

NEWSPAPER HIGHLIGHT

According to a report by Central Pollution Control Board of India, for the year 2018-2019, 3.3 million metric tonnes of plastic waste are generated by Indians. The bad news is that this may well be an under-estimation of the problem. Another alarming statistic is that of all the plastic waste produced in the world, 79% enters the environment. Only 9% of all plastic waste is recycled. Accumulation of plastic waste is detrimental to the environment and when this waste finds its way into the sea, there can be major harm to aquatic ecosystems, too. Researchers from Department of Material Engineering, Indian Institute of Science, Bengaluru (IISc) have found a way to make a substitute for single use plastic that can, in principle help mitigate the problem of accumulating plastic waste in the environment.

When two people converse, their eyes meet in moments of “shared attention”, with their pupils dilating in synchrony, according to a Dartmouth study (PNAS). According to lead author Sophie Wohltjen at Dartmouth, when two people converse, eye contact signals that shared attention is high — that they are in peak synchrony. As eye contact persists, that synchrony then decreases. “We think this is also good because too much synchrony can make a conversation stale. An engaging conversation requires at times being on the same page and at times saying something new. Eye contact seems to be one way we create a shared space while also allowing space for new ideas.

In Alzheimer’s disease, amyloid plaques build up in the person’s brain for nearly two decades before the first signs such as forgetfulness are exhibited. Now an algorithm, published in a paper in Neurology, by using data from a single PET brain scan of the amyloid and the person’s age, can yield an estimate of how much longer it will take for the symptoms to manifest.

Scent activates different areas of the brain. A research team has now found that scents, processed by structures of the olfactory senses, work together with the brain’s reward and aversion system. Hence, scents affect those regions responsible for emotions. The study, published in the journal Cerebral

MODEL TENANCY ACT

1.Assam has become the first state to adopt the Model Tenancy Act. With this Assam Urban Areas Rent Control Act, 1972 gets repealed. Impact-New Act will spur growth & development of transparent & accountable rental market & balance the interests of tenants & landlords. It will provide ecosystem for rapid dispute resolution.

2.Background-The Union Cabinet, in June 2021, approved the Model Tenancy Act (MTA). States and Union territories can now adopt the Model Tenancy Act by enacting fresh legislation or they can amend their existing rental laws suitably.

3.Highlights of the Model Law- Applicable prospectively and will not affect the existing tenancies. Written agreement is a must for all new tenancies. **The agreement will have to be submitted to the concerned district ‘Rent Authority’. The law also speaks about roles and responsibilities of landlord and tenants. No landlord or property manager can withhold any essential supply to the premises occupied by the tenant.**If tenancy has not been renewed, the tenancy shall be deemed to be renewed on a month-to-month basis on the same terms and conditions as were in the expired tenancy agreement, for a maximum period of six months. Compensation in case of non-vacancy: On the expiry of extended period of six months of agreed tenancy period or the termination of tenancy by order or notice, the tenant shall be a tenant in default and liable to pay compensation of double of the monthly rent for two months and four times of the monthly rent thereafter.

4.Significance: **It is an important piece of legislation that promises to ease the burden on civil courts, unlock rental properties stuck in legal disputes,** and prevent future tangles by balancing the interests of tenants and landlords.

MAINTENANCE AND WELFARE OF PARENTS AND SENIOR CITIZENS ACT,2007

1.Coming to the aid of senior citizen parents, the Bombay high court has directed a man and his family to vacate a flat within 10 days, failing which police would be used to forcibly evict them. What’s the issue-As a last resort, the parents invoked the provisions of the Maintenance and Welfare of Parents and Senior Citizens Act, 2007 and the special tribunal under the Act granted relief to the parents, against which the son and his family moved the high court.

2.Background-The High Court of Karnataka has said that there is a complete failure on the part of the State government to comply with its statutory obligation of establishing old-age homes as per the provisions.

3.Overview of the Maintenance and Welfare of Parents and Senior Citizens Act, 2007-**This Act makes it legally obliging for adult children and heirs to provide for parents by way of a monthly allowance.** This Act provides an inexpensive and speedy procedure to claim monthly maintenance for parents and senior citizens. According to this Act, parents could mean biological, adoptive or step-parents. Under this Act, there are also provisions to protect the life and property of such persons (elderly).

4.Is it mandatory for the state to set up old-age homes as per the law? **Section 19 of the law says, the State Government may establish and maintain such number of old age homes at accessible places,** as it may deem necessary, in a phased manner, beginning with at least one in each district . The State Government may also, prescribe a scheme for management of old age homes.

GREEN BONDS

1.Power Finance Corporation Ltd (PFC), the leading NBFC in power sector, has successfully issued its first ever Euro Green Bonds. It is the first ever Euro denominated Green bond issuance from India. Moreover, it is the first ever Euro issuance by an Indian NBFC and the first Euro bond issuance from India since 2017.

2.What Is a Green Bond? **A green bond is a type of fixed-income instrument that is specifically earmarked to raise**

Cortex, may explain why smell plays a role in memory retrieval.

In fish, the pineal organ uses two proteins known as opsins present in a single cell to detect colour. Lampreys – jawless fish that retained many primitive vertebrate features – use a two-cell system. Researchers hypothesise that the one-cell system may have evolved from the two-cell system.

Extreme premature infants carry high risk of brain damage. A new study from Vienna finds a connection between gut microbiome and brain damage. An excess of Klebsiella in the gut was found to be associated with high presence of certain immune cells and also neurological damage in premature babies. This study suggests a way to prevent this damage.

