

KSG:NEWSPAPER CRUX

6TH JUNE, 2021

NEWSPAPER HIGHLIGHT

- Carbon capture and storage poses the challenge of establishing economic value. Researchers from Universities of Sydney and Toronto have designed advanced electrolyzers to convert captured carbon into building blocks of everyday materials. Some of it is used to produce ethylene. The technology needs to be perfected before it can be used practically.
- A violent fall, a vehicular accident, or a sports injury can sometimes damage the spinal cord and brain leading to paralysis and other life threatening health problems. The nerve fibres that carry important information are unable to regrow, leading to irreversible damage. Using novel bioinformatics frameworks and screening platforms, researchers have now identified a new gene combination that can help enhance the growth of nerve fibres after an injury.
- Over two lakh kilograms of biomedical waste was generated each day last month by hospitals in India dealing with COVID19 patients, a new report revealed. The report titled, "State of India's Environment 2021," released by the Centre for Science and Environment, said 2,03,000 kg of COVID19 biomedical waste was produced daily in May this year and it was roughly 33% of India's non-COVID biomedical waste.
- By studying fossilised dinosaur bones that had the bite mark of juvenile T.rex, researchers have concluded that these had powerful bites, between that of a hyena and a crocodile. They estimated a juvenile T. rex could have exerted 5,641 newtons of force. The force of a human's bite is 300 newtons.
- A study assessing satellite data over 30 years (1990 to 2019) on identifying critical impacts of coastal inundation along the Mumbai Metropolitan Region (MMR) and the Konkan region has found siltation at the mouth, causing shrinking of width of creeks and waterways.

BLACK CARBON AND GLACIER MELTING

- 1.The report titled "**Glaciers of the Himalayas: Climate Change, Black Carbon and Regional Resilience**" says that the glaciers are melting faster than the global average ice mass. However, the strong policy on black carbon can sharply cut glacier melt.
- 2.Black carbon is a kind of an aerosol. An aerosol is a suspension of fine solid particles or liquid droplets in the air.The research report is released by the World Bank and covers the Himalaya, Karakoram, and Hindu Kush (HKHK) mountain ranges.
- 3.Source of Black Carbon in Himalayan Region: Industry (primarily brick kilns) and residential burning of solid fuel together account for 45-66% of regional anthropogenic (man-made) BC deposition, followed by on-road diesel fuels (7-18%) and open burning (less than 3% in all seasons) in the region.
- 4.The rate of retreat of HKHK glaciers is estimated to be 0.3 metres per year in the west to 1.0 metre per year in the east. Full implementation of current policies to mitigate Black Carbon can achieve a 23% reduction but **enacting new policies and incorporating them through regional cooperation** among countries can achieve enhanced benefits.

WORLD ENERGY INVESTMENT REPORT, 2021:IEA

- 1.The International Energy Agency (IEA) published the World Energy Investment Report, 2021.
- 2.Increased Investment in Energy Sector: Global energy investment is expected to rebound in 2021 and increase 10% year-on-year to around USD 1.9 trillion. Most of this investment will flow towards power and end-use sectors, shifting out of traditional fossil fuel production.
- 3.Renewable Energy: Renewable power will have the largest share - around 70% of the total will be spent on new power generation capacity.Fossil Fuels: Upstream (production and exploration) investment in oil is expected to grow 10%.
- 4.Increased Emissions: The above positive scenarios will still not deter the increase in carbon dioxide emission. **Global emission is set to grow by 1.5 billion tonnes in 2021.**

SENIORCARE AGING GROWTH ENGINE INITIATIVE

- 1.The Ministry of Social Justice and Empowerment virtually launched the SAGE (Seniorcare Aging Growth Engine) initiative and SAGE portal for elderly persons.An amount of Rs. 100 crore has been assigned for the promotion of the silver economy.
- 2.**Silver economy is the system of production, distribution and consumption of goods and services aimed at using the purchasing potential of older and ageing people** and satisfying their consumption, living and health needs.
- 3.About: The SAGE portal will be a "one-stop access" of elderly care products and services by credible start-ups. It has been launched with a view to help such persons who are interested in entrepreneurship in the field of providing services for elderly care.

CIBER-2

- 1.A NASA funded CIBER-2(Cosmic Infrared Background Experiment-2) sounding rocket's launch window will open at the White Sands Missile Range in New Mexico, USA.Sounding rockets take their name from the nautical term "to sound," which means to take measurements.
- 2.The aim of CIBER-2 mission is to look for evidence of extra stars that may have been missed in stellar head counts.