

### NEWSPAPER HIGHLIGHT

A wormhole can act as a bridge or a shortcut between two points in curved spacetime which are well separated in practical terms to the inhabitants of the universe. The existence of wormholes has been predicted by Ludwig Flamm, in 1916, soon after Einstein proposed his General Theory of Relativity. However, the presence of wormholes has not yet been established through observation or inference by astronomers. With rapid advances in observational cosmology in recent times, there is gathering support for the existence of entities such as the wormhole and others that have not yet been “seen”.

13.34 lakh, the total number of electric vehicles (EVs) in India as of July 14, 2022. In comparison, there were 27.81 crore nonelectric vehicles. Nearly 3.37 lakh EVs were registered in U.P., the highest among all States. Notably, EVs as a share of total vehicles were highest in Delhi (2% of total vehicles were electric), followed by Tripura and Assam at 1.4% each. As of January 1, 2022, there were only 1,536 retail outlets where EV charging facility was available.

17 number of people who have died this year till July while cleaning sewers and septic tanks. Since 2017, 347 such deaths have been recorded across India. Despite a 2013 law prohibiting employment of manual scavengers, a government survey identified 54,130 people engaged in this job as of July 2019. While the latest State wise split is not available, Tamil Nadu had registered 206 deaths of manual scavengers who were cleaning sewers and septic tanks between 1993 and July 2019, the highest among all States.

889 number of people who died in India till July this year due to hydrometeorological calamities such as tropical cyclones, heavy rainfall, severe thunderstorms, floods, and drought. In 2022, Assam recorded the most number of such deaths with 192 fatalities, closely followed by Himachal Pradesh with 187 deaths. More than 50,000 livestock were also killed in Assam due to the calamities. More than 2 lakh houses/huts were damaged in Assam and 2.4 lakh hectares of crops were spoiled.

6 percentage, the share of 1,45,747 government buses across 24

### TELE-LAW SERVICE IS BEING MADE FREE OF COST FOR CITIZENS FROM THIS YEAR

1.From this year, Tele-Law service is being made free of cost for citizens in the country,” Minister of Law and Justice at the 18th All India Legal Services Meet at Jaipur. The Department of Justice, Ministry of Law & Justice and National Legal Services Authority (NALSA) exchanged a Memorandum of Understanding (MoU) on Integrated Delivery of Legal Services. During last year a total of 21,148 meetings of the UnderTrial Review Committee(UTRCs) were held resulting in the release of 31,605 undertrial inmates.

2.Legal aid to marginalized: Tele-Law mainstreams legal aid to the marginalized seeking legal help by connecting them with the Panel Lawyers through the tele/video-conferencing infrastructure available at Common Service Centers (CSCs) across 1 lakh Gram Panchayats. Tele Law application: For easy and direct access Tele- Law Mobile Application (both Android and iOS) has also been launched in 2021 and it is presently available in 22 scheduled languages.

3.Widening of service to beneficiaries: Benefitting from this digital revolution, Tele-Law has widened the outreach of legal services to 20 Lakh + beneficiaries in just five years. NALSA to provide lawyers: Under the provision of the MoU, NALSA would provide the services of 700 lawyers, in each district exclusively for the Tele-Law program. These empanelled lawyers would now also act as referral lawyers and also assist in strengthening the mechanism for dispute avoidance and dispute resolution at the pre-litigation stage.

### WHAT THE DRAFT MEDICAL DEVICES BILL SAYS AND WHAT IT DOES NOT

1.The Union Health Ministry last week released a draft of a proposed Drugs, Medical Devices and Cosmetics Bill, 2022 to replace the existing Drugs and Cosmetics Act, 1940, and several sets of Rules by which the industry is currently run. The draft focuses on regulating medical devices as a separate entity, makes provision for fines and imprisonment for injury and death related to clinical trials or investigations, and seeks to regulate e-pharmacies.

2.Online pharmacies: No provisions to regulate online pharmacies exist in the 1940 law or any of the Rules. No person shall himself or by any other person on his behalf sell, stock or exhibit or offer for sale, or distribute, any drug by online mode except under and in accordance with a license or permission issued in such manner as may be prescribed. Clinical trials and investigations: The draft Bill makes provisions for compensation to participants or their legal heirs for injury or death suffered in clinical trials and investigations for drugs and medical devices. The draft also lays the onus on providing medical management for any injury arising due to the trial of the investigators.

**3.Imprisonment and fine: It amounts to double the compensation amount if the compensation is not paid. If the draft Bill becomes law, these provisions will be part of it, and will not be restricted to just clinical trial Rules.**

Prohibits clinical trials: The draft Bill prohibits clinical trials or clinical investigations of drugs and medical devices without permission from the central licensing authority. While companies have to seek permission from the regulator to conduct trials even now, this is not specifically mentioned in the existing law.

4.Medical devices: Under the ambit of medical devices defined by the draft Bill are diagnostic equipment, their software, implants, devices for assistance with disabilities, life support, instruments used for disinfection, and reagents or kits.

### A GLOSSARY FOR THE TROUBLED GLOBAL ECONOMY

1.Context: US' inflation rate was at 9.1% in June, the highest in 40 years, and FED action to increase the interest rate has led to few terms coming up in focus. **Bond yield curve inversion-Bonds are essentially an instrument through which**

States/UTs that are fully accessible to the differently abled, according to the Ministry of Road Transport and Highway. About 30% of them are “partially accessible”. Close to 700 railway stations have been made fully accessible, while 4,068 railway stations have been made partially accessible. Responding to a question in Lok Sabha, the Minister of State for Social Justice and Empowerment said accessible content on TV is also being enhanced in a phased manner.

