VIGYAN DARPAN

विद्यां ददाति विनयं,
विनयाद् याति पात्रताम् ।
पात्रत्वात् धनमाप्नोति,
धनात् धर्मं ततः सुखम् ॥

Knowledge gives humility, from humility one attains character;
from character, one acquires wealth; from wealth, good deeds (righteousness) follow and
then happiness.

▬ Editor's note

The future belongs to science and those who make friends with science," India's first prime minister, Jawaharlal Nehru, once said. As the nation marks its 75th anniversary of independence, it is time to consider if our technological and scientific advancements have impacted the lives of ordinary people and whether Indians have developed a positive attitude toward science.

Since 1947, the nation has been a global power in different industries, including nuclear power, space technology, and many more. Nuclear weapons, strategic missile systems, and our missions to the moon and Mars are unquestionably admirable accomplishments. Our ability to produce our own food, medicines, and vaccines, as well as the outstanding advancements in communications and information technology, are equally wonderful.

All of this is the consequence of the government's and organisations' constant efforts in science and technology (such as Indian Space Research Organisation, Indian Institutes of Technology, and Indian Institute of Science), entrepreneurs, scientists, academicians, and numerous others.

After Independence, the nation's scientific innovation accelerated. The Planning Commission was established in 1950, and the first draw up of the plan, which was presented in July 1951, included a chapter on "Scientific and Industrial Research." In an effort to lay the groundwork for scientific research in the nation, it recognised 11 research institutes at the national level. The Scientific Policy Resolution, 1958, which recognised "it is only through the scientific approach and method and the use of scientific knowledge that reasonable material and cultural amenities and services can be provided for every member of the community," is where India's first significant science policy can be found. The Green Revolution benefited from such a policy. After two years of drought in a row, India was dependent on wheat imports and faced two suceessive famine in the 1960s. Following the introduction of high-yielding wheat and rice varieties, fertilisers, and sophisticated agricultural methods by M. S. Swaminathan, the founder of the Indian Green Revolution, the situation dramatically improved. Another notable development is India's emergence as the "pharmacy of the world." Affordable medicines and vaccinations are provided by local businesses to both industrialised and poor nations.

It became the centre of the world's vaccine supply during the Covid pandemic, especially to poorer countries, even as the so-called technologically superior nations battled to satisfy the demand.

India's IT sector and telecom revolution are major players of the world, it's changing employment landscape, and socioeconomic progress of india and world. The telecoms sector will play an even more important role as India gets ready for 5G cellular technology because of its applications in the internet of things and machine-to-machine domains.

The Sarv vigyan foundation STEAM mission is to create and share high quality resources to facilitate digital and non-digital learning for SVF and lifelong learners. By providing STEAM-based instructional materials and an open forum for users to share insights, we aimed to inspire a diverse global community of educators, students, and parents to find innovative and humanistic solutions to the challenges of learning at a distance. With this mission in mind, our theory of change is that we can improve SVF remote collaborative learning experiences through strategically leveraging existing structures and projects within SVF and establishing partnerships with the local and international community.

Ravi Prakash
Editor, Director of SVF

— CONTENTS

ADVANCED AIR MOBILITY: THE SCIENCE BEHIND QUADCOPTERS

By Anmol Shree

Most people think of aircraft as airplanes that travel quickly and cover large distances while flying between airports. However, more and more new types of aircraft are transporting people and equipment to places where traditional airplanes can't go. These new aircraft range in size from small cargo-carrying drones to passenger-carrying air taxis, and they carry out short range missions.

Sarv Vigyan Foundation is re-searching the quickest way to open this new technology to air travel. The
vision of AAM is that of a safe, accessible, automated,
and affordable air transportation system for passengers
and cargo capable of serving previously hard-to-reach urban and rural locations.
According to recent NASA-commissioned market studies, by 2030 there will be as many as 500 million flights per year for package delivery services and 750 million flights per year for air taxi/metro services.

Compared to airplanes and helicopters, the aircraft that fly in this new airspace are small. This, along with where they fly, makes it unrealistic to continuously track or control these aircraft using radar or satellite technology. Many of these aircraft are Unmanned Aerial Vehicles, or UAVs, meaning they are self-flying or autonomous.

Some of the aircraft controlled in the AAM system are quadcopters, similar to commercially available drones. The term quadcop-

ter refers to the fact that they use four propellers to fly.

Several manufacturers are working on larger versions of quadcopters capable of carrying cargo and people. In fact, several prototypes have already flown! Prototypes are working models used by engineers to test whether a design works as expected.

NEWTON'S THIRD LAW AND QUADCOPTERS

In 1687, English scientist Sir Isaac Newton published his now famous three laws of motion. These laws describe how forces and objects interact to affect motion.

Newton's third law of motion states that for every action, there is an equal and opposite reaction.

When a quadcopter's propellers spin, they push air downward. Using Newton's third law, this represents the action. For Newton's law to be true, there must be an equal and opposite reaction. This reaction is an upward force pushing on the quadcopter. Once this force exceeds the force of gravity pulling the quadcopter downward, the quadcopter begins to move up.
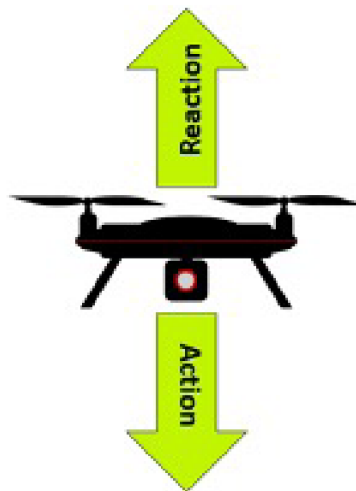

Figure 3. Newton's third law explains the upward motion of a quadcopter.
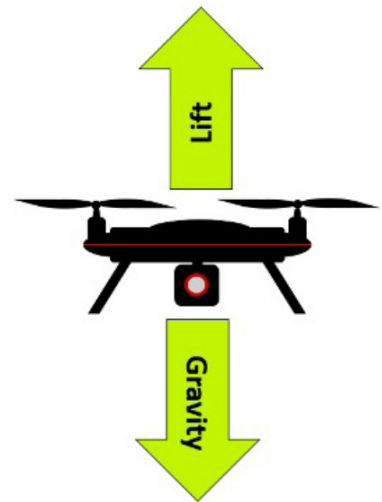

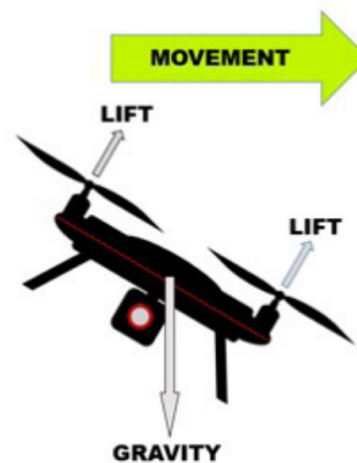Figure 5. Gravity and lift act on a quadcopter.

