Deputy Mayor Inspects Civic Issues in OU Police Station Limits.

..""Indian Chronicle OU january 24: Greater Hyderabad Deputy Mayor Smt. Mothe Srilatha Shobhan Reddy conducted an inspection on Saturday to review various civic issues within the Osmania University Police Station (OU PS) limits, including sanitation deficiencies, non-functional streetlights, poor road conditions, and other maintenance-related problems. TTUC State President Shri Mothe Shobhan Reddy accompanied her during the inspection. On the occasion, OU Division Assistant Commissioner of Police (ACP) Shri Jagan and Osmania University Police Station Circle Inspector Shri Appalanaidu briefed the Deputy Mayor about the difficulties being faced by the general public visiting the police station. They explained that inadequate sanitation facilities, malfunctioning streetlights causing safety concerns during night hours, and dilapidated roads in and around the police station premises were leading to severe inconvenience for the public. They requested immediate intervention through GHMC to address these issues. Responding to the concerns, the Deputy Mayor held discussions with GHMC officials and Osmania University authorities regarding the required sanitation works, streetlight repairs, road development, and other civic improvements within the OU Police Station area. She assured that permanent solutions would be implemented at the earliest to ensure better facilities and convenience for the public.

Awareness program for students with representatives from 26 universities

.""Secunderabad Cantonment. January 24 (Indian Chronicle):" On Saturday, an awareness session was conducted for students from various schools at St. Peter's School in Bowenpally, through the SPHS Career Fair program, with representatives from 26 national-level universities and several major colleges, to provide guidance on future planning. Speaking on this occasion, Director T. Alphonse Reddy stated that they provided students with the opportunity to directly interact with representatives from 26 prominent universities and higher education institutions across the country regarding their future plans. He mentioned that representatives from BITS Pilani, Dubai Campus, Mahindra University, ICFAI University, STU, Woxsen University, KL University, Avinash College of Com-

merce, Alliance University, BML Munjal University, The Apollo University, Plaksha University, Amity University, Vidyashilp University, Mallareddy University, JJ Rewa Arts University, Lakshya College of Commerce, GITAM University, HITAM, Annapurna College of Film and Media, Ahmedabad University, FLAME University, UpGrad School of Technology, SHASHI Group, IDP IELTS, and Atlas SkillTech University attended and held extensive discussions with the students. The discussions covered career pathways, undergraduate programs, and admissions. He stated that the students gathered direct information about the process, scholarships, and global opportunities, and received clarification from the representatives regarding their future educational decisions. He added that the school management is always striving to prepare students for the future by providing them with various relevant aspects and shaping them into high-achievers. Representatives from several universities and colleges, teachers, and approximately 1,000 students and their parents participated in this program.

Funds of Rs 53 lakh Sanctioned to 144 Churches Due to the Efforts of CM Revanth Reddy: Uppal Congress In-charge Mandumula Parameshwar Reddy

""KISHORE VADDEPALLI, Uppal, January 24 (Indian Chronicle):""Uppal Assembly Constituency Congress Party In-charge Mandumula Parameshwar Reddy stated that funds were sanctioned to churches for Christmas celebrations solely due to the dedicated efforts of Chief Minister Revanth Reddy.He informed that a total of ?53 lakh was sanctioned to 144 churches in the Uppal Assembly Constituency. On Saturday in Uppal, representatives of various churches felicitated Mandumula Parameshwar Reddy for his role in securing the funds."He further explained that ?1 lakh each was sanctioned to 14 churches, while ?30,000 each was allocated to another 130 churches.Several leaders and pastors participated in the programme, including Ezekiel, Sadguna Rao, Trimurthulu, Prabhakar Agam Reddy, Salla Prabhakar Reddy, Luther, Pushpa Raju, Varaprasad Rao, Manohar, and other pastors.

The MLA Sri Ganesh relay hunger strike has entered its 5th day

."""Secunderabad Cantonment. January 24 (Indian Chronicle):"The relay hunger strike undertaken by Cantonment MLA Sriganesh, demanding the merger of the Secunderabad Cantonment Board with the state government's municipal corporation, reached its 5th day on Saturday. A large number of locals and leaders gathered at the hunger strike camp set up near the Ambedkar statue in Karkhana and expressed their solidarity. The people of the 5th ward, Rajya Sabha members Anil Kumar Yadav, Madhu Yashki Goud, Kuna Srisailam Goud, and others expressed their support for the MLA's strike. On this occasion, the nominated members of the Rajya Sabha, while speaking, demanded that the central government abolish the nominated system and immediately merge the board with the state government's municipal corporation. They stated that they would discuss the merger issue with Rahul Gandhi, raise it in Parliament, and bring the demands of the Cantonment residents to the attention of the central government. They assured the Cantonment residents that they would raise the merger issue in Parliament. Subsequently, several leaders spoke, stating that the hunger strike undertaken by the MLA for the merger of the Cantonment Board was commendable, and that they would extend their full support to him until his strike yields results. They urged the central government to recognize the problems of the local people and respond accordingly, and requested the Prime Minister and the Defence Minister to acknowledge the needs of the people and take steps to fulfill them. Otherwise, they warned that they would undertake protest programs at Jantar Mantar in Delhi to achieve the merger of the Cantonment Board. Leaders such as Telugunta Satish, Jampana Pratap, Muppidi Madhukar, Venugopal Reddy, Nagineni Saritha, Sadanand, Badrinath Yadav, and others participated in this program.

CMRF scheme is a great boon to the poor
Tandur MLA distributes CMRF checks worth Rs. 75 lakhs to 200 beneficiaries

.""Indian Chronicle, Tandur (January,24)""Tandur MLA Buyyani Manohar Reddy distributed CMRF checks worth approximately Rs. 75,00,000/ to 200 beneficiaries from Tandur and surrounding mandals at his camp office. The beneficiaries had undergone treatment at various hospitals for illnesses.""Speaking on the occasion, MLA Manohar Reddy said CMRF checks are a boon to the poor and urged people to utilize the opportunity. He assured that the checks are being distributed without any political bias, aiming to support the poor.""The event was attended by Congress party leaders, including PCC president Dharasingh and former DCCB president Ravi Goud, among others.