Against the backdrop of the troop withdrawal from Afghanistan, the top U.S. military officer is meeting in Greece with NATO counterparts this weekend, hoping to forge more basing, intelligence sharing and other agreements to prevent terrorist groups from regrouping and threatening America and the region.

Russia's elections commission said that it had recorded foreign interference in its ongoing threeday parliamentary elections. The polls, which culminate on Sunday and come after an unprecedented crackdown on Kremlin critics and dissenting voices, allow Russians to cast their ballots online.

The Mayor of Del Rio, Texas, declared a state of emergency after more than 10,000 undocumented migrants, many of them Haitians, poured into the border city in a fresh test of President Joe Biden's immigration policy. Del Rio Mayor Bruno Lozano said that the migrants were crowded in an area controlled by the U.S. Customs and Border Patrol (CBP) beneath the Del Rio International Bridge, which carries traffic across the Rio Grande river into Mexico. The White House remained silent on the issue as political pressure mounted on Mr. Biden to address the influx.

France recalled its Ambassadors to the United States and Australia in a ferocious row over the scrapping of a submarine contract, an unprecedented step that revealed the extent of French anger against its allies.

The Health Ministry has flagged the

money for climate and environmental projects. These bonds are typically asset-linked and backed by the issuing entity's balance sheet, so they usually carry the same credit rating as their issuers' other debt obligations. Green bonds may come with tax incentives to enhance their attractiveness to investors.

3.How Does a Green Bond Work? Green bonds work just like any other corporate or government bond. Borrowers issue these securities in order to secure financing for projects that will have a positive environmental impact, such as ecosystem restoration or reducing pollution. Investors who purchase these bonds can expect to make as the bond matures. In addition, there are often tax benefits for investing in green bonds.

4.Green Bonds Vs Blue Bonds: Blue bonds are sustainability bonds to finance projects that protect the ocean and related ecosystems. This can include projects to support sustainable fisheries, protection of coral reefs and other fragile ecosystems, or reducing pollution and acidification. All blue bonds are green bonds, but not all green bonds are blue bonds.

5.Green Bonds Vs Climate Bonds: "Green bonds" and "climate bonds" are sometimes used interchangeably, but some authorities use the latter term specifically for projects focusing on reducing carbon emissions or alleviating the effects of climate change.

SHOONYA CAMPAIGN

1.Recently, NITI Aayog and Rocky Mountain Institute (RMI) and RMI India have launched the Shoonya Campaign. RMI is an independent nonprofit organization founded in 1982.

2.About the Campaign: **It is an initiative to promote zero-pollution delivery vehicles by working with consumers and industry.** The campaign will promote the adoption of electric vehicles (EVs) in the urban deliveries segment and create consumer awareness about the health, environmental and economic benefits of electric vehicles. As part of the campaign, a corporate branding and certification programme is being launched to recognise and promote the industry's efforts towards transitioning to EVs for final-mile deliveries.

3.Government of India Initiatives to give a boost EV Sector in India: The government aims to see 6 million electric and hybrid vehicles on the roads by 2020 under the National Electric Mobility Mission Plan 2020. Faster Adoption and Manufacturing of Electric Vehicles in India (FAME India Scheme) for improving electric mobility in India. Implementation of smart cities would also boost the growth of electric vehicles.

4.Challenges ahead-**The Indian electric vehicle (EV) market currently has one of the lowest penetration rates in the world. Capital costs are high and the payoff is uncertain.** The Indian EV industry has been hit hard due to rupee's dramatic depreciation in recent months. Local production of inputs for EVs is at just about 35% of total input production. The production will be severely affected in terms of production costs.

EXERCISE SURYA KIRAN

1.15th Edition of Indo – Nepal Joint Military Training, Exercise Surya Kiran between Indian Army and Nepali Army is commencing at Pithoragarh (UK).

2.**This joint military training will go a long way in improving bilateral relations and also will be a major step towards further strengthening the traditional friendship between the two nations.** **3.**Last edition of Exercise Surya Kiran was conducted in Nepal in 2019.

KUSHINAGAR AIRPORT DECLARED AS CUSTOMS NOTIFIED AIRPORT

1.The Central Board of Indirect Taxes and Customs (CBIC) has declared Kushinagar Airport as a Customs notified airport. This would also facilitate international passenger movements including that of Buddhist pilgrims.

2.**A customs airport is an airport notified by the appropriate customs authority of the country as an airport which shall be airports for the unloading of imported goods and the loading of export goods or any class of such goods.** About Kushinagar: It is an important Buddhist pilgrimage site, where Gautam Buddha attained Mahaparinirvan.

3.Kushinagar is dotted with several other Buddhist sites in the nearby surroundings like Sravasti (238 km), Kapilvastu (190 km) and Lumbini (195 km).

KUSHINAGAR AIRPORT DECLARED AS CUSTOMS

emerging challenge in 11 States across India of serotype 2 dengue, which it said is associated with “more cases and more complications” than other forms of the disease..Dengue virus serotype 2 (DENV2) causes severe epidemics, and the leading tetravalent dengue vaccine has lower efficacy against DENV2 compared to the other 3 serotypes. In natural DENV2 infections, strongly neutralizing type-specific antibodies provide protection against subsequent DENV2 infection.

BAIJAYANT PANDA COMMITTEE

1.It is a committee constituted by Ministry of Defence constituted a High Level Expert Committee for a comprehensive review of National Cadet Corps (NCC).

2.Objectives of the Committee: Committee is to suggest measures to empower NCC cadets to contribute more effectively towards nation building.

3.To propose ways for gainful engagement of NCC Alumni for betterment of the organization. To recommend best practices of similar international youth organisations for inclusion in NCC curriculum.