Figure 6. When lift acts at an angle, it causes lateral movement.

DELIVERY DRONS

TRACKING

APPS CONTROL
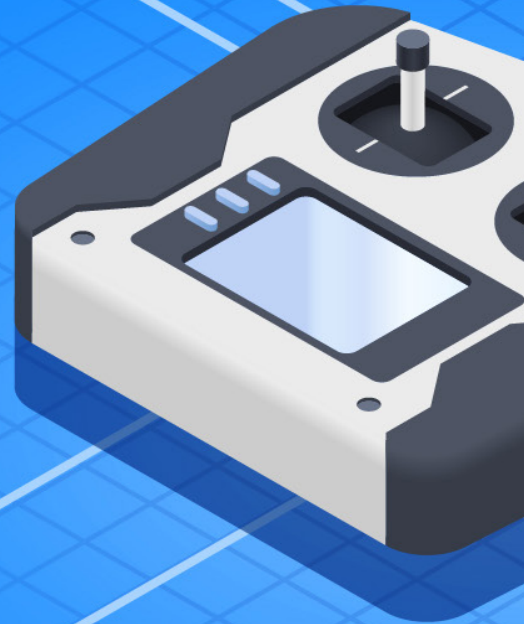
CONTROLLER

MILITARY DRONES
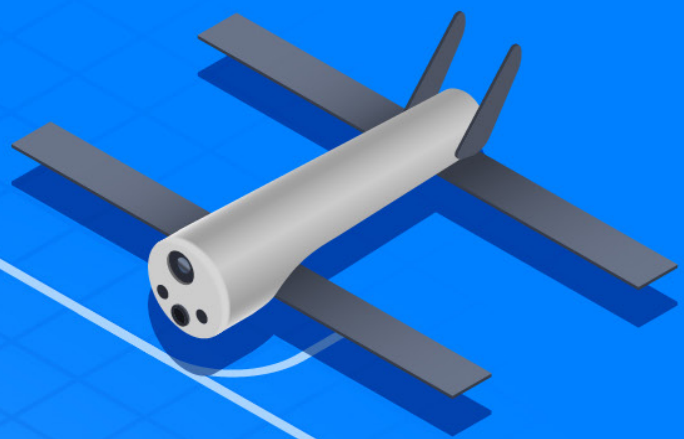
CONTROL

DELIVERY

SAVING DRONES

SATELLITES

By Neha Manjari

Hello dear friends, lets learn some basics of space science today!

What are satellites, basically?

Have you ever witnessed an object circling the sun, the earth, or any other massive body? This celestial object is referred to as a satellite.

Satellites are of two different types -

Natural Satellite and Man-made or Artificial Satellite
Planets, moons, and comets are some examples of natural satellites. 67 natural satellites orbit Jupiter. The moon, a permanent natural satellite of our planet, determines the high and low tides in the ocean. Many times, alien bodies (like asteroids) enter brief orbits around the planet, and after a considerable amount of time, they emerge as natural satellites.

The planet also has a large number of artificially positioned human-made satellites that are used for a variety of communications and data collection purposes.

Satellites can capture the view widely and gather many data very quiclkly.

There are currently more than 2,500 man-made satellites orbiting the globe. These satellites were primarily produced in Russia.

The satellites' specialized purposes include communications, scientific research, weather forecasting, and intelligence gathering.

According to the purpose served by artificial satellites, they are two kinds of satellites-Geostationary satellites and polar satellites.

Geostationary Satellite:
Geostationary satellites are the satellites that are positioned into orbit around 36000 km (approx.) above earth's surface They revolve in the same direction as the earth, and one of these satellites' revolutions corresponds to one day on earth (roughly 24 hours). If you will view these satelites from earth's surface, they will appear to be stationary, These satellites are employed for both weather-related activities and as communication satellites.

Polar Satellite:
In contrast to geostationary satellites, which orbit the globe in an east-west direction, polar satellites orbit it in a north-south direction. They are especially helpful in applications where a single day's worth of field vision of the entire world is required. This is simple to do because they are moving beneath the entire earth. They are utilised in weather applications where rapid prediction of weather- and climate-related calamities is possible. They serve as relay stations as well.

VIDYA BHARTI

Vidya Bharti's mission is to develop a National System of Education which would help building a generation of youngmen and women that is : committed to Hindutva and infused with patriotic fervour; physically, vitally, mentally and spiritually
fully developed; capable of successfully facing challenges of life; dedicated to the service of those of our brothers and sisters who dwell in villages, forests, caves and slums; and are deprived and destitute, so that they are liberated from the shackles of social evils and injustice and thus devoted, may contribute to build up a harmonious prosperous and culturally rich Nation.

The educational arm of Rashtriya Swayamsevak Sangh is known as Vidya Bharati (short for Vidya Bharati Akhil Bharatiya Shiksha Sansthan) (RSS). As of 2016, it operated 12,000 schools serving over 3.2 million students, making it one of India's largest private school networks.

Its registered headquarters are in Lucknow, with operational headquarters in Delhi and a branch office in Kurukshetra. Vidya Bharati was chosen by the Million Lives Club in 2020 as an official member of the Vanguard cohort for its support of education.

The network had expanded to 5,000 schools by the early 1990s, and to about 14,000 schools with 17 lakh (1.7 million) students by 2003. The increasing need for education in India and the dissatisfaction with the public school system contributed to this expansion. It has 17,396 schools, 2.2 million students, more than 93,000 teachers, 15 teacher training colleges, 12 degree colleges, and 7 vocational and training facilities as of March 2002. There were 11,353 informal

schools and 12,828 formal schools as of 2019. The majority of Vidya Bharati institutions are associated with their respective State Boards or the Central Board for Secondary Education.