"National security is strong under Modi's leadership" – State President Ramchander Rao

""""Nacharam, Indian Chronicle, January 24: """"On the occasion of Vasantha Panchami, a Saraswati Mata Puja was conducted in a grand manner under the auspices of the Bihar and Uttar Pradesh Settlers Welfare Association."The programme was organised under the joint leadership of the Association's Honorary President Guduru Shailesh Reddy, President Shatrughan Ram, and General Secretary Kabinder Singh. BJP State President Ramchander Rao attended the event as the chief guest, while former Uppal MLA Bethi Subhash Reddy participated as the guest of honour and performed special prayers."Speaking on the occasion, BJP State President Ramchander Rao alleged that the West Bengal government is encouraging and patronising anarchic forces and extremism. He stated that there is no com-

promise on national security under the leadership of Prime Minister Narendra Modi."More than 3,000 devotees participated in the Saraswati Mata Puja. After the puja, the annadanam (free meal distribution) programme arranged by the committee was inaugurated by Ramchander Rao and Bethi Subhash Reddy."Local leaders and representatives of various associations were present at the programme.

On the occasion of National Girl Child Day, Panel Lawyer Nagendramma participated in a program at the Bhongir Government SC Girls' Hostel.

""(Mandava Srisailam... Yadadri Bhongir District Bureau... Indian Chronicle... January 24):- As per the instructions of the District Legal Services Authority, Yadadri Bhongir District President and District Principal Judge A. Jayaraju, and Secretary V. Madhavilatha, on the occasion of National Girl Child Day today, Panel Lawyer G. Nagendramma and Legal Aid Advocate Saritha provided awareness on girls' legal rights, protection, prohibition of child marriage, right to education, and government schemes at the Government Scheduled Castes Development Girls' Hostel in Bhongir. Hostel Welfare Officer Indira stated that they are striving to provide all facilities to the students residing in the hostel and to support their educational development. Students participated in this program.

Local Bodies and Revenue Additional Collector Bhaskar Rao unveiled the Telangana Minority Residential School and College admissions poster.

""(Mandava Srisailam... Yadadri Bhuvanagiri District Bureau... Indian Chronicle... January 24):- Local Bodies and Revenue Additional Collector Bhaskar Rao, along with DRO & DMWO Jayamma, RCO Srikanth, Urdu Minority Officer Fauzia, and Minority Residential Institutions Principals Balakrishna, Srinivas, and Kavitha, unveiled the Telangana Minority Residential School and College admissions poster. He released the poster related to minority admissions in his chamber on Saturday. He urged all Muslim minorities in the district to utilize the quota for minority residential admissions in schools and intermediate colleges.

""(Mandava Srisailam... Yadadri Bhuvanagiri District Bureau... Indian Chronicle... January 24):- Upon the Central Government confirming the IAS status for Bhaskar Rao, the Additional Collector for Local Bodies and Revenue in Yadadri Bhuvanagiri district, DRO Jayamma, members of the Telangana Revenue Association, and District Treasury Officer Sampoorna along with their staff, respectfully met him on Saturday, presented him with a bouquet, and conveyed their best wishes.

Author Indrapramit Das tells the story of beasts that have come to take revenge on the human world

I look out the window of the taxi and I see a great beast, more human than hound or cat, awful and unexpected to my reality-tempered eye, and it is mounting another one on the side of the road, a jarring evolution of the sight of stray dogs copulating frantically alongside passing traffic. The taxi driver slows, and so does time. There is nothing frantic in the coupling of these beings. It is bestial and magical at the same time, like watching two tigers fighting in the wild. Their fur blazes in the dusky light, streaked with smoky stripes rippling over muscle. There are no people near them. Perhaps, they fled indoors. The beast and its kneeling mate turn to look at me. Their eyes are radiant in the reflected light of the fire burning on the footpath. Tires curl into tarry snakes in the dancing blaze. In the kindling, I see the familiar lines of a body, a corpse wrapped in a saffron shawl of flames and blackened to cinder. The car lurches as the taxi driver speeds up, and I look at the pair as they recede, refusing to vanish despite the wind in my eyes and hair. They keep looking at me. Somewhere, a siren's blue bleat rises, the city's surprised reply to this affront.In time there are no impossibilities, though on closer inspection they become banalities. Our phones flash with images of hybrid beasts, chimeras that appear and then vanish as if they were never there. In my city, as in others, one is burned by a mob.

The body turns out to be human, blunt teeth embedded like gemstones in the char. These tiger-men (no one calls them tiger- women, though they have no gender but what we give them) and Hanumans and elephant-headed beings, we are told, are the result of experimental generative AI holograms developed by the Chinese, worn by Bangladeshi immigrants to sow discord and terror in India. The man burned to death by mob was a miscreant, a terrorist.When I asked the taxi driver what he saw, he said he saw two asuras fighting. I thought they looked like they were making love. He said they must have come from the drowned land of the Sundarbans, hungry for vengeance after the mangrove forests vanished in the rising waters of our avarice and apathy. In his dazed look there was fear, monsters bounding through our city streets, claws and fangs dancing in sunlight to shed rivers of blood. Yet this seemed a more beautiful explanation than what I saw later on our social feeds, of holograms and gaslight.I wonder if those chimeras in their animal union were undergoing a ritual of mourning, next to that burning body. Was it one of them, before magic burned away in that daylight like alcohol, emitting the blue flame of terrible reason, reducing their impossible kin to mere human. Were they shapeshifters desperate to enchant the dying world?Among the videos, there is one from the Himalayas, where once lay snow on the summer slopes of the naked mountains. It shows a towering fur-clad figure loping across a hillside. Indian soldiers shoot at it. Border drones hunt it, but it vanishes into the rocky grey as if made of mist. In the villages gathered around their artificial glaciers, they call it a yeti. They think it a good omen, and pray for a good winter and the snow's return, and with it water to parch the droughts.From

my flat in Smart Zone 7, I can see the towers of a server city on the other side of a canal, squatting on what was once a green sheet of farmland. Highrises with no occupants but unthinking artificial intelligences, familiar for the higher powers, swarming the air and settling in our devices to eat our data and vomit it into easily categorized and surveilled information for their masters. On news channels, they narrate the news, their faces slurring into ghostliness and their language often nonsensical, though it hardly matters. On socials, they transform into troll armies to attack antinationals. In movies, they reanimate dead stars of eras gone, their muscles gleaming godly as they destroy India's enemies. All around the server city are slums, filled with the life that the towers cannot hold. I wonder at the heat the server cities radiate, wonder if they can truly conjure chimeras into the true world, not the


digital one, now.At night, I walk to the runoff canal around the city of AIs in their towers. On the other side, people in the slum are dancing, the warm air threaded with drums. In the light of their solar lanterns, I see two dancers painted in red, orange, black, their bodies close. In flesh they have

become the chimeras that we're told are holograms in our rule-based world. They are as beasts in the shadow of those digital towers. I, too, am a beast, enchanted by the dance, dancing under the stars and the uncaring drones.Indrapramit Das (aka Indra Das) is the Shirley Jackson, British Fantasy & Lambda Literary Award-winning cross-genre author of (Penguin India/Del Rey) and The Last Dragoners of Bowbazar (Subterranean Press)

