The Indian Express

Front Page

In Bangladesh, bridge of dreams open today (Page no. 3) (GS Paper 1, Geography)

All along the brand new six-lane expressway from Dhaka to Mawa in Munshiganj district, signs with pictures of Sheikh Hasina congratulate her and the people of Bangladesh on "amader swapner Padda Setu" — the Bridge of Our Dreams Across the Padma.

The signs are sponsored by local leaders of the ruling Awami League and compete with each other to lavish praise and gratitude on the leader — but they invariably refer to the "dream".

Twenty-one years after the Prime Minister, in the last days of her previous tenure, laid the foundation stone in Mawa, a decade after the World Bank cancelled its \$1.2 billion funding saying it "cannot, should not, and will not turn a blind eye to evidence of corruption" in the project, and seven years after Bangladesh began construction with its own money, the Padma Multipurpose Road-Rail Bridge is ready to be inaugurated.

The Padma Bridge is the biggest and most challenging infrastructure asset ever created in Bangladesh. By joining the southwest — home to 30 million people — with the capital across the mighty river that cleaves through the country, the bridge is expected to give an unprecedented boost to communications, trade, and the economy of Bangladesh as a whole. The government estimates GDP to increase by 1.23 per cent — and the southwestern regional GDP by 2.3 per cent — as the bridge begins to provide returns.

Govt. and Politics

Norms to protect rights of kids working on OTT platforms (Page no. 7) (GS Paper 2, Governance)

The National Commission for the Protection of Child Rights (NCPCR) has today published draft guidelines to regulate child protection within the entertainment industry.

While the "Guidelines to Regulate Child Participation in the Entertainment Industry" were issued by the Commission in 2011, today's draft increases the scope of the guidelines to cover social media and OTT platforms for the first time.

The commission has further included stringent penal provisions for violating the guidelines, including imprisonment, and has mandated that child artists and children being used in entertainment need to be registered with District Magistrates.

Children are now being used in videos across social media and in content on OTT platforms which had not been covered by the existing guidelines and this increasing influence and scope of the internet needed to be covered.

Parents, who are using children to make money, have to be held accountable. There are different Acts protecting children — the provisions of these Acts have now been included in the guidelines.

Provisions under the Juvenile Justice Act, 2015, Child Labour Amendment Act, 2016, Protection of Children from Sexual Offences Act, 2012, Information Technology (Intermediary Guidelines and Digital Media Ethics Code) Rules, 2021, etc., have been included in the guidelines.

Express Network

VL-SRSAM missile system successfully test-fired (Page no. 8) (GS Paper 3, Defence)

The indigenously developed shipborne weapon system, Vertical Launch Short Range Surface to Air Missile (VL-SRSAM), was successfully flight tested by the Defence Research and Development Organisation (DRDO) and Indian Navy off the coast of Chandipur in Odisha.

The VL-SRSAM system has been designed to strike at the high-speed airborne targets at the range of 40km to 50km and at an altitude of around 15km.

Defence Minister Rajnath Singh congratulated DRDO and the Indian Navy on the success of the mission. Congratulations to DRDO, Indian Navy & the industry for the successful flight test of Vertical Launch Short Range Surface to Air Missile off the coast of Chandipur, Odisha. This success will further enhance the defence capability of Indian Naval Ships against the aerial threats.

Explained

Study finds potential in using non-humanoid robots for teaching children with autism (Page no. 9) (GS Paper 3, Science and Technology)

RobotICs has been used as teaching aids for children with autism spectrum disorder (ASD), but these interventions have often been expensive humanoids.

A research paper examines whether non-humanoid robots can act as teaching aids, and whether they can reduce the workload of human special educators.

Experiments by researchers from the Indian Institute of Science (IISc) and the Academy for Severe Handicaps and Autism (ASHA), Bengaluru, indicated that non-humanoid toy robots indeed may have significant potential in aiding special educators in autism education.