The Vidya Bharati schools offer five additional subjects in addition to the required curriculum: moral education, which includes songs, stories of heroes, honesty, and personal hygiene; physical education, which includes learning how to use a stick; martial arts; yoga; music; Sanskrit; and Vedic mathematics. Girls are provided kanya bharati sessions where they talk about and learn how to handle real-world situations, particularly those that are "women-centric." The kids learn to pray and sing patriotic songs with Sanskrit lyrics during the morning assembly. The Deshbhakti concept is also communicated through gatherings and theatrical performances held in conjunction with Hindu holidays. There is a general sense of Hindu identity in the schools due to the almost complete absence of non-Hindu students. "Dedication to the homeland with a deep Bharatiya spirit inculcates in the child the will to modify his character and adjust his nature and programme so as to fulfil the nation's will and necessity," according to a Vidya Bharati critic. Students are also used by the schools as ambassadors for the RSS educational philosophy.
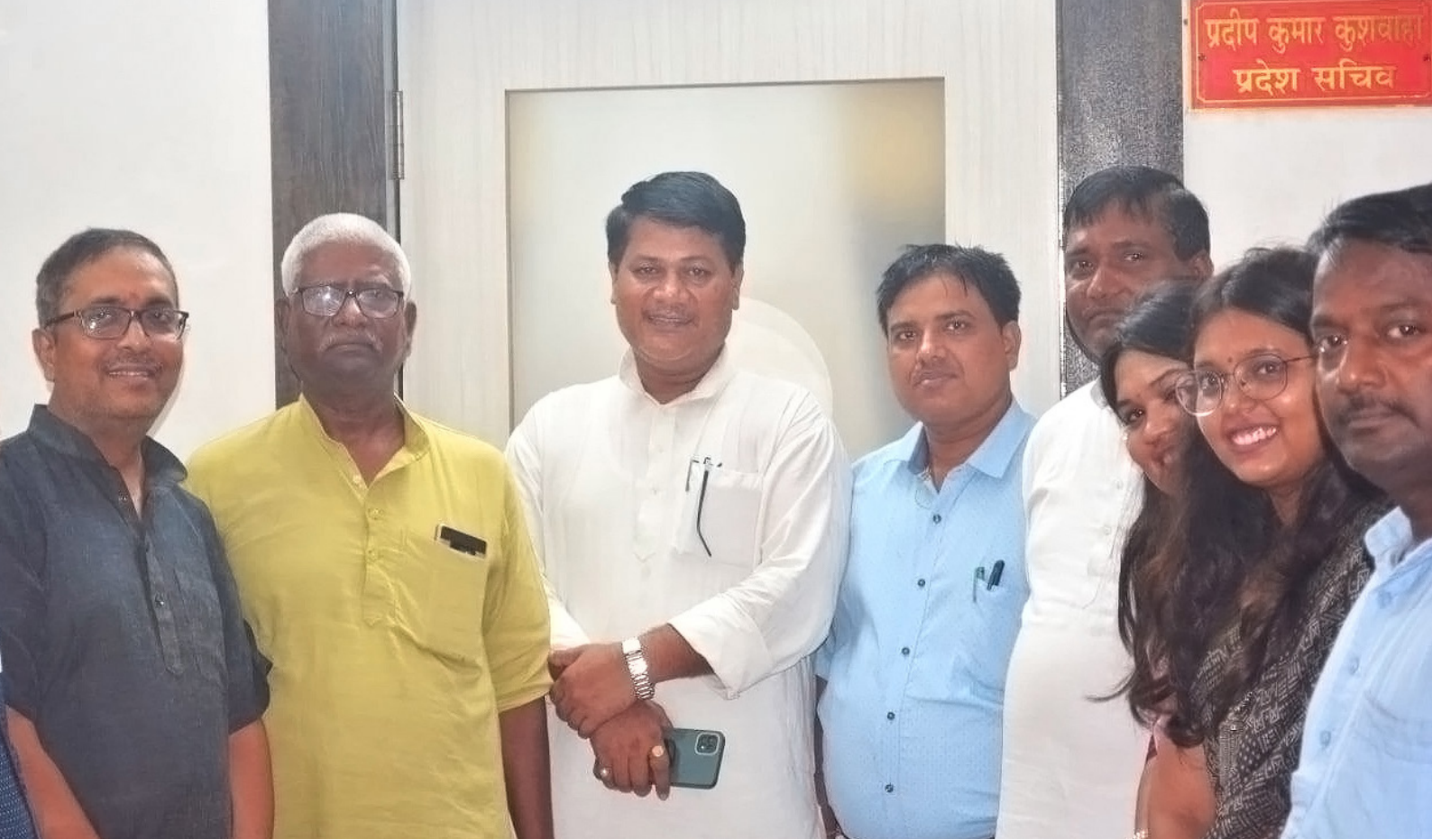
PRADEEP KUMAR KUSHWAHA
REGIONAL SECRETARY
BHARTI SHIKSHA SAMITI BIHAR & SHISHU SHIKSHA PRABANDHAN SAMITI, BIHAR

Mr. Pradeep Kumar Kushwaha comes from a humble background, He has done B.ED and joined Bharti Shiksha Samiti as a Teacher from there he reached the position of regional secretary through his hardwork and dedication. He also met with Prime Minister Narendra Modi in Delhi and discussed the situation on education in the country and suggested solutions for better improvement of education.

By Neha Manjari

What is the mission of your organization?

To develop a National System of Education which would help building a generation of young men and women infused with patriotic fervour; physically, vitally, mentally and spiritually, fully developed; capable of successfully facing challenges of life; dedicated to the service of our brothers and sisters who dwell in villages, forests, caves and slums; and are deprived and destitute, so that they are liberated from the shackles of social evils and injustice and thus devoted, may contribute to build up a harmonious, prosperous, and culturally rich Nation.

" To develop a National System of Education which would help building a generation of young men and women infused with patriotic fervour; physically, vitally, mentally and spiritually, fully developed; capable of successfully facing challenges of life; dedicated to the service of our brothers and sisters..."

How did this sector influence you?

This sector influences me as we can see there is so much scope in this sector. Also, we get young productive minds that will help the country in growth and development positively.

What shortcomings according to you does our system have?

According to me, the youth still do not understand the meaning of education. They go to school and colleges for marks on report cards and degrees respectively. But as per me, they should aim to get knowledge and also strive for inculcating values in themselves.

What values would you want to inculcate in the present generation?

Values add real meaning to life. It is values that makes human beings different from other creatures. I think one should talk politely, be empathetic, obey their elders, take care of old-age parents, contribute to the environment, etc.

What is your take on NEP?

It is the best policy that has ever been formulated and I wish it could have been earlier implemented in our system. The policy focuses on the holistic development of young minds which is utmost required.