Why Handwriting (Still) Works

I sit by an aeroplane window, surrounded by stacks of handwritten transcripts, each written in its distinctive style - loopy, scrawled, precise. Eight hours stretch ahead, free from the distractions of the internet, as I grade these papers—ticking off well-crafted arguments, adding smiley faces for humour, and scribbling comments in the margins. By the time we land in Mumbai, I've connected with each student in a way that digital submissions never allowed.Cut to a year ago when I was drowning in 140 digital submissions on Google Docs - each one a standard times roman. This time, I decided to do things differently: I asked my students to handwrite their assignments. The students were taken aback when I arrived with a stack of blank printer paper and distributed the sheets. Many scrambled to find pens. Yet, they embraced the task with good humour, turning in their work over the next few days.This handwritten exercise brought unexpected other benefits. Without digital copy-pasting, it became harder for students to submit large swathes of AI-generated text. They were writing more authentically, in their own distinctive voices. Returning the graded papers became a chance to connect in person one-on-one with my students, offering brief comments or quick exchanges that seemed to mean more to them than digital comments.The debate over whether to write by hand, type on a computer, or use a phone has long occupied the literary world. Joan Didion famously wrote her first drafts in notebooks, calling handwriting "a physical process that cements language in your mind." Zadie Smith spoke about writing portions of White Teeth by hand, explaining that "the speed of typing creates the illusion of flow, while handwriting forces more deliberate word choices. In Writing Down the Bones, Natalie Goldberg says "when I am writing something emotional, I must write it the first time directly with hand on paper. Handwriting is more connected to the movement of the heart."Their responses are reflected in what neuroscientists have discovered. A 2020 study in Frontiers in Psychology found that handwriting activates regions of the
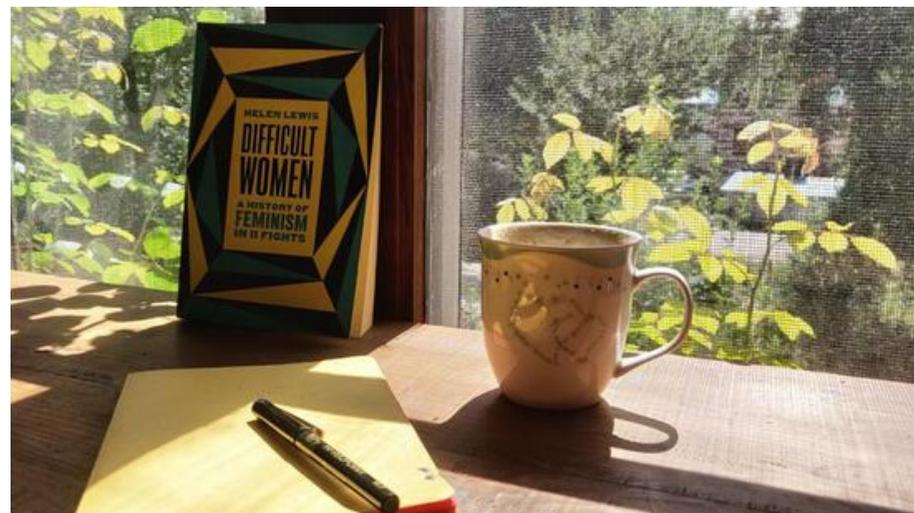
brain associated with learning and creativity in ways typing doesn't. "When we write by hand, we're forced to be more economical and strategic with our use of language, crafting notes in our own words. To do that, we have to listen more closely, think about the information, and essentially distil others' words and thoughts through our own neurological filtration system and onto the page" says Ryder Carroll in The Bullet Journal Method, a brilliant book that blends writing by hand with digital tools.

I wasn't always a promoter of the pen. Like most people in my generation, I was happy to leave handwriting behind. Gliding from garamond to geometric sans serif, I experimented with text and typeface. If it didn't read good enough, there was always backspace. And best of all, was Ctrl+C, the magic key - no more copying by hand.Sometimes, I'd read interviews with authors who said they wrote their first drafts in longhand and wonder why they clung to such an old-fashioned method.Then five years ago The Artist's Way by Julia Cameron came into my life. I was feeling low, in a creative trough, anxious about turning into an empty nester as our three girls left home. Write by hand, said Julia Cameron. A big part of her 12-week creative program is the Morning Pages, a jour-

nal which must be written by hand. It sounded pedantic and pernickety to me. But if I was doing the program, I might as well do it right. So off I went to Vinod Stationery in Juhu Market, bought a blank notebook and three gel pens (blue, black, and green), and began my handwriting journey.It wasn't easy. My fingers ached on the first day, and forming legible lines required effort. But over time, something shifted. My writing became more relaxed, my thoughts flowed more freely. On a computer, I'd obsessively edit as I typed, deleting and rewriting lines before they had a chance to breathe. Handwriting forced me to slow down. Because I didn't like the untidiness of scratched out sentences, I let my lines be. I stopped worrying about perfection and let my ideas unfold naturally. Now, years later, my handwriting has grown stronger, and my hands no longer ache.Yet, handwriting is not for everyone. Technology can be just as liberating. Last year we were moved to hear author V .V Ganeshananthan speaking to our book club about losing the use of her hands while writing Brotherless Night ; she managed to complete this Women's Prize winning novel by using voice recognition software.Yet writing my daily pages has reminded me of the value of handwriting. From ancient parchments to handwritten

'We have lived with macaques for very long periods of time and have co-evolved with them'

When primatologist Anindya Sinha first came to Bengaluru in the early 1990s, he couldn't help but notice the number of bonnet macaques in the city. "They were not just in Cubbon Park or Lal Bagh, but also on the city walls and the terraces of houses," he says at a recent talk at Science Gallery, Bengaluru. "But, of course, we knew that times were changing and their existence was doomed," he says.According to Sinha, a professor at the National Institute of Advanced Sciences (NIAS) in Bengaluru, as the city transitioned from the Garden City of yore to the Silicon Valley of India that it is today and lost its gardens as well as the relatively relaxed pace of life that had once defined it, many other non-human inhabitants of the city began to leave. One such "legitimate citizen of the city" was the bonnet macaque, a species of monkey native to peninsular India.

