IMPACT OF TECHNOLOGY

echnology has become an indispensable aspect of modern society, profoundly shaping how we live, work, communi-. cate, and interact with the world around us. From the invention of the wheel to the advent of artificial intelligence, technological advancements have continually revolutionized human civilization, driving progress and innovation across all sectors.

In the realm of communication, technology has transformed the way we connect with one another. The evolution of the internet, social media platforms, and mobile devices has facilitated instant communication on a global scale, breaking down barriers of time and distance. People can now effortlessly share information, ideas, and experiences, fostering greater connectivity and collab-

Moreover, technology has revolutionized the way we work and conduct business. Automation, robotics, and artificial intelligence have streamlined processes, increased efficiency, and expanded the scope of what is possible. Industries ranging from manufacturing to healthcare have embraced technological solutions to enhance productivity and deliver better outcomes.

In the field of healthcare, technology has led to remarkable advancements in diagnosis, treatment, and patient care. From medical imaging techniques to wearable devices that monitor health metrics, technology has empowered healthcare professionals to provide more accurate diagnoses and personalized treatments, ultimately improving patient outcomes and quality of life.

Furthermore, technology has had a profound impact on education, democratizing access to knowledge and resources. Online learning platforms, digital textbooks, and interactive educational tools have made learning more engaging, accessible, and flexible. Students can now access educational materials anytime, anywhere, empowering them to learn at their own pace and pursue their academic goals more effectively.

Earth: Facts about the **Blue Planet**

■ MOHAMMAD HANIEF

 \P arth, our home, is the third planet from the sun. While scientists continue to hunt for clues of life beyond Earth, our home planet remains the only place in the universe where we've ever identified living organisms.

Earth is the fifth-largest planet in the solar system. It's smaller than the four gas giants - Jupiter, Saturn, Uranus and Neptune but larger than the three other rocky planets, Mercury, Mars and

Earth has a diameter of roughly 8,000 miles (13,000 kilometers) and is mostly round because gravity generally pulls matter into a ball. But the spin of our home planet causes it to be squashed at its poles and swollen at the equator, making the true shape of the Earth an "oblate spheroid."

Our planet is unique for many reasons, but its available water and oxygen are two defining features. Water covers roughly 71% of Earth's surface, with most of that water located in our planet's oceans. About a fifth of Earth's atmosphere consists of oxygen, produced by plants.

Earth has a very hospitable temperature and mix of chemicals that have made life abundant here. Most notably, Earth is unique in that most of our planet is covered in liquid water, since the temperature allows liquid water to exist for extended periods of time. Earth's vast oceans provided a convenient place for life to begin

While Earth orbits the sun, the planet is simultaneously spinning around an imaginary line called an axis that runs through the core. from the North Pole to the South Pole. It takes Earth 23.934 hours to complete a rotation on its axis and 365.26 days to complete an orbit around the sun - our days and years on Earth are defined by these evrations.

Earth's axis of rotation is tilted in relation to the ecliptic plane, an imaginary surface through the planet's orbit around the sun. This means the Northern and Southern Hemispheres will sometimes point toward or away from the sun depending on the time of year. and this changes the amount of light the hemispheres receive, resulting in the changing seasons.

Earth happens to orbit the sun within the so-called "Goldilocks zone," where temperatures are just right to maintain liquid water on our planet's surface. Earth's orbit is not a perfect circle, but rather a slightly oval-shaped ellipse, similar to the orbits of all the other planets in our solar system. Our planet is a bit closer to the sun in early January and farther away in July, although this proximity has a much smaller effect on the temperatures we expe on the planet's surface than does the tilt of Earth's axis.

As Earth orbits the Sun, it completes one rotation every 23.9 hours. It takes 365.25 days to complete one trip around the Sun. That extra quarter of a day presents a challenge to our calendar system, which counts one year as 365 days. To keep our yearly calendars consistent with our orbit around the Sun, every four years we add one day. That day is called a leap day, and the year it's added to is called a leap year.

Earth sometimes temporarily hosts orbiting asteroids or large rocks. They are typically trapped by Earth's gravity for a few months or years before returning to an orbit around the Sun. Some asteroids will be in a long "dance" with Earth as both orbit the Sun.