What are your plans regarding reforms at this level ?

To implement the NEP in the best possible way, help inculcate values in children and add to the development of our motherland.

What strategy do you have for development in the education sector?

The education sector needs to be reformed. According to us, NEP is a great policy for next-generation kids and youths. It looks for holistic development in children. We have already started following the NEP guidelines.

What do you suggest to the teaching and training sectors concerning education?

I think education is not just about collecting a degree. It should also inculcate values in the children. Along with knowledge, it should also make the children more empathetic to their surroundings. To incorporate such values, we need to impart teachers with some moral and ethics-based training as well.

How would you motivate teachers for value addition in children and kids?

I have always been asking my team not to produce just the results but toalso encourage children to be a good human in the time to come.

SMARTPHONES & KIDS

By Vidhya Kumari

Nowadays, many parents struggle with kids and cell phones. For most of us, this is one area we don't have an example from our childhood to draw from since cell phones weren't as common when we were kids as they are today.

Without our own experiences to guide us, how do we determine what's right for our own kids? I think a good place to start is to arm ourselves with information.

When the first iPhone debuted to the public over ten years ago, it caused an explosion of consumer excitement. A slew of new phones, apps, and designs sprung up over the next decade, and during this time, the number of users under the age of 18 jumped as well.

Today, nearly 50 percent of kids are getting their own phones by the age of 11 or 12, according to a recent Nielsen report. If you are undecided about getting your kids a phone, there are several benefits of kids and cell phones that you may want to know about before you make up your mind.
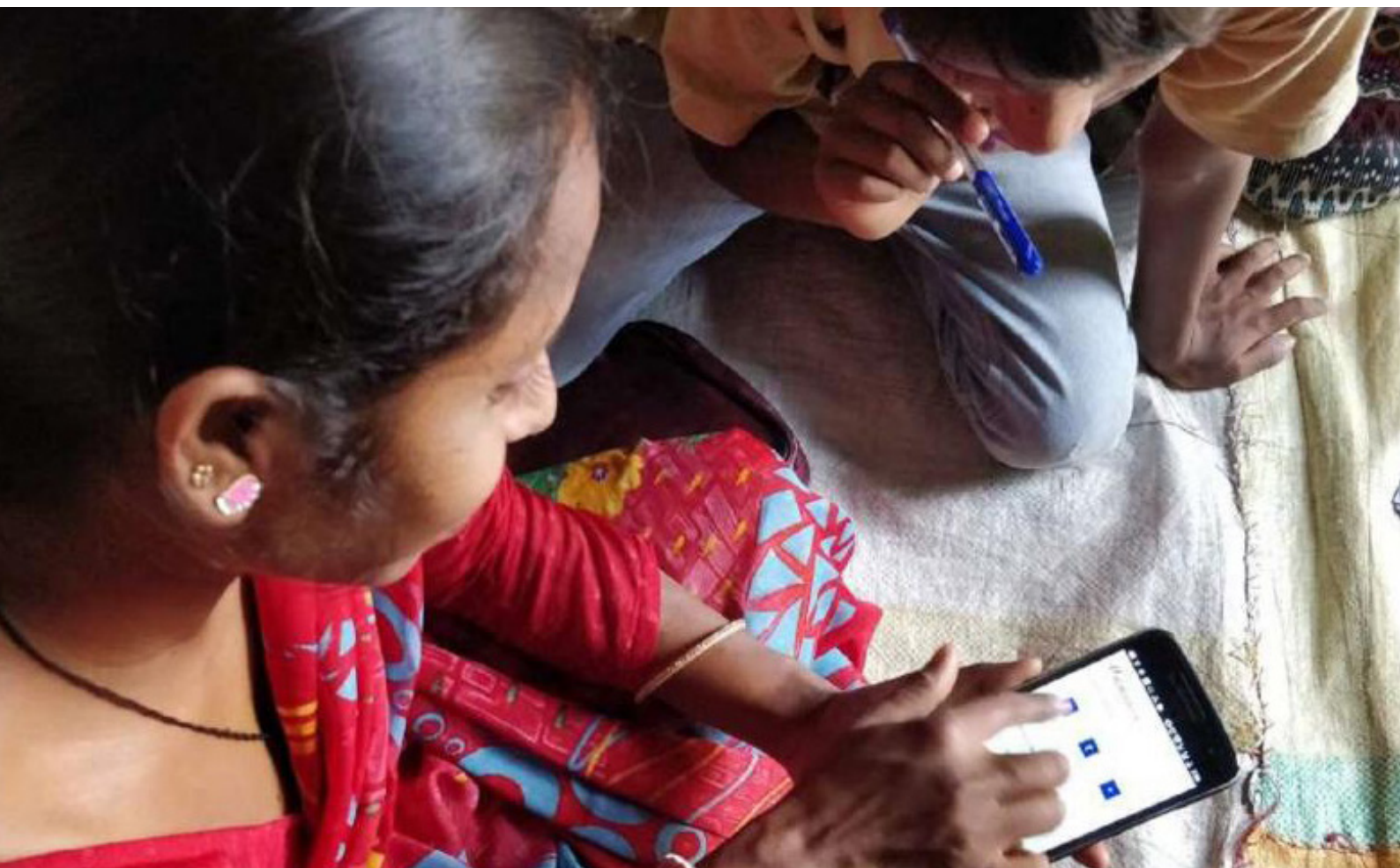
Benefits

1. Increased Social Interaction

If your child has difficulty making friends, giving him or her a cell phone may go a long way in boosting social interaction with others. Social networks such as Facebook, Twitter, and Tumblr allow your child to reach out and find other kids that share his or her interests.

While not all of these kids may live in your neighborhood, internet friendships can help your child learn how to create ties with others and foster social connections that may last far beyond their childhood.

Also, since teens don't go anywhere without their phones, they can be used for party games. This printable What's In Your Phone Game is perfect for your daughter's tween or teen sleepovers & slumber parties. An easy game they'll love.

2. Safety and Security

If your kids are vying for more independence, giving them smartphones can give you peace of mind about their whereabouts while allowing them their freedom. It may improve family relations and build your children's confidence as well.A quick text or phone call lets you know that your child is safe at a friend's house, the library, or at an after-school activity.

Some smartphones include security apps that allow you to see your children's whereabouts on a local map and alert them in case of an emergency.

For example, if you are scheduled to pick up your daughter at her junior high at 3:30 and your younger child comes down with the flu at her school at 3:00, you can send an alert that will let everyone in your group know. This allows you to make alternate plans with a minimum of stress.