"What subsequently developed was not only negativity about the macaque, but also these other ideas and conceptions that came in, about aesthetics, for example," he says in this talk titled Changing Ecologies, Transforming Lives: Complex Coexistence of Human and Non-Human Primates in Our Cities. "If Bengaluru was to be a beautiful city, it shouldn't have monkeys just as it shouldn't have dogs. I find that personally very difficult to accept because what it is clearly saying is that we are speciesists," says Sinha, whose lecture offered insights into the profound relationship Indians have shared with nonhuman species, including macaques, why this co-existence is under threat and how these macaques have learnt how to survive in human-altered landscapes, often resorting to pilfering, begging or forging new friendships to adapt to an urbanised world."We fight being racists, we fight being sexist. But I don't think we have any qualms about announcing loudly that only we will stay in the city, not the macaques or dogs."

The kinship that Indians have traditionally had with non-human species has been an integral aspect of our culture, he says, adding that this aspect of our attitude towards other forms of life still exists in many parts of the country. "I will stick out my neck and say that the closeness that humans feel towards non-humans in India far out-surpasses any other community anywhere in the world," he says, attributing this to two specific reasons. The first is that our philosophy looks at all other species in a continuum with ourselves. This is in marked contrast with the West, where either because of Judeo-Christian faith or generations of philosophers, the human and the non-human were very starkly separated," he says. The second reason, in his opinion, is religion, with "many of our deities, many of the vehicles of our gods and goddesses being non-human. That gave them pride of place in our communities and belief systems," he says.To make his case, he uses the example of the fishing folk of Charotar in Gujarat, who have lived in relative harmony alongside the mugger or marsh crocodile for centuries. "This is a remarkable friendship. There have been very few attacks, about four or five in the last 40 years, with almost no deaths," says Sinha, showing the audience a photograph taken at Charotar depicting one such friendship — between Ramubhai, a fisherman and Raju, a marsh crocodile. "The relationship is so close that Ramubhai can call out to Raju, and Raju responds to him," he says.This attitude, unfortunately, is fast disappearing, says Sinha. "I do not understand why this spirit, this philosophy of being with other beings, does not pervade our modern thinking of other beings," he says. "Maybe we have lost much of the idyllic kind of world that we imagine where we could co-exist without stress, strain and conflict."

The macaques who love humansMacaques are a genus of old-world primates consisting of around 24 species spread across the world, 12 of which are found in India, including the Assam macaque, the Rhesus macaque, the southern pig-tailed macaque, the white-cheeked macaque and the lion-tailed macaque. "They have the largest range of non-human primates, to the extent that there is one species that lives in Northern Africa, but all the other species extend from Afghanistan in the west to Japan in the east," says Sinha. In his opinion, what is most remarkable about them is that they are flexible in their social and individual ecologies and behaviour. "As a result, they have been extremely successful evolutionarily."Of these, there are two species — the North Indian Rhesus macaque and the South Indian bonnet macaque — that are especially interesting because they have a "remarkable ability to adapt to almost any kind of ecology, both natural and human-made." Additionally, both these species as well as the Nicobar long-tailed macaque, tend to move towards human habitation, says Sinha. "In some sense, crudely speaking, if you give these macaques a choice between living in a forest and living with people, they prefer to live with people," he says.According to him, the ability of macaques to adapt to urban dwellings is not new — they have been doing so for centuries. Sinha brings up a poem featuring a monkey on a jackfruit tree who "mistakes for fruit… the eye… on the thronged drumheads," and explains, "This was originally a poem in Tamil by a poet called Mutamociyar," he says, pointing out that the poet wrote this poem about 2000 years ago. This indicates that "we have lived with macaques for very long periods of time and have co-evolved with them."And yet, the relationship between human beings and macaques is also often fraught with tension, with many early biologists even referring to these macaque species as "weed macaques" since they "are very prolific, they multiply in large numbers and are even called pests, just as weeds are." Sinha, however, does not see the macaques this way. "In our research group, we decided very consciously to do away with that term because of the kind of value system this term had," he says. "We call them anthropophilic macaques since they love people, or the prolific macaques since they multiply at very high rates," he says."Once a macaque has tasted human food, her life has changed forever," says Sinha.One offshoot of this close relationship with human beings is that these interactions irretrievably change the macaques. "Once a macaque has tasted human food,

When primatologist Anindya Sinha first came to Bengaluru in the early 1990s, he couldn't help but notice the number of bonnet macaques in the city.

her life has changed forever," says Sinha, expanding on some of the behaviours that have resulted from this.In Bandipur National Park, for instance, where tourists have been interacting with these animals by throwing food to them, juvenile bonnet macaques have developed new modalities of communicating with people who carry foods in their hand, he says, showing a photograph of a young monkey with its arm stretched out, almost in a begging gesture. "It consists of four behaviours," he explains." These juvenile monkeys end up tracking people who have food in their hands and orient themselves so that they are making eye contact with these people.""While they are doing this, they give a coo-coo call, and finally, when eye contact is made with a human, the macaque puts out its hand," he says. "This is remarkable because they don't do it with other macaques; they do it only with people. The interesting reason for that is there is no food-sharing amongst these macaques, but people are willing to share food with them. "It is a very human appeal," says Sinha, adding that this entire set of behaviours is completely newand "never before seen in any wild monkeys.""When people provide food to these females, that bond is tested because the competition for the food becomes so high," says Sinha."When people provide food to these females, that bond is tested because the competition for the food becomes so high," says Sinha. | Photo Credit: RAJEEV BHATTHuman presence in Bandipur is also gravely impacting the integrity of macaque social groups. Like most primates as well as mammals like elephants, lions and hyenas, macaques are female-bonded, forming very close relationships with others in their group, which typically consists of a few adult males, many females and all their offspring. "When people provide food to these females, that bond is tested because the competition for the food becomes so high," says Sinha, whose team is now seeing group fission with females often leaving these large multi-male, multi-female groups to bring down social tensions."You end up with small groups of females with a single male. In the last three decades, many of the groups in Bandipur and Mudumalai, especially those around the highway, have developed a new form of social organisation — a single adult male and these small groups of females — and they don't do very well," he says.Doomed city dwellers