Like Mars and Venus. Earth has volcanoes, mountains, and valleys. Earth's lithosphere, which includes the crust (both continental and oceanic) and the upper mantle, is divided into huge plates that are constantly moving. For example, the North American plate moves west over the Pacific Ocean basin, roughly at a rate equal to the growth of our fingernails. Earthquakes result when plates grind past one another, ride up over one another, collide to make mountains, or split and separate.

Scientists think Earth was formed at roughly the same time as the sun and other planets some 4.6 billion years ago when the solar system coalesced from a giant, rotating cloud of gas and dust known as the solar nebula. As the nebula collapsed under the force of its own gravity, it spun faster and flattened into a disk. Most of the material in that disk was then pulled toward the center to form

Other particles within the disk collided and stuck together to form ever-larger bodies, including Earth. Scientists think Earth started off as a waterless mass of rock. However, analyses of minerals trapped within ancient microscopic crystals suggest that there was liquid water already present on Earth during its first 500 million

Radioactive materials in the rock and increasing pressure deep within the Earth generated enough heat to melt the planet's interior, causing some chemicals to rise to the surface and form water, while others became the gases of the atmosphere. Recent evidence suggests that Earth's crust and oceans may have formed within about 200 million years after the planet took shape

Earth Day is an annual celebration that honors the achievements of the environmental movement and raises awareness of the need to protect Earth's natural resources for future generations. Earth Day is celebrated on April 22 throughout of the world.

The first Earth Day was celebrated in 1970, when a United States senator from Wisconsin organized a national demonstration to raise awareness about environmental issues. Rallies took place across the country and, by the end of the year, the U.S. government had created the Environmental Protection Agency. By 1990, Earth Day was an event celebrated by more than 140 countries around the globe. Our planet is an amazing place, but it needs our help to thrive! That's why each year on April 22, more than a billion people celebrate Earth Day to protect the planet from things like pollution and deforestation. By taking part in activities like picking up litter and planting trees, we're making our world a happier, healthier place to live.

Innovations for Sustainable Development

■ DR BANARSI LAL

very year National Technology Day is celebrated on 11th of May across India to commemorate the major technological breakthroughs, achievements and contributions of our scientists and engineers. The day is also celebrated to promote the development of technology in various fields. The day highlights the importance of science in our daily lives and encourages students to embrace science as a career option. The theme for National Technology Day 2024 is "From Schools to Startups: Igniting Young Minds to Innovate". The theme emphasizes nurturing school children to start their own start-ups and contribute to make India the hub of startups in the world. This day reminds us the anniversary of Pokhran Nuclear Test (Operation Shakti) which was carried out on 11th of May, 1998.On this day India successfully tested the nuclear missile Shakti-I at the Indian Army's Pokhran Test Range in Rajasthan. India's former President, Dr.APJ Abdul Kalam headed the operation. It was renamed Action Shakti or Pokhran -II and two days later as a part of operation Shakti, India successfully launched two nuclear weapons. India achieved a major technological breakthrough by carrying out successfully nuclear tests at Pokhran on this day. On this day, we emphasize on the value of science in our everyday life. The younger generation is promoted to consider science as their career opportunity on this important day. This day was introduced by our Late Prime Minister Sh.Atal Bihar Bajpayee. With the accomplishments of Pokhran Test, India also joined as the sixth nuclear community nation in the world

On this day the achievements of our scientists and engineers are highlighted in the field of science and technology. Various events are being organized in different technical institutions to mark the significance of the day. Various competitions, quizzes, lectures, interactive sessions and presentations of various aspects of science are organised across the nation. The day is crucial for scientists, engineers, planners and others who are engaged in nation building and governance. This day is considered as a symbol of pursuit for technological creativity, scientific inquiry and the conversion of that pursuit in the integration of science, industry and society. The technology has brought massive changes in many fields whether that is agriculture, education, health, space, defense etc. Changes by the technology are quite apparent from our daily lives. Everybody has different opinion of technology. Some consider it as a boon while consider it as a bane. Generally our perception towards science is limited to weapons and automobiles. Innovations are the engine for the national and international growth. Govt. of India has declared 2010-2020 as the decade of Innovations. Scientific and technological developments are the keys of development for any nation. Technological innovations are considered as the main driving force in fostering economic growth of any nation.

