics and technology centre.
- The move is the latest in a series of announcements by Iran to the IAEA that it plans to further breach the deal. The move is being seen in retaliation for Washington's withdrawal from the agreement and the reimposition of US sanctions against Tehran

## India begins its two-year tenure as a Non-Permanent Member of the UNSC



- India Friday officially began its two-year term as a non-permanent member of the United Nations Security Council along with Norway, Mexico, Ireland and Kenya.
- On 17 June, India was elected to the UN Security Council with 184 of the total 192 votes.
- A member country needs a two-third majority of votes in the General Assembly to become a non-permanent member. This is the eighth time India has been elected as a non-permanent member.
- India had last assumed the role of a non-permanent member at the UNSC in 2011-12.
- Prior to that, it was a non-permanent member for 1950-51, 1967-68, 1972-73, 1977-78, 1984-85 and 1991-92.
- In August, India will serve as the president of the council, a position held by each of the members in turn for one month, according to the alphabetical order of the member states' names.
- Presidency entails presiding over council meetings, coordinating actions, deciding the content of UNSC debates and more.
- India will strive to achieve a "concrete and result-oriented action at the security council for an effective response to international terrorism," said Jaishankar.
- India is also expected to call for more transparency in listing and delisting of entities and individuals by the UN sanction committees.
- Getting permanent membership in an expanded council is also high up on the agenda.

## Draft National Science Technology and Innovation Policy



- Department of Science and Technology releases the draft 5th draft of the 5th National Science Technology and Innovation Policy (STIP) for public consultation
- The STIP will be guided by its broad vision of:
- Achieving technological self-reliance and position India among the top three scientific superpowers in the decade to come
- To attract, nurture, strengthen and retain critical human capital through a 'people centric' science, technology and innovation (STI) ecosystem,



- To double the number of Full-Time Equivalent (FTE) researchers, Gross Domestic Expenditure on R&D (GERD) and private sector contribution to the GERD every 5 years and
- To build individual and institutional excellence in STI with the aspiration to achieve the highest level of global recognition and awards in the coming decade.

## Firework that lasted for 150 yrs: NASA on pic of super-massive star Eta Carinae



- The official Instagram page of NASA has shared the picture of Eta Carinae, a doomed super-massive star 7,500 light-years away that went through a "Great Eruption" in the 1840s that made it the second-brightest visible star in the sky for over a decade. "Have you ever seen a slow-motion firework show that lasted...over 150 YEARS?" wrote NASA.

## Alang shipbreaking yard



- Alang in Gujarat is the world's biggest ship breaking yard with hundreds of ships getting scrapped each year.
- With increase in the yard's popularity around the world, there has also been a steep increase in the number of threats posed by the ship breaking yard to the marine environment and laborers working there.

## Iran plans 20% uranium enrichment 'as soon as possible'



- IRAN SAID Saturday it plans to enrich uranium upto 20 percent at its under ground Fordo nuclear facility "as soon as possible", pushing its programme a technical step away from weapons grade levels as it increases pressure on the West over the tattered atomic deal.
- The move comes amid heightened tensions between Iran and the US in the waning days of the administration of President Donald Trump, who unilaterally withdrew American from Tehran's nuclear deal in 2018.

## Work from home' part of draft service norms



- The Union Labour and Employment Ministry has sought comments and objections on the draft Model Standing Orders, which are the legally-binding documents that govern service conditions of workers, for the service, manufacturing and mining sectors, a Ministry statement said on Saturday.
- The Ministry published the drafts on December 31, 2020, inviting comments from stakeholders for 30 days.
- The Ministry said when an employer adopts the order relevant to their establishment it would be deemed to have been certified.

## Assam throws a lifeline to its only Ramsar site



- The Kamrup (Metropolitan) district administration has prohibited community fishing in Deepor Beel, a wetland on the south-western edge of Guwahati and Assam's only Ramsar site.
- The prohibition order under Section 144 of the Cr.P.C. underlines the possibility of community fishing on January 3 and will remain beyond the mid-January Magh or Bhogali Bihu that is preceded by mass fishing in many parts of the State.
- Deepor Beel was designated a Ramsar site in 2002 for sustaining a range of aquatic life forms besides 219 species of birds.
- A Ramsar site is a wetland designated to be of international importance under the Convention on Wetlands on February 2, 1971, in the Iranian city of Ramsar.
- According to hydrological experts, the area of the wetland was about 6,000 hectares in the late 1980s.
- Satellite imagery has revealed that its area has shrunk by at least 35% since 1991.

## Rabi food grain output likely to exceed previous record



- The country's Rabi foodgrain production, including wheat, in the ongoing 2020-21 crop year is expected to be better than the previous year's record of 153.27 million tonnes
- The Rabi sowing begins from October immediately after the harvest of Kharif (summer) crops. Wheat and mustard are major crops.
- The crop year runs from July to June.