The paper was presented at IEEE International Conference on Robotics and Automation in Xi'an, China in 2021. It has now won the IISc's Murthy Govindaraju 'Women in Computer Science' Research Endowment Award for one of its lead authors, Nabanita Paul.

ASD is a developmental disability caused by differences in the brain; people with ASD may behave, communicate, interact, and learn in ways that are different from most other people.

In the paper, the interventions focused on ASD children's communication and gross motor skills. The paper details three studies: a toy robot called Cozmo assists special educators in verbal lessons on school premises; a mini drone Tello helps especial educators in exercise lessons, again on school premises; and Cozmo, special educators and ASD children connect remotely for verbal lessons.

The 'Talk With Cozmo' sessions (20 children) included storytelling followed by questions related to the story; 'Exercise With Tello' (55 children) included rudimentary lessons such as raising arms and squatting; and 'Learn With Cozmo Online' (7 children) included various aspects including spelling three-letter words and phonetic learning.

Hunt for Alzheimer's breakthrough continues, drug fails in clinical trials (Page no. 9) (GS Paper 3, Science and Technology)

An experimental Alzheimer's drug aimed at slowing or preventing cognitive decline in people at risk of developing the disease early has failed in clinical trials, landing a blow to efforts aimed at finding a trailblazing treatment to the neurodegenerative disease.

Alzheimer's is a degenerative brain disorder that slowly robs people of their memory and thinking abilities. Worldwide, it is the most common form of dementia or loss of cognitive functioning — thinking, remembering, and reasoning – contributing 60%-70% cases, according to the World Health Organisation (WHO).

Progressive and irreversible, it usually begins with mild memory loss, and as symptoms grow severe, patients lose the ability to perform even simple tasks.

Pathology of the disease is deposition of an abnormal protein called beta-amyloid in the brain. The disease starts much before the symptoms show up.

The symptoms may come at a certain age, but the pathology changes almost a decade earlier," Dr Manjari Tripathi, professor of neurology at the All India Institute of Medical Sciences, New Delhi, said.

Eco-Sensitive Zones: why Kerala farmers are protesting an SC order (Page no. 9) (GS Paper 3, Environment)

Farmers in Kerala continue to protest across several high ranges of the state against the Supreme Court's recent order to establish 1-km Eco-Sensitive Zones around all protected areas, wildlife sanctuaries and national parks.

The widespread unrest, which has hit districts like Idukki, Kottayam, Pathanamthitta and Wayanad, is borne out of the fear of farmers losing their livelihood, and has found support from the state government, opposition parties and the Catholic Church.

On June 18, almost two weeks after the court order, the Union government said that it will hold discussions with the Kerala government and file an affidavit in the Supreme Court on the matter.

As per the National Wildlife Action Plan (2002-2016), issued by the Union Ministry of Environment, Forest and Climate Change, land within 10 km of the boundaries of national parks and wildlife sanctuaries is to be notified as eco-fragile zones or Eco-Sensitive Zones (ESZ).

Tight supply at some pumps order (Page no. 9)

(GS Paper 3, Economy)

For much of June, several cities across the country have witnessed petrol pumps rationing supplies or shutting due to non-availability of fuel, leading to concerns about shortages and triggering panic buying among some consumers.

The situation peaked around the middle of the month, and the government intervened by asking pumps to stay open and directing oil marketing companies (OMCs) to ensure the availability of fuel.

The Ministry of Petroleum and Natural Gas also assured there was enough fuel in the country. The situation has eased since then, and the fuel availability situation is likely to start returning to normal next month.

As global crude prices increased and the value of the rupee fell simultaneously, OMCs such as state-owned IOCL, HPCL, and BPCL, and private companies Rosneft-backed Nayara Energy and Reliance Industries, started to report losses on retail sales.

Idea Page

New rules for new game (Page no. 11)

(GS Paper 2, Governance)

Online gaming has swiftly emerged as the most engaging form of entertainment in India owing to younger demographics, increased internet penetration, and affordable smartphones.