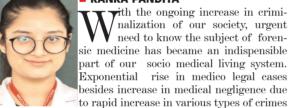
On this day we highlight the importance of science and the groundbreaking achievements in science. The day is far more than the historical event. New technologies are the gateway of future. On this day our best scientists and innovators are honoured by the government. These scientists devote their whole lives in their respective scientific fields. The innovations developed by them help us to transform our lives through innovations. On 11th of May, Defense Research and Development Organization (DRDO) also carried out the Trishul missile test-fire. It is a short range surface- to -air missile. This was later adopted by the Indian Army and Indian Air Force. This day also marks the flight of India's indigenous aircraft -Hansa-3 which was flown in Bengaluru when nuclear tests were conducted at Rajasthan.Hansa-3 was developed by National Aerospace Laboratories. It is light weighted, double seater airplane. It is mainly used in the pilots trainings, sports, aerial photography, surveillance and environmental projects. Shakti, the Pokhran Nuclear Test was carried out in May 1974 with the first nuclear test code called 'Smiling Budha'. The second was the Pokhran II which was a sequence of five nuclear bombs explosion tests performed by India in May, 1998. Considering above technological achievements on a particular day, it was declared as the National Technology Day. It was first observed on 11th May, 1999 in present of our Hon'ble former Prime Minister, Sh.Atal Bihari Bajpayee. Since then Ministry of Science and Technology has been celebrating 11th of May as the National Technology. On this particular day many innovative scientists are awarded to recognize their achievements in their respective fields. This day is celebrated as the symbol of quest for scientific enquiry and technology

Technology has connected the world together and brought us closer. It has simplified our lives. Numerous scientists, innovators and engineers work very hard to simplify things for us and making technology better and useful for us. Presently our country is moving in the right direction to reach the developed country provided we need to prepare our rural base. Presently we need to adopt the renaissance concept taking advantage of the many advances in science and technology. We are employing the modern tools of information technology and knowledge management in rural areas also. Now we have to integrate our ideas and design a management strategy to develop a strong rural technology base. Rural road connectivity, rural housing, health, sanitation, safe drinking water projects are already in progress. Setting up of more and more rural technology based rural enterprises will help to upgrade human skills, generate employment and create wealth. Also era of growth and development will be ushered by the use of rural technologies. It has been observed that rural technologies are not reaching to the rural people to an extent as they should have to reach. There are various reasons like lack of awareness about rural technologies, lack of resources to access technologies, rural technologies are not cost-effective, not according to the needs of the users, not according to the culture of the people, not skillfully demonstrated etc. responsible for it. Policy makers need to contemplate over the rural people's aspirations. Now the time has come to change our mindset for rural renaissance. Technology works for a specific purpose, be it hi-tech or low-tech, hi-investment or low-investment oriented and need of hi-profile or low-profile marketing. Any technology that is developed by an individual or an institution needs to be transferred for field use. For rural development we need to prepare a Directory of Rural Technologies (DRT) which can be a valuable source for rural information. It can be particularly useful for potential entrepreneurs, consultants, promotional and financial agencies and field functionaries in rural areas. Even the research and development scientists should have rural technology information for further improvements. Some rural technologies like handicrafts, artisans and traditional ones are not documented in the conventional sense. The directory of rural technologies should be available in local language of the respective areas. In the 6th and 7th plans there was much excitement with the establishment of many National Technology Missions on certain projects like oilseeds, safe drinking water etc. It was thought that all the rural problems would be solved with the implementation of these projects. But unfortunately that did not happen. Presently we all know the status of rural areas: our majority of rural population does not have access to proper sanitation, one-third does not have access to clean drinking water, a major section of rural population is illiterate, many villages lack road connectivity and electricity position is also critical. We all are aware of the rural problems and perhaps we also know how to solve these problems. There are lots of funds for rural areas. New innovative technologies need to be introduced in the villages to bring a big change. There is need an all round development in both rural and urban areas if India has to reach the developed country status. There is need to develop needful technologies for the rural areas. In order to get quick results, replication of rural technologies which are successful at one place should be implemented at other places also.

