

KSG:NEWSPAPER CRUX

21ST FEBRUARY, 2021

NEWSPAPER HIGHLIGHTS

- **Scientists from ETH Zurich have succeeded in propelling microvehicles to move against fluid flow using ultrasound. The researchers studied the behaviour of a swarm of magnetic beads spread out over 15-40 micrometre in fluid in a thin glass tube of diameter 150-300 micrometre - the size of a blood vessel in our bodies. Using ultrasound, they guided the swarm close to edge of the tube and then guided it with a magnetic field.**
- **Despite its being hard and exceptionally radioactive, chemists have studied element 99 - einsteinium - and characterised its properties in the lab. Discovered in 1952 from the debris of the atomic bomb, the element has not been studied so far.**
- **Climate change and not extensive hunting by humans may have driven the large mammals of North America such as mammoths and glyptodons to extinction, a new study suggests. Published in Nature Communication.**
- **States should work towards reducing compliance burden for citizens to ensure ease of living and to promote ease of doing business, Prime Minister Narendra Modi, stressing the importance of a better coordination between the Centre and the States for the development of the country.**
- **India's decision to agree to a "phased" withdrawal of troops rather than a package deal for a complete disengagement across the Line of Actual Control could become a cause for concern in the future, said former National Security Advisory Board (NSAB) chairperson and former Foreign Secretary Shyam Saran.**
- **Ahead of International Mother Language Day on Sunday, Rajya Sabha Chairman M. Venkaiah Naidu wrote to all members of the Upper House urging them to promote and preserve Indian languages. He lamented that regional languages were being given short shrift.**

ELDERLY ABUSE A GROWING CONCERN IN INDIA, SHOWS LASI

1. Longitudinal Ageing Study in India (LASI) is a national survey of scientific investigation of the health, economic, and social determinants and consequences of population aging in India.
2. Key highlights of report include - **At least 5% India's elderly population (aged 60 years and above) experienced ill-treatment in 2020.**
3. Ill-treatment is relatively more frequent among elderly women and those living in rural areas.
4. In 2019, 6% of India's population was of the age 65 and above. By 2050, proportion of Senior Citizens (aged 60 years and above) is projected to increase to nearly 20%.

ACUTE ENCEPHALITIS SYNDROME (AES)

1. Year's first AES case has been reported in Bihar. AES is characterized by an acute **onset of fever and clinical neurological manifestation that includes mental confusion, disorientation, delirium, or coma.**
2. It is caused by several different viruses, bacteria, fungus, parasites, spirochetes, chemicals/toxins etc. It predominantly affects the population below 15 years.
3. Locally **called Chamki Bukhar**, AES usually surfaces during summer in the flood-prone districts of north Bihar.

TRANSATLANTIC ALLIANCE

1. The USA President Joe Biden in his first address to the annual Munich Security Conference declared that the 'transatlantic alliance is back' and stressed the need to defend democracy around the world. The USA President intended to improve the strained relationship between the USA and other European allies.
2. The **Munich Security Conference is an annual conference on international security policy that has taken place in Munich, Bavaria (Germany) since 1963.**
3. About: The Transatlantic Alliance has been the cornerstone of the post-World War II world order. It is a real-world expression of West - of a sense that both sides of Atlantic are in it together.
4. Transatlantic Trade and Investment Partnership (T-TIP): T-TIP is an ambitious, comprehensive, and high-standard trade and investment agreement being negotiated between the United States and the European Union (EU).

HELINA AND DHRUVA STRA: ANTI-TANK GUIDED MISSILE

1. India has successfully test-fired indigenously-developed anti-tank guided missile systems 'Helina' and 'Dhruvastra' in the Pokhran range, Thar desert (Rajasthan).
2. About: **The Helina (the Army version) and Dhruvastra (Indian Airforce version) are helicopter-launched versions of third-generation anti-tank guided missiles (the Nag missile system).** The missile system has all-weather day-and-night capability and can defeat battle tanks with conventional armor and explosive reactive armor.
3. Indigenous: The missile systems have been designed and developed by DRDO.

MINISTRY OF AGRICULTURE AND FARMERS WELFARE GRANTED DRONE PERMISSION

1. Permission was granted by Ministry of Civil Aviation **to use drones for remote sensing data collection in agricultural areas of 100 districts** for gram panchayat level yield estimation, under PM Fasal Bima Yojana (PMFBY).
2. PMFBY is a Central Government's crop insurance scheme launched in 2016.
3. PMFBY recommends using drones to estimate crop loss.