## Why people with prior infection still need vaccination



- As on January 1, nearly 10.3 million SARS-CoV-2 cases have been reported in India, and in all about 50% of people in large urban cities and about 30% of those across India would have already been infected.
- The four high-risk groups that would receive the vaccine on priority in India alone amount to 300 million people, meaning 600 million doses would be required to vaccinate them.
- Antibodies wane in about six months, ascertaining the infection status in people who were infected early during the pandemic becomes even more challenging and unlikely to give answers that are of practical use or public health solution.

## Woolly rhino from the Ice Age found in Russia



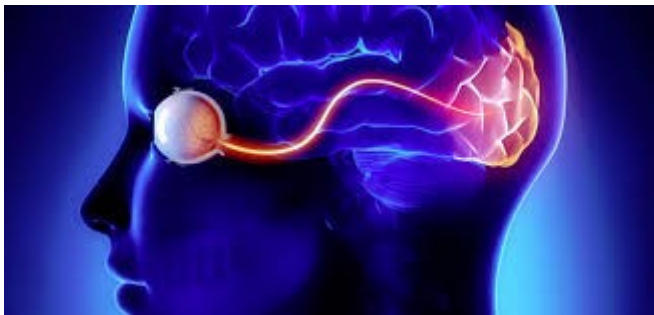
- A well-preserved Ice Age woolly rhino with many of its internal organs still intact has been recovered from permafrost in Russia's extreme north.
- Russian media reported on Wednesday that the carcass was revealed by melting permafrost in Yakutia in August.
- Scientists are waiting for ice roads in the Arctic region to become passable to deliver it to a lab for studies next month.
- It's among the best-preserved specimens of the Ice Age animal found to date. The carcass has most of its soft tissues still intact, including part of the intestines, thick hair and a lump of fat. Its horn was found next to it.
- Scientists dated the carcass as anywhere from 20,000- to 50,000-years-old. More precise dating will be possible once it is delivered to a lab for radiocarbon studies.
- The carcass was found on the bank of the Tirekhtyakh river in the Abyisk district, close to the area where another young woolly rhino was recovered in 2014.
- Researchers dated that specimen, which they called Sasha, at 34,000 years old.

## The first life forms



- The researchers showed a simple compound diamidophosphate could have knitted together the building blocks of DNA to form the primordial structures.
- The possibility is that DNA and RNA arose together and that the first life forms were a mixture of the two.

## How the brain sees



- Research shows that our brains generate a common code to indicate where other people are in relation to ourselves. In the study, published in Nature, participants were asked to move around and their brainwaves were monitored.
- As they searched the room, their brain waves flowed in a typical pattern.
- This was true also when they sat and watched others move.

## BREXIT



- The term Brexit, coined by former lawyer Peter Wilding, is a blend of two words - "Britain" and "exit". He wrote about "Brexit" in May 2012. As the name suggests, the United Kingdom's divorce with the European Union is known as Brexit.

- The UK joined the European Economic Community (a regional organisation that aimed to bring about economic integration among its member states) in 1973, which then became part of the European Union when it was created in 1993.
- However, the UK always had always maintained a distance from the EU.
- It has its own currency - the pound sterling and refrained from joining the Schengen agreement, which removes internal border controls within the EU.
- The political fraternity in Britain always included people who were opposed to the idea of EU, and this opposition intensified after the 2008 financial crisis.
- Immigration of migrants from poorer EU states and the fear of refugees from Syria, Africa and the Middle East further intensified scepticism among voters and the politicians.
- In 2012, the then-Prime Minister David Cameron promised to hold a referendum on whether the UK should remain in the EU or leave it.
- He kept his promise and the UK held the referendum on June 23, 2016. Soon after the result was announced, Cameron resigned.
- For Britain, Europe is the most important source of foreign investment and its membership in the EU has helped London cement its position as a global financial centre.

- Threats from major businesses to leave Britain over Brexit have become quite frequent.
- According to government estimates, the country's economy would be four to nine per cent smaller under Brexit (subject to how it leaves the bloc).
- While a successful Brexit could be a boon for the working-class that sees immigration as a threat to their jobs, young Britons who dream of studying abroad are apprehensive.

## Four variants of coronavirus found since beginning of pandemic, says WHO



- The World Health Organisation has said that there have been at least four types of coronavirus that have been circulating in the globe since the infection was first detected in Wuhan in November 2019.
- The organisation said that since the start of the pandemic, they have received several reports of unusual public health events that are possibly due to the coronavirus variants.
- A SARS-CoV-2 variant with a D614G substitution in the gene encoding spike protein emerged in late January-early February last year.
- However, over a period of several months the D614G mutation replaced the initial coronavirus strain that was identified in China.
- By June, the mutation became a more dominant form of COVID-19 circulating globally.
- Studies have suggested that the D614G substitution increased infectivity and transmission as compared to the initial virus strain.