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Need to celebrate Forensic Medicine Day

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completely expose our public anathy which gets further exploited due to lack of awareness about basics of forensic medicine, even among our educated community.

This lack of knowledge and application of forensic medicine by most of its stakeholders like Judiciary, Law enforcing authorities, Investigation agencies, Medical fraternity not only Detroit the quality of our healthcare mechanism but also adversely affects our existing criminal justice system which completely disturbs our socio economic balance.

Creating mass awareness by celebrating World Forensic Medicine Day is one such step in this direction. Although National Medical Commission (NMC) has pre attempted this concept by introducing Forensic Medicine as mandatoat medical education level but it requires equal attention by various line departments like social welfare, health, education and other related departments to create its much needed awareness and generate sufficient knowledge about this subject.

WORLD FORENSIC MEDICINE DAY

Forensic Medicine, also known as Forensic Pathology in medical terminology and Legal Medicine in Judicial vocabulary, coined by Thomas Stuart , dates back to 19th Century. Courses like Forensic Chemistry and Forensic Biology having symbiotic relationship with this chapter of education involves the application of medical knowledge and its techniques to investigate the crime and its legal consequences. Subject of Forensic Medicine deals with the examination and assessment of individuals who have been, or are suspected to have been - injured or killed by any external or internal influence that has both medical and legal implications. Basically if the branch of medicine dealing with the practical application of medical know how to establish the facts in civil or criminal legal jurisprudence for investigation in to the cause and suspicious of injury or death for the purpose of law and administration of justice.

Forensic Medicine can also be termed as Forensic Social Work as it involves the application of social work principle and practices in legal, criminal and civil contests of our justice system. It focuses on the intersection of law and mental health as it systematically assess the individuals accused of crime, evaluate their mental health, provide expert testimo-

ny in courts and finally provide counseling and other rehabilitation services to the victims and offenders. By virtue of their experience and exposure on physiological effects of crime in victims and offenders, Trained Forensic Social Workers are also involved in the development of public policy related to mental wellness and criminal justice thus play an important role in building vibrant social fabric. The specialty of Forensic Social Worker goes far beyond the medical clinics and psychiatric hospitals and ensure proper juvenile and adult justice services, needed corrections and mandated

Due to significant impact of Forensic Medicine on our criminal justice system, this education not only plays an important role in civil and criminal investigations through scientifically proven accurate and reliable evidence but also generates an in depth insight in to the nature and cause of crime, be it a homicide, suicide, accidental or natural death. The path and process of Forensic medicine not only reduces the time taken during investigation and delivery of justice but is equally cost effectiveness and amply resourceful. The accuracy of evidence and investigation is the most important benefit of Forensic Medicine, the awareness of which need to be percolated down to masses in order to strengthen our socio medical justice system besides safeguarding our per-

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First time voters of world's largest democracy

-t is really a great privilege that the first time voters of the world's largest democracy are exercising their right to vote to chose the government of their choice .It is a proud moment that the first timers are making use of their powerful weapon of ballot to bring a desired change in the politico-social life of the country .it is a matter of great delight and joy that the first time voters are exercising their democratic right and privilege to chose their representatives who will govern the country in accordance with the aspirations of the people .To exercise the right of vote is not an ordinary thing for the first timers but this democratic right of voting has an extra-ordinary implication and importance for these voters. In India all the people having attained the age of 18 vears has been given the right to vote and this gives a sense of belonging to the adults for the democracy. All eligible adults who are the first time voters should voluntarily and compulsory exercise their right to vote and become participants in making the democratic government. The right to vote is not only a right but is a duty as well and thus all the eligible people should vote the candidates of their choice and thus become a part of the silent revolution of making and framing a government as per their aspirations. It is the responsibility of the government and the ECI to encourage and educate the people especially the first timers so that they will participate in voting and cast their vote in accordance with their conscience. It is the duty of the people including the first timers that they should not waste even a single vote as a single vote is very valuable and it makes a difference and can make or mar a government .It is in the fitness of things to note that sportspersons serve the nation through their dedication ,perseverance and teamwork .It is both a privilege and a responsibility to wear the national colors ,whether at home or abroad .But as sportspersons, and young Indian's, a part of the world's most vibrant democracy ,there is another privilege we aspire to-that of voting .Elections are the bedrock of democracy, granting citizens the vital privilege to elect their representatives . However ,this right is not passive It is a duty especially incumbent upon the youth to actively engage in the electoral process . Historically young people have spearheaded societal change ,and their involvement in elections is crucial .Strengthening democracy requires the active participation of youth at