Evolving technologies resulting in immersive experiences have led more people to adopt this new form of entertainment instead of the passive ones.

The popularity of online gaming including e-sports, online casual games and real money gaming can be gauged readily with the industry growing at a rate of about 35 per cent in 2019-20, outpacing OTT, television, and social media platforms.

Propelled by the mobile-first phenomenon and around 420 million gamers already active, online gaming is disrupting conventional forms of entertainment.

Like any social change and most new technologies, the industry has been functioning under the weight of societal ramifications and perceptual ambiguity — online real money gaming is often confused with gambling.

Whilst games of skill (fantasy chess, bridge, rummy, and poker) are legal and protected under the Constitution, games of chance (roulette, teen patti, and dice) are essentially about gambling and hence deemed illegal.

As per the Indian Constitution, gambling is classified under the State List. States have the power to regulate or prohibit such activity.

Failing to distinguish between online skill-based gaming and gambling, some states have either placed restrictions or buried the sunrise sector under regulatory ambivalence.

Power our future (Page no. 11)

(GS Paper 3, Economy)

The cold reality of modern life is that more than love, crude oil makes the world go round. Crude is the raw natural resource extracted from the earth, subsequently refined into widely used products like petroleum, jet fuel and heating oils.

The price of crude impacts the cost of essential goods like food and clothing – since every good that we access daily has been transported long distances. A significant fallout of Russia's invasion of Ukraine has been the rising cost of petroleum.

Russia is the world's largest exporter of oil products to global markets, and the second largest exporter of crude oil behind Saudi Arabia. About 60 per cent of Russia's oil exports go to Europe and another 20 per cent to China.

In response to the invasion, Western countries, including the United States and Europe, have imposed an array of sanctions against Russia.

Europe and the United States have seen the price of oil steadily rise after they reduced their purchases from Russia. Today, gasoline costs a historic high of almost \$5 a gallon in the US, up almost 50 per cent since last year.

President Joe Biden has been forced to consider a gas tax holiday in light of the rising discontent amongst the American public, even though taxes constitute about a third of the price of gas.

India on the other hand has chosen a different route. We are the third-largest importer and consumer of oil in the world and have increased our purchase of Russian oil to cope with rising oil prices elsewhere.

This week the Wall Street Journal and the New York Times both reported on India emerging as a major buyer of Russian oil. According to the Wall Street Journal, India has increased imports of Russian crude more than 25-fold since the start of the invasion on February 24, 2022.

As of June 1, 2022, India is importing an average of a million barrels a day. We are also refining crude oil or turning it into products like jet fuel and diesel and selling it to Europe and other nations.

Importing Russian crude also helps us curb inflation that has been made worse by rising fuel prices. Procuring discounted Russian oil is an effort by the government to bring down prices and halt the decline in the value of the Indian rupee which has now crossed Rs 78 to the dollar – up from an average of Rs 73.93 last year.

Economy

To avoid 'disruption', RBI extends card tokenisation deadline by 3 months (Page no. 13) (GS Paper 3, Economy)

The Reserve Bank of India (RBI) on Friday extended the timeline for tokenisation of debit and credit cards by three months till September 30, 2022 "to avoid disruption and inconvenience to cardholders".

After September 30, no entity in the card transaction or payment chain, other than the card issuers and card networks, should store the CoF (Card-on-File data or storage of actual card data) and any such data stored previously will be purged, it said.

The central bank had earlier fixed the due date for card tokenisation on June 30, 2022.

On a review of the issues involved and after detailed discussions with all stakeholders, it is observed that considerable progress has been made in terms of token creation.

Transaction processing based on these tokens has also commenced, though it is yet to gain traction across all categories of merchants," the RBI said in a circular to payment system providers.

Further, an alternate system in respect of transactions where cardholders decide to enter the card details manually at the time of undertaking the transaction (commonly referred to as 'guest checkout transactions') has not been implemented by the industry stakeholders.