

KSG:NEWSPAPER CRUX

18TH JULY, 2021

NEWSPAPER HIGHLIGHT

- **Meteorologists were stunned this week when three successive thunderstorms swept across the icy Arctic from Siberia to north of Alaska, unleashing lightning bolts in an unusual phenomenon that scientists say will become less rare with global warming. Typically, the air over the Arctic Ocean, especially when the water is covered with ice, lacks the convective heat needed to generate lightning storms. But as climate change warms the Arctic faster than the rest of the world, that's changing, scientists say.**
- **A study by researchers from the University of Maryland disputes the prevailing hypothesis on why Mercury has a big sized core relative to its mantle (the layer between its core and crust). Scientists had argued that hit and run collisions with other bodies during the formation of our solar system resulted in much of Mercury's rocky mantle being removed, leaving behind the big, dense, metal core inside. But new research reveals that Sun's magnetism is the reason for this and not the collisions.**
- **Last year, scientists were excited by traces of phosphine in Venus's atmosphere, because it could imply the presence of life there. This has been displaced by what Cornell University researchers have suggested - that there are explosive volcanoes on the surface of Venus that emit phosphides which forms the phosphine. This study, published in PNAS, suggests that phosphine points not so much to the biology but the geology of Venus.**
- **Researchers at IIT Madras have developed an AI tool called NBDriver (neighbourhood driver) for use in analysing cancer-causing mutations in cells. By looking at the neighbourhood, or context, of a mutation in the genome, it can look at harmful "driver" mutations and distinguish them from neutral "passenger" mutations.**

FIT FOR 55

- 1.The European Union (EU) released a new climate proposal, the Fit for 55 package. The EU in December 2020 submitted a revised Nationally Determined Contribution (NDC) under the Paris Agreement.
- 2.The new package attempts to deliver the NDC and carbon neutrality goal through proposed changes that would impact the economy, society and industry.
- 3.Climate neutrality is achieved when a country's emissions are balanced by absorptions and removal of greenhouse gases from the atmosphere. It is also expressed as a state of net-zero emissions. It claims to achieve a balance between "regulatory policies" and market-based carbon pricing to avoid the pitfalls of each.
- 4.**Vehicular Carbon Emissions: It must be cut by 55% by 2030 and by 100% by 2035, which means a phaseout of petrol and diesel vehicles by 2035.** Vehicular Carbon Emissions: It must be cut by 55% by 2030 and by 100% by 2035, which means a phaseout of petrol and diesel vehicles by 2035.

G7'S BUILD BACK BETTER INITIATIVE

- 1.The G7 (Group of Seven) Countries proposed a 'Build Back Better World (B3W) initiative' at the recent 47th G7 summit to counter China's Belt and Road Initiative (BRI).
- 2.**It aims to address the infrastructure investment deficit in developing and lower income countries - the space which has been increasingly captured by China through 2,600 BRI projects with trillions of dollars of investment.**
- 3.This infrastructure plan is being led by the United States. B3W initiative will provide a transparent infrastructure partnership to help narrow about \$40 trillion needed by developing nations by 2035. It calls for spending hundreds of billions of dollars in collaboration with the private sector while adhering to climate standards and labour practices.
- 4.BRI projects are perceived as corrosive tactics or debt traps laid by China for its strategic dominance in trade, foreign policy and geopolitics in the world.

FOREIGN CARD PAYMENT NETWORK COMPANIES

- 1.The Reserve Bank of India (RBI) has barred three foreign card payment network firms - Mastercard, American Express and Diners Club — from taking new customers on board over the issue of storing data in India.
- 2.As many as five private sector banks, including Axis Bank, Yes Bank, and IndusInd Bank, are to be impacted by the RBI's decision.
- 3.**The Personal Data Protection Bill also has provisions pertaining to 'data localisation'.**

SCHOOL INNOVATION AMBASSADOR TRAINING PROGRAM

- 1.The Union Education Minister and Union Tribal Affairs Minister jointly launched the School Innovation Ambassador Training Program (SIATP). The Ministry of Tribal Affairs has launched an Adi-Prashikshan portal which is also a repository of training inputs.
- 2.**The innovative and one-of-its-kind training program for school teachers aims at training 50,000 school teachers in innovation, entrepreneurship, Intellectual Property Rights (IPR), design thinking, product development, idea generation, among others.**
- 3.It will make Indian teachers, change-agents and ambassadors of innovation to make our students future-ready.