Over 1.6 lakh Indians renounced their citizenship in 2021, highest in the past five years, according to information provided by the Ministry of Home Affairs (MHA) in the Lok Sabha on Tuesday. Over 78,000 Indians acquired the U.S. citizenship, the highest among all other countries. India does not allow dual citizenship. As many as 362 Indians living in China also acquired Chinese citizenship. Minister of State for Home Nityanand Rai, responding to a question by Fazlur Rehman, said in a written reply that “individuals renounced Indian citizenship for reasons personal to them.” In 2018, MHA revised Form XXII under Citizenship Rules and included a column on “circumstances/reasons due to which applicant intends to acquire foreign citizenship and renounce Indian citizenship.”

The Samyukt Kisan Morcha on Tuesday rejected the Centre’s invitation to join the committee, headed by former Union Agriculture Secretary Sanjay Agrawal, on the minimum support price and other issues in the farming sector. The Centre had left three positions vacant for SKM nominees on the panel.

A Deputy Superintendent of Police was allegedly run over by a dumper truck carrying stones at an illegal mining site in Haryana’s Nuh on Tuesday. The deceased has been identified as Surrender Singh Bishnoi, the DSP of Tauru.

Union Finance Minister Nirmala Sitharaman said on Tuesday that the decision to levy the Goods and Services Tax (GST) on unbranded, prepacked and prelabelled food products was critical to curb tax leakage and was not taken by “one member” of the GST Council alone as all States had agreed to the move.

The Parliamentary Standing Committee on Housing and Urban Affairs on Tuesday flagged the need for a single and comprehensive law for all the Metro rail networks in the country as opposed to the existing three Central Acts, and also raised

**governments (and also corporations) raise money from people. Typically government bond yields are a good way to understand the risk-free interest rate in that economy. The yield curve is the graphical representation of yields (profit) from bonds.** E.g. If one was to take the Indian government bonds of different tenures and plot them according to the yields they provide, one would get the yield curve.

2. Under normal circumstances: any economy would have an upward sloping yield curve (meaning normal profit from investment in the bond). Inverted Bond yield curve: As one buys bonds of longer tenure — one gets higher yields. This is logical. If one is parting with money for a longer duration, the return should be higher. However, An inversion of the yield curve essentially suggests that investors expect future growth to be weak. For instance, bonds with a tenure of 2 years end up paying out higher yields (returns/ interest rate) than bonds with a 10-year tenure.

3. Soft-landing When a central bank is successful in slowing down the economy without bringing about a recession, it is called a soft-landing — that is, no one gets hurt. But when the actions of the central bank bring about a recession, it is called hard-landing.

4. Reverse Currency War As the US FED rate increases, the investor finds it more attractive and less risky. So, more and more investors are rushing to invest money in the US. This, in turn, has made the dollar become stronger than all the other currencies. The relative weakness of their local currency against the dollar makes their exports more competitive. This can be good for economies.

5. However, today, every central bank is trying to counter the US Fed and raise interest rates themselves in order to ensure their currency doesn’t lose too much value against the dollar. This has been termed ‘reverse currency war’. E.g. India being import dependent, a weaker currency would mean a higher import bill and therefore RBI is trying to defend Indian Rupee against Dollar.

#### **RISK-REDUCTION STRATEGIES USING TRADITIONAL KNOWLEDGE**

1. Context: Indigenous peoples’ understanding of disaster risk uses an enormous dataset – traditional knowledge and folklore reaching back many generations. It was highlighted in the recently concluded Global Platform For Disaster Risk Reduction 2022 (GP2022) in Bali. These indigenous practices have used traditional knowledge, alongside modern techniques, to help manage disaster risk:

2. Cultural burning ( Ancient Australian technique to reduce bushfire): Controlled fires in small areas burn, reducing undergrowth and dead wood while preserving larger trees and allowing wildlife to escape Natural flood management (age-old traditional forecasting and flood-prevention methods to limit the risks of seasonal flooding in Nepal and the Tibetan Plateau): These include planting flood-resistant crops and digging drainage ditches and moats. Community-based early warning systems using environmental indicators: Observations of changes in cloud shapes, rainfall patterns, fauna activity, wind velocity, star positions and temperatures help anticipate floods and trigger preparations to minimize their impacts.

3. **Traditional remedies after flooding – like using green coconut milk to treat diarrhoea, cholera and dysentery – help with recovery, alongside any modern medical treatments that might be available. Safe areas (In Sulawesi, Indonesia, the Kailli communities have passed on historical knowledge of natural hazards):** Folksongs recount past experiences of disasters and pass on lessons learnt from predecessors about a range of hazards and their causes: tsunamis, earthquakes, and ground liquefaction resulting from earthquakes. The villages include safe areas, known as ‘Kinta’, which have always been used as refuges during seismic events.

#### **SANNATI**

1. Context: The Archaeological Survey of India has now taken up conservation work at this important Buddhist site near Kalaburagi. It is an ancient Buddhist site on the bank of the Bhima river near Kanaganahalli in the Kalaburagi district.

2. The Kanaganahalli excavation opened up many marvels : Magnificent Maha Stupa, which was referred to as Adholoka Maha Chaitya (the Great Stupa of the netherworlds) in the inscriptions and, more significantly, the stone portrait of

**the concern about the low ridership in all Metros except those in Delhi and Mumbai.**

Emperor Ashoka, surrounded by his queens and female attendants considered to be the only surviving image of the Mauryan Emperor which had the inscription 'Raya Asoko' in Brahmi on it.