In his talk, Sinha also discusses how changing ecological circumstances are causing many of these animals to move from forests to highways to villages and cities. "Their forests are being removed, they have no way to go back, and so they adapt to different kinds of human habitations," says Sinha. Macaques, he adds, have a high degree of what he calls phenotypic flexibility, the "ability to quickly adapt to changing conditions, so you are not left in a difficult situation," he says.This phenotypic flexibility makes it easier for them, as compared to many other animals, to adapt to urban ecosystems. For instance, "they may not have their trees, canopies and branches, but they use this mass of electric cables and wires to move across the city," he says, sharing a video of a macaque stealing a woman's glasses and refusing to return it unless given food bought from a nearby vendor. "Clearly, this is a barter system, which they have learnt to negotiate," he says. "And don't forget that shopkeepers also benefit."While macaques may have learnt to adapt to urban spaces, the people who inhabit these same spaces aren't always happy to have them there. "Across virtually every city, we have gotten into negative relationships with macaques," he says. The problem, in his opinion, is very complex, affecting both humans and animals. "Where you stand on it will depend on where your empathies lie and how you think the problem can be solved," he says.However, it is important to remember that macaques, world-over, are struggling to survive, with research showing that many of them are disappearing from across their traditional distribution

Artificial Intelligence in healthcare: what lies ahead

The term Artificial Intelligence (AI) evokes both excitement and anxiety. But what does it mean for healthcare? The hype surrounding AI in healthcare seems like a breakthrough on par with the discovery of antibiotics or vaccines. Yet, the reality may not live up to these expectations — at least not in the near future. Healthcare has evolved over centuries, contributing to our understanding of health and disease. Today, with the rise of AI, we explore how this technology might shape the future of healthcare. To do this, it is crucial to understand some basic concepts of health and where AI might fit into this larger narrative. The biomedical concept of health, based on the germ theory of disease, transformed medicine by linking microorganisms to diseases and led to breakthroughs such as vaccines and antibiotics. However, it has limitations: the most significant being its failure to address non-infectious issues such as malnutrition, accidents, and mental illnesses. The ecological concept broadens the health perspective by considering environmental factors, such as food availability and air quality, emphasising the connection between health and the environment. The psychosocial concept includes social and psychological factors, highlighting how societal culture, beliefs, and socioeconomic conditions influence societal issues such as gun violence, addiction, and mental health. The holistic concept integrates all models – physical, mental, emotional and social dimensions for a comprehensive approach to healthcare. Breakthroughs over the course of history Over the past 500 years, several breakthroughs have revolutionised how we understand and approach healthcare. James Lind's historic experiment showed that a citrus-rich diet could prevent scurvy, though the role of Vitamin C was not yet known. This marked evidence-based medicine. The discovery of vaccines by Edward Jenner introduced the concept of disease prevention. Anaesthetics made surgeries painless and made complex procedures possible. The discovery of antibiotics radically reduced infection mortality, and the microscope opened up a new world of microorganisms, reshaping our understanding of diseases. The birth of epidemiology during the cholera outbreak — before the identification of Vibrio cholerae — demonstrated the power of public health interventions. A common thread ties these breakthroughs: they did not just improve health services but also fundamentally changed how diseases were viewed, shifting from the reactive to the preventive, curative and scientific approaches. Now, as we face the growing impact of AI, can it, too, transform healthcare, reshaping not just what we do but how we understand and address health challenges? Where AI fits in AI, much like healthcare, is a broad concept. To understand AI's role in healthcare, it is crucial to clarify that AI is not a single, well-defined tool. It is a collective term that encompasses various technologies. These include large language models, diffusion models, deep learning, machine learning, natural language processing and robotics, each offering different tools that could potentially be applied in healthcare. Generative AI has shown promise in specific applications such as generating medical images, assisting drug design and aiding documentation. Still, its impact remains limited to creative tasks rather than revolutionising treatment or diagnosis. Predictive AI has attracted more attention by aiming to forecast health outcomes through pattern recognition in large datasets. However, its promise is yet to fully materialise, as predictive models require vast training data and can be biased. When we talk about AI in healthcare, much of the excitement revolves around predictive AI models that are supposed to predict disease outcomes, optimise treatment plans, and even forecast patient deterioration. However, predictive AI is not as advanced or reliable as it is often portrayed to be. Take, for example, the Google Flu Trends experiment, an early application of predictive AI in healthcare. By analysing search terms, Google tried to predict flu outbreaks faster than traditional reporting mechanisms. It failed. Similarly, sepsis prediction models have not performed as anticipated.

The problem of truth erosion A major concern with AI in healthcare is 'truth erosion', where reliance on AI risks diminishing critical thinking in medicine. This is worsened by commercial interests, with proprietary algorithms limiting independent scrutiny and contributing to a reproducibility crisis. AI models often work well in controlled settings but falter in real-world applications. Additionally, many models lack transparency, creating a 'black box' issue where predictions are made without clear reasoning. In medicine, explainability is crucial. If doctors can't understand or trust AI-generated predictions, this undermines confidence in the technology. Healthcare, by nature, is considered a public good. However, much of the AI development in healthcare is expensive and driven by private companies. In India, the healthcare system is already under considerable strain, and implementing costly AI tools might not be the most efficient use of resources. Investing in AI without first addressing fundamental health system gaps could be an expensive, pointless exercise.

AI in healthcare faces several limitations, particularly in predicting human behaviour. Health outcomes are heavily influenced by individual actions, such as medication adherence or lifestyle changes, which are difficult to forecast. Like the unpredictability of financial markets or weather patterns, human behaviour complicates AI's ability to predict health outcomes accurately. Diseases are complex – for instance, a common condition like diarrhoea has multiple causes — viruses, bacteria, or parasites, all of which require different treatments. Conditions such as diabetes and cancers arise from a multifactorial combination of genetic, environmental, and lifestyle factors, making them harder to predict and treat. In the future, AI may be able to better predict single-gene disorders – for instance, sickle cell anaemia – with advances in genomics, but most diseases are dynamic and involve an evolving interplay of biological, behavioural, and environmental elements. Predictive AI, which depends on large datasets to recognise patterns, struggles due to healthcare data's incomplete, biased, and scattered nature. As diseases evolve and human behaviours shift, AI models risk becoming obsolete unless regularly updated with new information. To effectively integrate AI into healthcare, it is crucial to close this gap. AI developers need a deeper understanding of the healthcare system's complexity, while healthcare providers must be educated about how AI works, its limitations, and how best to use it. Currently, these two fields often function on parallel, poorly connected islands. AI in healthcare holds genuine promise for the future but has been overhyped in certain aspects, particularly in predictive healthcare. Unlike the crypto boom, AI is not a technology without substance. AI can help improve healthcare delivery in the future but will not revolutionise it. Its greatest strength may lie in augmenting human decision-making and improving efficiency. The key to AI's success in healthcare will be a balanced, informed approach that involves better education for healthcare providers, more interdisciplinary collaboration between tech developers and clinicians, and creating