every stage ,from voter registration to grassroots campaigning. The first time voters bring fresh perspectives and champion ideals such as transparency and inclusivity. The energy and tech-savvy nature of a young voter inject dynamism into the electoral landscape, fostering accessibility and responsiveness to citizens needs. Youth play a pivotal role in holding elected officials accountable .utilizing social media to amplify voices and advocate for issues that resonate with the public thereby safeguarding democracy 's integrity and vitality. In the words of Mahatma Gandhi, "The future depends on what vou do today. "As the wheels of democracy turn once again ,gearing up for the ongoing elections of 2024, it is imperative to underscore the pivotal role that youth play in shaping the destiny of the nation .In his monthly radio programme "Mann ki Baat.' 'Prime Minister Narendra Modi emphasized the importance of youth participation in the electoral process, highlighting the Election Commissions "Mera Phela vote Desh ke Liye' campaign aimed at first time voters .He lauded India's vouth for their vigor and enthusiasm .urging them to actively engage in voting as it directly impacts the nation's future. Urging first -time voters to participate in record numbers, he stressed their crucial role in shaping the destiny of the nation.PM Modi called upon influencers across various sectors to join the campaign and motivate young voters, recognizing their influential role in driving societal change .Amidst the electoral fervor ,he urged the youth to not only participate in political activities but also stay informed about ongoing discussions and debates .The ECI is spearheading "Mera Phela Vote Desh Ke Liye" aimed at fostering universal enlightened participation of youth in elections .Union minister Anurag Thakur launched the campaign anthem , symbolizing the nation's commitment to encourage young voters to exercise their democratic right .The anthem, a part of voter awareness initiative, embodies the spirit of PM Modi's call for greater youth participation in the electoral process .Youth across the country are embracing this anthem as a clarion call to encourage their young friends to pledge to vote .The initiative is also witnessing Higher Education Institutions -HEI's conducting comprehensive voter awareness activities nationwide and stressing the value of voting for a representative democracy . Whereas HEI's are hosting physical events, online competitions are also being organized

on the MyGov platform, including blog writing, podcasts ,debates .and more to encourage creativity in content creation . Workshops , seminars , flash mobs , and voter pledge drives are further engaging and educating students on the electoral process, with NSS volunteers and institution clubs actively participating in the campaign Responding to Prime ministers appeal, influencers from across various platforms, including Instagram, you Tube and entertainment industry are actively supporting the campaign , motivating the first time voters . Prominent names from across all corners of the country ,who have made a mark in spheres like sports, entertainment, business and industry ,have come together to spread the message far and wide. This people's movement underscores the collective power of voices of the youth and the importance of their active participation in shaping the country's democratic landscape. Let the enthusiasm of the youth pave the way for a brighter and more inclusive future this Lok Sabha election 2024. As the Lok Sabha of 2024 is currently going on ,a wave of excitement and responsibility is across the nation, especially among the

first -time voters The power to bring about revolution and shape the future of India lies in the hands of these young and dynamic individuals .Also, casting a vote is not just a duty but an important step towards strengthening democracy. Take the note of all the tips below if you are first time voter-1-Ensure you are registered on the electoral roll well before the elections. Check your eligibility and registration status on the Election Commission of India website.2-Get an insight into the voting process including polling station location, voter ID requirement and how to cast your vote.3-verify information from multiple credible sources before forming any opinion.4-Be open to different viewpoints and discuss politics with friends ,family and community members respectfully.5-Be cautious of misinformation spread near polling booths

Trust only official ECI communication and polling booth officials .In short the right to vote of the first times will shape the future destiny of the largest democracy of the world and therefore the first timers should compulsorily exercise their democratic right to vote and be partners in the democratic revolution of

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