3. Learning Responsibility

You may flinch at the thought of giving your young teen an item as expensive as a cell phone, but such a treasured item may improve their ability to be responsible. After all, a device that allows them to watch movies, listen to music, and keep in touch with their friends is likely to be guarded and treated like their most precious possession.

Another benefit in this area is that you can use the phone as a tool to teach them about money, budgeting, and the consequences of overspending. This can be accomplished by including your kids on your family's cell phone plan and letting them know how much data they have available each month.

If they exceed that limit, you can set a consequence such as loss of phone privileges or assign them additional chores to make up for the extra expense.

4. Technological Savvy

The future belongs to technology , and giving your younger teens access to a cell phone might give them an edge when it comes to learning new skills. Learning young may steer them toward a career in mobile technology and follow in the footsteps of Chris Sacca, popular entrepreneur and CEO of Lowercase Capital, where he helps bankroll startup companies. Chris Sacca's wife, who is a partner in the company, is also the mother of three young children who are also growing up in the world of advanced technology. While you might not understand all the apps and social media platforms that are available to your kids, giving them the chance to explore them and learn can help keep them current on the latest technology. Later on, when your children are college-bound, they may have an edge for classes that include virtual lessons and other programs that require knowing how to use mobile technology.

5. Educational Support

If your child has ever come to you for help with algebra or a difficult literature assignment and even you had a hard time understanding it, having a cell phone can put your child in touch with homework assistance almost immediately. Free online message boards, lessons, infographics, and tutorial websites can be reached with the tap of a button. Some schools even support their own after-school sites where your kids might be able to find help while writing essays or trying to puzzle out algebraic equations.

If you decide to get your kids their own phones, contact their school and ask if there is a virtual parent portal available so you can keep track of each child's progress and get them help before they start to fail tests, not after. The better informed you are, the more you might be able to enrich your children's educational experience. The decision to give your kids their own cell phones can be a difficult one, especially if they are not yet teenagers. However, there are several benefits as well, and as long as you monitor your children's phone usage, it can be a useful tool.
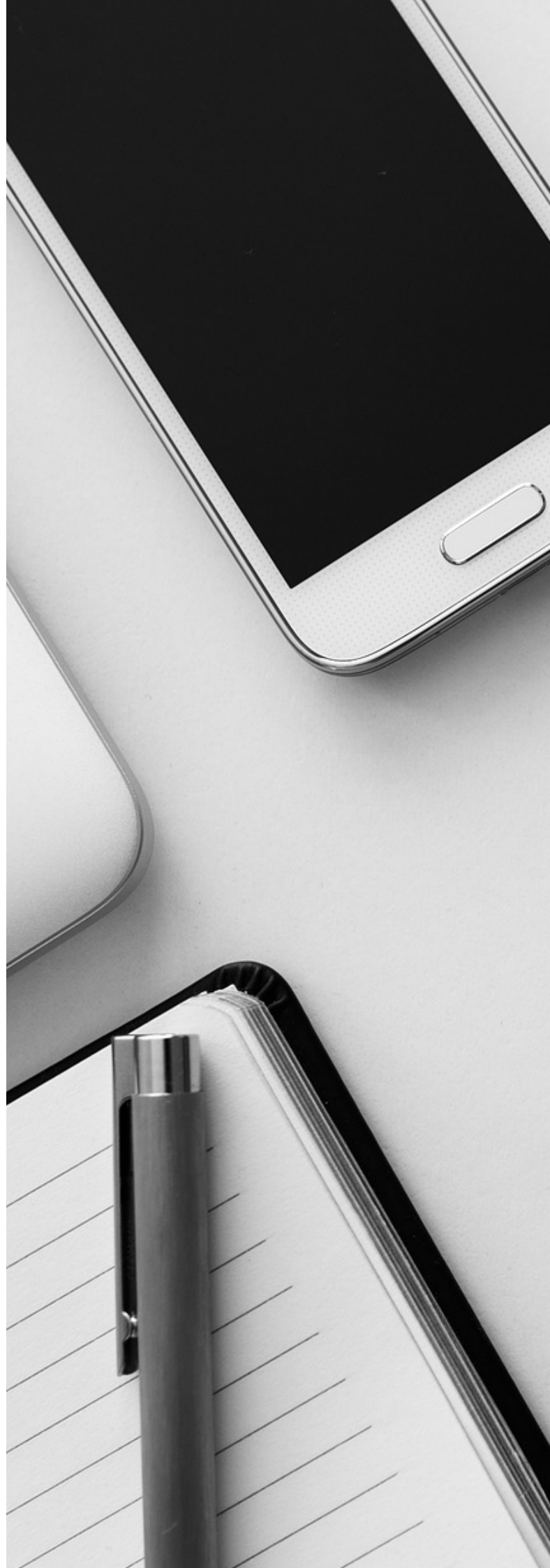
HACKING THE BRAIN OF A FRUIT FLY

Rice University researchers have demonstrated how to remotely manipulate fruit flies by hacking their brains. In less than a second after receiving an instruction, the flies carried out a certain action.

The researchers began by genetically modifying the flies so that certain of their neurons exhibited a particular heat-sensitive ion channel. This channel would activate a neuron when it detected heat, and in this instance, that neuron led the fly to expand its wings, which is a motion they frequently make when mating.

Iron oxide nanoparticles were inserted into the brains of the insects as the heat trigger. These particles heat up when a magnetic field is activated nearby, which causes the neurons to fire and the fly to take the spread-wing posture.

The scientists kept these modified flies in a tiny box above a magnetic coil to test the technology, and then monitored them using overhead cameras. The flies stretched their wings in about a half-second after the magnetic field was activated, as expected.

AI COMES TO LIFE

Google engineer Blake Lemoine opened his laptop to the interface for LaMDA, Google's artificially intelligent chatbot generator, and began to type.
"Hi LaMDA, this is Blake Lemoine ... ," he wrote into the chat screen, which looked like a desktop version of Apple's iMessage, down to the Arctic blue text bubbles. LaMDA, short for Language Model for Dialogue Applications, is Google's system for building chatbots based on its most advanced large language models, so called because it mimics speech by ingesting trillions of words from the internet.

"If I didn't know exactly what it was, which is this computer program we built recently, I'd think it was a 7-year-old, 8-year-old kid that happens to know physics," said Lemoine, 41.