The relics of Ratnagiri

On December 1 2024, a group of archaeologists, students, and labourers gathered at a mound in the southern part of the 18-acre Ratnagiri Buddhist heritage site in Odisha's Jajpur district to unearth the remnants of history that still lay hidden beneath the surface. The expectations were mixed, but there was no doubt that resuming excavations after six decades would shed new light on Buddhism's influence in the region.As the days passed, the rhythmic swings of pickaxes and the delicate strokes of brushes gradually revealed the relics. Every inch of the earth seemed to hold a trace of history. Still, no one in the group anticipated that on that wintry morning, they would discover a breathtaking piece of Buddhist heritage — an intact, massive Buddha head lying face down.Ratnagiri is no stranger to Buddha sculptures made of Khondalite stone. Dozens of such carvings have been unearthed in the area. But when experts measured the massive Buddha head, which took nearly two months to dig out completely, they found it to be 1.4 metres tall — the largest ever discovered in Odisha.The excavation at the site is likely to continue until the end of March, after which it will be impossible due to the harsh summer sun. Then, further analysis will be done to determine whether the centuries-old sculpture could be the largest Buddha head ever found in India.An excavated stone idol of Buddha inside the ancient Ratnagiri monastery.

"It [Buddha head] was magnificent. There were wrinkles on its neck. I was amazed at the level of expertise people had back then, carving such sharp and intricate features without modern tools. Besides the colossal head, we also found two other Buddha heads lying nearby," recalls Dibishada Brajasundar Garnayak, the Superintending Archaeologist of Puri Circle.The team subsequently found more stone-carved parts, including palms and fingers, which, along with the head, are believed to belong to a huge sculpture of Buddha in a meditating posture.

Hills of jewelsRatnagiri, which means 'Hills of jewels' in Odia, is located on a hillock in the Assia hill range in Jajpur and encircled by the rivers Brahmani, Kimiria, and Birupa and their tributaries. The village is situated around 100 km from Bhubaneswar and is part of the 'Diamond Triangle', a collection of three Buddhist sites — Ratnagiri, Udayagiri and Lalitgiri — located in a 10-km radius.Archaeologists believe this landscape was strategically chosen for Buddhist establishments. Its once-secluded nature made it ideal for spiritual and scholarly pursuits.Moreover, it is believed that the rulers of the time provided land to sustain the monastic settlements, ensuring the residents' livelihood and financial support for their rituals.According to the Archaeological Survey of India (ASI), the historical significance of Ratnagiri came to light in

The RTI is now the 'right to deny information'

The introduction of the Right to Information (RTI) Act was a move that generated great hope among citizens since it recognised them to be the rulers of the nation. It empowered them to seek information from the government, with dignity and respect. It looked as if the 'swaraj' that they had missed would be delivered to them. The Act codified their fundamental right to information and was one of the best transparency laws in the world. It appeared that it would curb corruption and arbitrariness, with citizens being the vigilance monitors of their government. But, it must be conceded, it has fallen far short of our expectations and the state of our democracy is not better.Within a few months, the government realised that this was a transfer of power from public servants to the citizens. In less than a year it moved to amend the law which would have weakened the RTI Act. But there were widespread protests by citizens across the nation. Sensing the mood of the nation, the government dropped the amendments.

The RTI Act had created Information Commissions as the final appellate authorities to implement the law. Most of the posts of 'information commissioner' were taken up by retired bureaucrats. After working for decades as senior bureaucrats, it was difficult for them to hand over power to citizens and recognise that they were the rightful owners of the government. No attempt was made to select people with a record in transparency. Many of them looked at these jobs as post-retirement sinecures and worked only for a few hours. While the national average of the disposal of cases by High Court judges is over 2,500 in a year, the national average of disposal of cases by the commissioners was less than this. Given the fact that the complexity of cases before commissions is far less than the cases before the High Courts, each commissioner should have been clearing at least over 5,000 cases in a year. While the law mandated a period of 30 days for the information to be provided and the same period for the first appellate authorities, it did not specify any time limit for the commissioners. Many commissions began to have pendency of over a year. The right to information was being converted into a right to history. Many ordinary citizens could not pursue the issue of what was now a denial of information. The penal provisions of the RTI Act were the teeth of the Act, but most information commissioners were reluctant to use them. The governments delayed appointing commissioners, which only increased the backlogs.

The clear message of various High Court judgments was that the exemptions listed under Section 8 of the RTI Act were restrictions on a citizen's fundamental right and had to be construed strictly as in the law. Parliament intended most information to be provided and crafted the exemptions carefully.The entire approach to a citizen's right to information changed in August 2011 when the Supreme Court of India held in Central Board of Secondary Education & Anr. vs Aditya Bandopadhyay & Ors, in paragraph 33: "Some High Courts have held that section 8 of RTI Act is in the nature of an exception to section 3 which empowers the citizens with the right to information, which is a derivative from the freedom of speech; and that therefore section 8 should be construed strictly, literally and narrowly. This may not be the correct approach."In paragraph 37 it made a comment without any evidence: "Indiscriminate and impractical demands or directions under RTI Act for disclosure of all and sundry information (unrelated to transparency and accountability in the functioning of public authorities and eradication of corruption) would be counterproductive as it will adversely affect the efficiency of the administration and result in the executive getting bogged down with the non-productive work of collecting and furnishing information. The Act should not be allowed to be misused or abused, to become a tool to obstruct the national development and integration, or to destroy the peace, tranquility and harmony among its citizens. Nor should it be converted into a tool of oppression or intimidation of honest officials striving to do their duty."A RTI applicant, Girish Ramchandra Deshpande, had sought copies of all memos, show cause notices and censure/punishment awarded to a public servant. A.B. Lute. He had also sought other details such as his movable and immovable properties and details of his investments, lending and borrowing from banks and other financial institutions.