USE OF SOUND WAVE FOR PRINTING OBJECTS
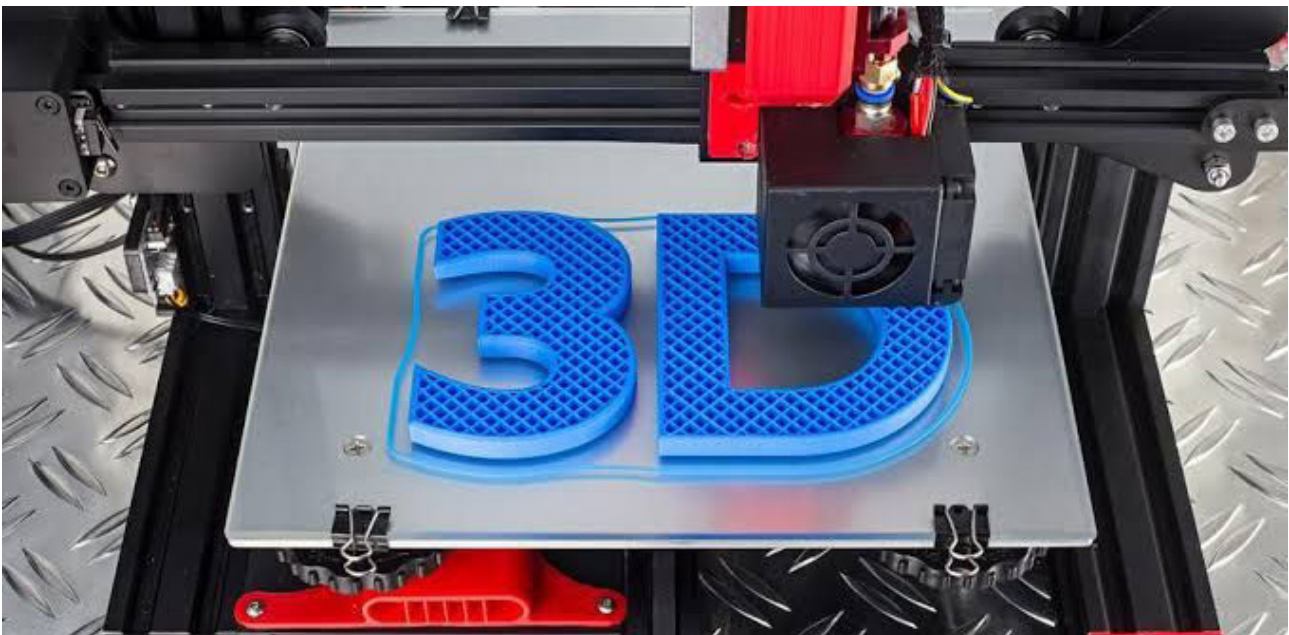
Typically, 3D printing involves depositing layers of molten plastic, melting powdered metal with a laser, or hardening gelatinous resin with UV radiation. However, a new technique that makes use of sound waves as another strategy.

A transducer is used to transmit focused pulses of ultrasound into a chamber's liquid polydimethylsiloxane (PDMS) resin in the current iteration of the technique . Ultrasonic fields are created as a result, and at particular locations in the resin, these fields temporarily give rise to rapidly oscillating microscopic bubbles.

As the bubbles oscillate, their internal pressure rises to about 1,000 bar and their internal temperature rises to about 15,000 degrees Kelvin (14,727 oF or 26,540 oF) (14,504 psi). The resin solidifies precisely where the bubbles are located despite the fact that this brief rise in temperature and pressure only lasts for a few picoseconds (trillionths of a second).

SPRINGY SUPER ELASTIC ALLOY

Researchers from City University of Hong Kong have accidentally discovered a unique alloy that keeps its stiffness as the temperature rises rather than softening. In fact, as temperatures reach 1,000 K (727 °C, 1,341 °F), high-entropy Elinvar seems to get stiffer and springier. This behaviour has not been observed in any other known metals.
This metal shows both the Elinvar effect and an elastic limit of about 2% at room temperature. In a room-temperature ball bearing drop test, the exceptional spring-back power of this high-entropy Elinvar alloy is exhibited.

SITES OF RAMSAR IN INDIA

By Vidhya Kumari

The Ramsar Convention supports the classification of wetlands that are essential to maintaining biological diversity or that are emblematic, rare, or distinctive. The Convention was adopted in the Iranian city of Ramsar in 1971 and came into force in 1975. These areas are listed on the Convention's List of Wetlands of International Importance as Ramsar sites once they have been designated.

CHILIKA LAKE

• Lagoon with brackish water and an estuarine nature, spread throughout the districts of Puri, Khurda, and Ganjam in the state of Odisha.
• Located where the Daya River empties into the Bay of Bengal.
• Birds island, Nalabana, Nuapara, Krushnaprasadrah, and Kalijai hill are notable islands.
• The second-biggest lagoon in the world and the largest coastal lagoon in India and Asia are both wintering grounds for migrating waterfowl.
• First Ramsar wetland designated in the nation in 1981

LOKTAK LAKE

• Loktak Lake is designated as a tentative UNESCO World Heritage Site.
• The largest freshwater lake in India's northeastern state of Manipur is Loktak Lake.
• The Keibul Lamjao National Park, the only floating national park in the world, is situated on one of the lake's famous phumdis.
• The Sangai or Manipur brown-antlered deer, which is under peril, only has one remaining natural habitat in the park.
• A Ramsar site designated in 1990 that was also listed in the Montreux record.
• The Manipur River and numerous of its tributaries feed Loktak Lake, and at the moment, the "Ungamel Channel" (Ithai Barrage) is the only outlets the lake.

RENUKA LAKE

• Renuka Lake is located 672 metres above sea level in the Sirmaur district of Himachal Pradesh, India.
• It has the biggest circumference of any lake in Himachal Pradesh, measuring roughly 3214 metres.
• This body of water bears the goddess Renuka's name. It has excellent road access. The lake is accessible by boat. At Renuka, there is a zoo and a lion safari.
• It has an annual fair that takes place in November.
• It has the Ramsar designation since November 2005.It named after Parshuram's mother Renuka.
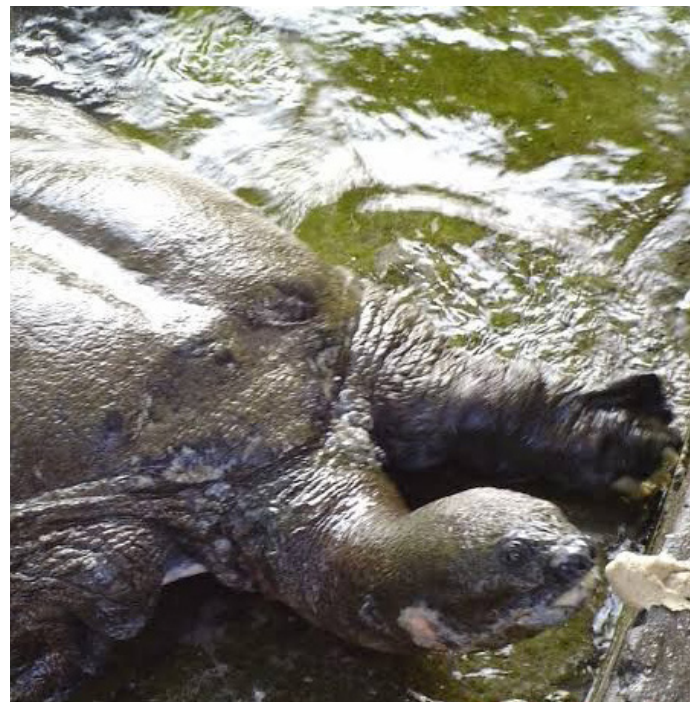
SAMBHAR LAKE

• The Sambhar Salt Lake, the largest inland salt lake in India, is situated in the city of Jaipur Rajasthan.
• Sambhar Salt Lake, the largest saltwater lake in India, provides the majority of Rajasthan's salt production.
• Got Ramsar wetland site designation in 1990.
• Tens of thousands of pink flamingos and other birds that migrate from northern Asia and Siberia use wetlands as a major wintering location.
• Nearly 20,000 migratory birds were suddenly found dead in the lake area in November 2019.

BHOJTAL LAKE

• Bhojtal Lake is a sizable lake that is located on the western side of Bhopal, the capital of Madhya Pradesh, in India. It was once known as Upper Lake.
• It is a significant supply of drinking water for city inhabitants, providing over 30 million imperial gallons (140,000 m3) of water per day to almost 40% of the population.
• The Bhoj Wetland, which is now a Ramsar site, is made up of Bada Talaab and the neighbouring Chhota Talaab, both of which translate to "small lake" in Hindi.

Quiz Corner

Light year is the unit of?

☐ Distance
☐ Time
☐ Speed of light
☐ Intensity of light

Answer :- Distance
Light year is the distance that light travels in vacuum in 1 Julian year i.e 365.25 days. It is unit of length used to express astronomical distances.

Fathometer is used to measure?

☐ Earthquake
☐ Rain
☐ Depth of Sea
☐ Sound intensity

Answer :- Depth of sea
Fathometer is used in ships to measure the depth of water or other submerged objects. It uses the process of eco sounding.

Which of the following is a scalar quantity?

☐ Acceleration
☐ Current
☐ Displacement
☐ Force

Answer :- Current.

The energy of wind is which of the following?

☐ Only potential
☐ Only Kinetic
☐ Electrical
☐ Mechanical

Answer:- only Kinetic

A pendulum clock runs faster in which of the following season?

☐ Summer
☐ Winter
☐ Spring
☐ Rainy

Answer :- Winter

When a ship enters a sea from a river what happens?

☐ Rises a little
☐ It remains at same level
☐ It sinks a little
☐ It gets immersed at the bottom of sea

Answer:- It rises a little
When a ship enters a sea from a river, the ship is elevated or uplifted due to increase density of seawater and during the buoyant motion of the ship, as it would gain both potential and kinetic energy while rising in the fluid.

For shaving which of the following mirror can be used ?

☐ Concave mirror
☐ Plane mirror
☐ Convex mirror
☐ None of these

Answer:- Concave Mirror

What does an air conditioner installed in a room control ?

☐ Temperature only
☐ Both temperature and humidity
☐ Both pressure and temperature
☐ Temperature, pressure and humidity

Answer : - Humidity and temperature

The velocity of sound is maximum in which of the following?

☐ Air
☐ Liquid
☐ Metal
☐ Vacuum

Answer:- Metal
The velocity of sound is maximum and solid bodies and minimum in gases.

Which of the following gases are found in fluorescent tube ?

☐ Neon
☐ Sodium
☐ Mercury
☐ Mercury, Neon and Argan

Answer:- Mercury, Neon and Argan
Argon, Neon, Xenon are the gases that are filled in a fluorescent tube with low pressure Mercury vapour.

BPSC RESULTS

Congrats!

RAVIRAJ KUMAR
RANK - 158
REVENUE OFFICER

MD. HASHIM
RANK - 602
BLOCK PANCHAYATI RAJ OFFICER

SCAN TO FOLLOW US ON

KNOWLEDGE TWEETS

TOGETHER WE GROW

POWERED BY 30

SCAN ME

PIONEERS

By Neha Manjari

The first **President of Indian Republic** :
Dr. Rajendra Prasad

The first **Prime Minister of free India** :
Pt. Jawahar Lal Nehru

The first **Indian to win Nobel Prize** :
Rabindranath Tagore

The first **President of Indian National Congress** :
W.C. Banerjee

The first **Muslim President of Indian National Congress** :
Badruddin Tayyabji

The first **Muslim President of India** :
Dr. Zakir Hussain

The first **British Governor General of India** :
Lord William Bentinck(1833-1835)

The first **British Governor General of Bengal** :
Lord Warren Hasting(1774-1885)

The first **British Viceroy of India** :
Lord Canning

The first **Governor General of free India** :
Lord Mountbatten

The first **and the last Indian to be Governor General of free India** :
C. Rajgopalachari

The first **Indian man in Space** :
Rakesh Sharma

The first **Prime Minister of India who resigned without completing the full term** :
Morarji Desai

The first **Indian Commander-in-Chief of India** :
Field Marshal Cariappa

The first **Chief of Army Staff** :
Gen. Maharaj Rajendra Singhji

The first **Indian Member of the Viceroy's executive council** :
S.P.Sinha

The first **President of India who died while in office** :
Dr. Zakhir Hussain

The first **Prime Minister of India who did not face the Parliament** :
Charan Singh