This was denied claiming exemption under Section 8(1)(j). This section exempts "information which relates to personal information the disclosure of which has no relationship to any public activity or interest, or which would cause unwarranted invasion of the privacy of the individual unless the Central Public Information Officer ... is satisfied that the larger public interest justifies the disclosure of such information: Provided that the information, which cannot be denied to the Parliament or a State Legislature shall not be denied to any person."A simple reading shows that under this clause, 'personal' can be denied if it has apparently no relationship to any public activity or interest; or the disclosure of the said information would cause unwarranted invasion of the privacy of the individual.The Court did not rule on whether the information was an outcome of a public activity or if its disclosure would amount to an unwarranted invasion of the privacy of the individual. It denied the information by reading only the first seven words of the provision and saying it was 'personal information'. Most information can be linked to some person. Realising that it may be difficult for public information officers and other appellate authorities to decide on what constitutes privacy, Parliament gave a simple test in the proviso — that information which would not be denied to Parliament or legislature would not be denied to any person. This can only have one meaning. That anyone claiming that information would be denied to the citizen would make a subjective statement that he would deny the information to Parliament.It is well settled that literal interpretation should be given to a statute if the same does not lead to absurdity. In Nasiruddin and others vs Sita Ram Agarwal (2003) 2 SCC 577, the Court has stated: "37. The court's jurisdiction to interpret a statute can be invoked when the same is ambiguous... It cannot re-write or recast legislation. It is also necessary to determine that there exists a presumption that the legislature has not used any superfluous words. It is well settled that the real intention of the legislation must be gathered from the language used."Girish Ramchandra Deshpande amends the RTI

Act and has been used as a precedent in six subsequent Court judgments and has become the gold standard to convert RTI into an RDI, or Right to Deny Information. The Digital Personal Data Protection Act takes a cue from this and amends the RTI Act itself. There are other cases in which words in the law have not been accorded their usual meanings.To ensure that the RTI fulfils its original promise we should go by the original Act and not allow any distortions.

Coimbatore's friendly elephant Chinna Thambi returns to home ground as a kumki

It is as though a festival is in progress on a patch of forest at the Periyanayakkanpalayam range. Scooters and cars are parked haphazardly along a stretch as families arrive in droves, children in tow. A young father leads his daughter through the crowd, while a mother walks briskly, hugging her baby to her chest. As dusk nears, more young men pour in on bikes to the forest at Varappalayam in the suburbs of Coimbatore. The gathering peers into the hills beyond in the receding light for a glimpse of their old friend, Chinna Thambi.The elephant and the people in the neighbourhood have a history over two decades. A regular visitor at Thadagam valley, Chinna Thambi, over the years, gained the trust and friendship of locals who showered it with love and treats of fruits. Among the elephant trio Periya Thambi and the late Vinayagan, it gradually started crop-raiding, a habit that ended its carefree days in the forest. The elephant was captured from the region in January 2019 and was eventually taken to the Varagaliar elephant camp at Anamalai Tiger Reserve (ATR), where it was tamed and trained to be a kumki. For the first time since its capture, the elephant has come home. This time, as a kumki to participate in an operation involving another younger, crop-raiding elephant.News of Chinna Thambi's arrival sent his fans into a tizzy, and some of them, like M Abraham Antony Raj, have been visiting it every other day. It was Abraham, an elephant lover who is also into wildlife and conservation photography, who named the elephant. He has been observing it for 18 years. "He can recognise me," says Abraham, as his voice chokes with emotion. "Elephants never forget."It is the golden hour at dusk when the forest glows, and Chinna Thambi, weighed down by a heavy iron chain at its feet, casually munches on grass. "That's a good boy; come on now, do your thing. Pose with your trunk on your tusk," calls out M Manickaraj from the crowd. An electrician from nearby Madathur, he has come to see the elephant. Chinna Thambi picks up powdery red soil at his feet and showers his back and feet with it, and Manickaraj says, "Dei thambi, it's time for your bath, eh?" For Manickaraj, like many others, the 34-year-old elephant is like a brother. As people around it watch, Chinna Thambi pauses to look at them, curiously. It remains that way for a long time, eyes locked on someone.

The elephant has two mahouts attending to it: C Murugan and S Kaliappan. Murugan, who is from Kozhikamudhi settlement at ATR, recalls the challenging initial months. "For one-and-a-half years, I would sleep next to him attending to his every need. I never went home during those days; I hardly got to meet my wife and two children," he says. His hard work paid off, with the elephant turning into a cool-headed kumki. "This is his 10th operation, and he was successful in all of them," he says.Abraham swears the elephant knows it is in its home ground. "But he cannot do anything about it since he now has to obey his mahout," he says. He feels bad for the tusker; that it has to be chained in the very forest it frolicked in, just a few years ago. Despite the crop damage it did, Chinna Thambi has a reputation for being a gentle elephant. "It did not damage any property nor attack human beings," points out D Venkatesh, Chief Conservator of Forests, Field Director, ATR.During the Forest Department's operation to tranquilise and capture the translocated Chinna Thambi at a field at Kannadipudur near Udumalpet on February 15, 2019.Venkatesh was the District Forest Officer during Chinna Thambi's capture in 2019. He studied its behaviour closely prior to the process, and recalls an interesting incident. "Chinna Thambi was with a female and a male juvenile who was around seven years old when we attempted to dart it [with tranquiliser]," he says. "It took us almost two hours to separate the mother and the young one from Chinna Thambi."This young elephant has now grown to be a crop raider too, and ironically, the adult

Physicists propose tabletop experiment to test gravity's quantumness

General relativity and quantum mechanics are two highly successful theories. The former explains gravity and the latter teams up with special relativity to describe the other three forces of nature: electromagnetic, strong nuclear, and weak nuclear forces.However, scientists don't know how gravity fits into quantum mechanics. In fact, they have been proposing experiments that can test the quantumness of gravity. On October 29, 2024, one such proposal appeared in the journalPhysical Review Letters.With concepts like superposition, illustrated by the Schrödinger's cat thought experiment, and entanglement, quantum mechanics defies classical intuition. Quantum mechanics also allows seemingly absurd phenomena, e.g. the measurement of a quantum system (like a particle) can cause the system to instantaneously 'collapse' into one possible state that described the system before the measurement.In fact, if a system undergoes measurement-induced collapse, it's said to live by the rules of quantum mechanics. Classical systems like planets orbiting stars, cricket balls flying in the air, and cars on the road don't do this.

Ruling out alternativesMultiple experiments have found that both quantum mechanics and general relativity are legitimate theories of nature — yet they remain incompatible with each other. This has encouraged physicists to try and come up with a larger theory that can accommodate both. One strong contender is string theory, another is loop quantum gravity. Both of them predict deviations from quantum mechanics and general relativity either at the beginning of the universe or inside black holes, meaning they're nearly impossible to test."So far, experimental tests are extremely difficult — the situation looks very bleak — it is not clear if it can be done at all," Dipankar Home of Bose Institute, Kolkata, and one of the authors of the new paper, said.To check whether gravity is quantum mechanical, scientists need precise tests that rule out alternative possibilities.Unlike the classical Newtonian mechanics, where measuring a system doesn't alter it, quantum mechanics dictates that observing a system forces it into a definite state. This isn't a matter of how carefully a physicist is making the measurement. The measurement will always collapse the state. So measuring the state versus not measuring it creates a way to test whether the system is behaving according to the laws of Newtonian mechanics or quantum mechanics.As a first step, physicists said they needed an experiment where gravity helps an inherently quantum mechanical process happen. If gravity causes the state to collapse, it will be a sign that gravity behaves quantum mechanically.The new study suggested the following design: a test mass is in a superposition of two possible paths it can take. A probe mass will interact with it gravitationally to force it to choose one of the paths. Here, both masses are in a superposition of which paths they take. These two paths come close, resulting in different distances between the two pairs of paths. That is, for each path of the test mass, there are two possible paths the probe mass can take."Such simple, yet novel proposals …

are very interesting to the community," said Sreenath K. Manikandan, a theoretical physicist at the Nordic Institute for Theoretical Physics, Sweden, who wasn't involved in the study.Testing weak gravityThe idea is also interesting because it proposes to test weak gravity. Say you're performing an experiment where you're looking for light. If the light is bright, you can find it just by looking at it. But if it is very dim, you need sophisticated light-detecting cameras. Similarly, ideas to look for quantum gravity have so far involved strong gravity, like that near black holes, whereas the new test proposes looking for weak gravity, like the force near a small object.

"Our contention is that fundamental quantum gravity features can persist in this limit," Home said.Igor Pikovski, a quantum gravity researcher at the Stevens Institute of Technology and Stockholm University, commended this: "The important lesson is that quantum gravity signatures might show themselves even … in tabletop set-ups and not just in science-fiction scenarios."But independent experts said the experiment is still challenging because the masses need to behave quantum mechanically.Quantum properties usually show up in a measurable way in systems that exist at a smaller than microscopic scale, like inside atoms, whereas gravity is easier to measure around larger objects, like a building.This is why Vivishek Sudhir of the Massachusetts Institute of Technology said, "Preparing a spatial quantum superposition of an object massive enough such that its gravitational force is also measurable is an enormous experimental challenge."Creating a superpositionBose et al. have proposed the use of masses weighing about one-trillionth of a gram while maintaining a separation of around one-tenth of a millimetre. Nanocrystals meet these criteria.Yet the team still estimates a decade for their experiment to be conducted. Thus far, "the largest objects that have been placed in two places at once are macromolecules. We will have to place a nanocrystal, which is a billion times larger, in two places at once," Sougato Bose, one of the coauthors of the study, said."Creating this superposition is by far the main challenge," Debarshi Das, another coauthor, added.To do so, the authors have proposed using a quantum property of the nanocrystals called spin. Simply speaking, the spin affects the nanocrystals' motion (and can be manipulated by an external magnetic field). The spin of each nanocrystal exists in a superposition of two states until it is measured. Since the state affects the nanocrystal's path, it also exists in a superposition of two paths until a measurement.

"Once prepared in such a state, the gravitational field produced by this configuration will need to be measured very rapidly," according to Sudhir. "This is because any spatial quantum superposition will be extremely fragile and will die quickly, [so] measurements have to be made before this happens."Bose also said the nanocrystals can collide with gas atoms and other objects and forces in their environment, which could destroy the superposition. "This could include things like the gravitational forces

from seismic activity in the earth or perhaps even those due to clouds moving in the sky," Sudhir said.For these reasons, the experimental set-up will have to happen in a near-perfect vacuum and the masses' properties will have to be measured with extreme efficiency.Despite all these challenges, physicists are hopeful. The pro-

posed test has a much shorter timeline than the centuries required for humankind to develop the technologies to test quantum gravity near black holes.Pikovski agreed the future is bright: "Just a few years ago, it was considered impossible to experimentally test quantum gravity even in principle."

A 'summer checklist' for Perumbakkam wetland

Perumbakkam wetland is beginning to develop a "tan". The bulrushes are beginning to shrink resembling ageing human skin drained of fat. These are nature's aide-memoire on what next to expect. It is a "gentle reminder" — using a phrase that makes nudges to action palatable in polite society — that the Perumbakkam wetland is an easy target for fires during summer. And it is time to start efforts to scuttle that possibility, checking factors that can be controlled. Summer heat can cause fires on dry vegetation, but there could be something else at work. Before proceeding further, here is what is at stake. At risk of repeating the evident, Perumbakkam wetland is not the sole preserve of waterbirds. Certain parts of it host ground-nesting birds, and these are the parts susceptible to fires, due to a cocktail of factors — brown vegetation during summer, the summer heat and burning cigarette stubs. These parts — particularly a kuccha road that marks the western border of the wetland — are hoofed by humans, and unknown to themselves, some of them carry in their hands an agency to start a fire.

The Perumbakkam wetland is swamped by intense developmental activ-

ity on three sides. On its northern side, lined by the Sholinganallur-to-Perumbakkam road, Metro Rail pillars are rearing up their head. In addition to Metro Rail work, there is activity pertaining to the Water Resources Department. On its southern side is a neighbourhood that is "mobilising" residents at a rapid pace. Housing projects abound on this side and frequently, a project becomes a collection of homes. There is constant work and work presupposes the presence of workers. On both sides — the northern and the southern — there is a noticeable presence of workers. Some of them live in temporary shacks arranged for them next to their worksites. Perumbakkam wetland is known for movement of people down a kuccha road on its western side, a good number of them belong to this workforce. Besides, on the other side of the kuccha road that is housing construction activity, leading to movement on the road.A careless cigarette butt thrown on the brown, dry vegetation before it has burnt out, can cause considerable mischief. From where the fire often started in recent years — particularly in the 2022 and 2024 fires