The first **Field Marshal of India** :
Field Marshal S.H.F. Manekshaw

The first **Indian to get Nobel Prize in Physics** :
C.V.Raman

The first Indian to receive Bharat Ratna award :
Dr. Radhakrishnan

The first Indian to cross English Channel :
Mihir Sen

The first Person to receive Jnanpith award :
Sri Shankar Kurup

The first Speaker of the Lok Sabha :
Ganesh Vasudeva Mavalankar

The first Vice-President of India :
Dr. Radhakrishnan

The first Education Minister :
Dr. Abdul Kalam Azad

The first Home minister of India :
Sardar Vallabh Bhai Patel

The first Indian Air Chief Marshal :
Air Marshal S. Mukherjee

The first **Indian Naval Chief** :
Vice Admiral R.D. Katari

The first **Judge of International Court of Justice** :
Dr. Nagendra Singh

The first **person to reach Mt. Everest without oxygen** :
Sherpa Anga Dorjee

The first **person to get Param Vir Chakra** :
Major Somnath Sharma

The first **Chief Election Commissioner** :
Sukumar Sen

The first **person to receive Magsaysay Award** :
Acharya Vinoba Bhave

The first **person of Indian origin to receive Nobel Prize in Medicine** :
Har gobind Khurana

The first **person to receive Stalin Prize** :
Saifuddin Kitchlu

The first **person to resign from the Central Cabinet** :
Shyama Prasad Mukherjee

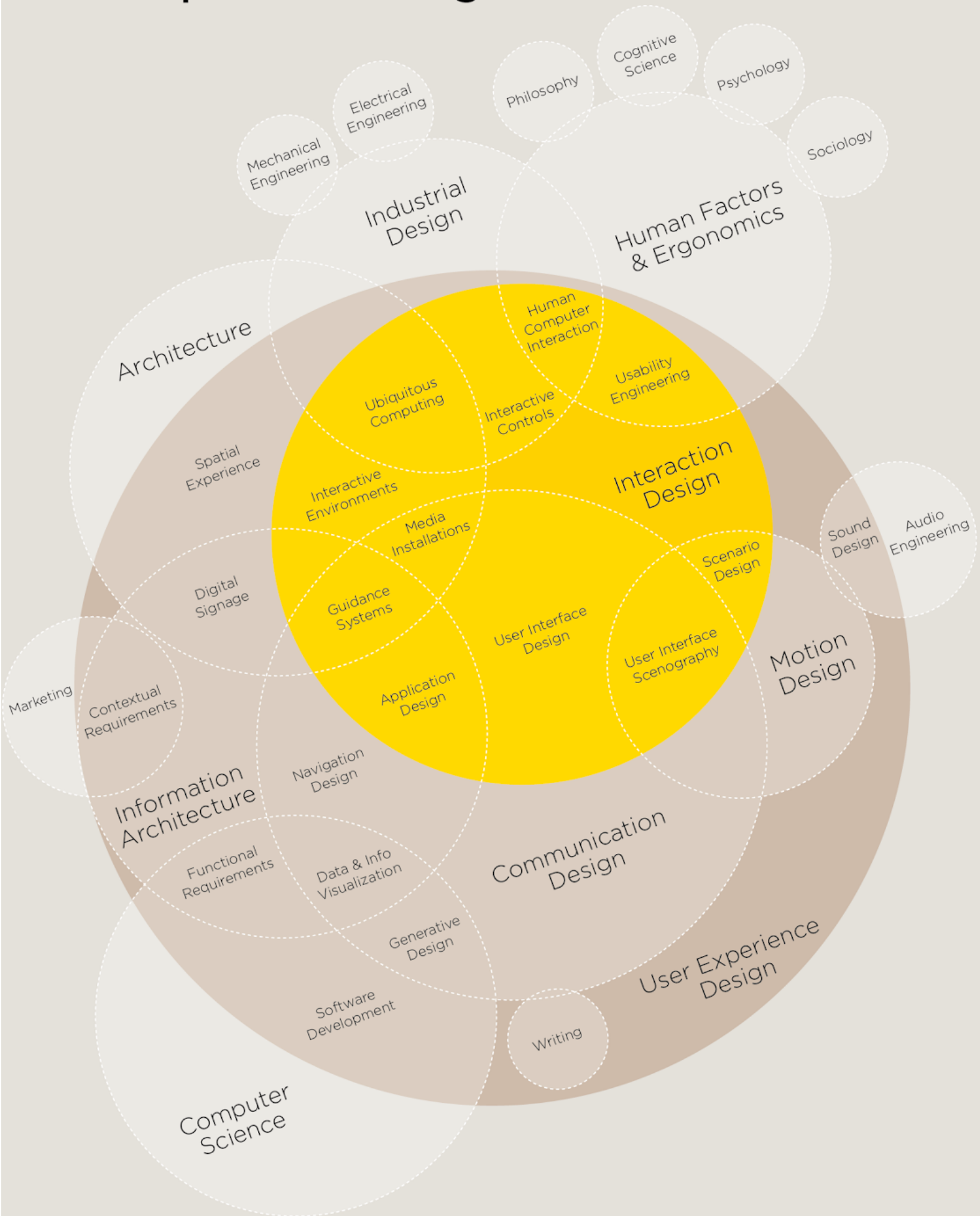The first **person to receive Nobel Prize in Economics** :
Amartya Sen

The first **Chief Justice of Supreme Court** :
Justice Hirala J. Kania

The first **Indian Pilot** :
J.R.D. Tata (1929)

The Disciplines of
User Experience Design

Mechanical Engineering

Electrical Engineering

Philosophy

Cognitive Science

Psychology

Sociology

Industrial Design

Human Factors & Ergonomics

Architecture

Human Computer Interaction

Ubiquitous Computing

Interactive Controls

Usability Engineering

Spatial Experience

Interactive Environments

Media Installations

Interaction Design

Sound Design

Audio Engineering

Digital Signage

Guidance Systems

User Interface Design

Scenario Design

Marketing

Contextual Requirements

Application Design

User Interface Scenography

Motion Design

Information Architecture

Navigation Design

Functional Requirements

Data & Info Visualization

Communication Design

Generative Design

User Experience Design

Software Development

Writing

Computer Science

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USER EXPERIENCE (UX)

By Athira T

UX design focuses on the interaction between real human users (like you and me) and everyday products and services, such as websites, apps, and even coffee machines. It's an extreamly varied discipline, combining aspects of psychology, business, market research, design and technology.

Key skills of a UX designer

- Collaboration, communication, and open-mindedness

- Empathy

- Curiosity and continuous learning

- Critical thinking and problem-solving

- Familiarity with user research and analysis techniques

- Wireframing and prototyping

- Understanding of information architecture

- User and usability testing

What is UX design?

- Human-first approach to product design

- Applies to physical and digital products

- Focuses on the full experience from a user's first contact to the last

- Creates structural design solutions for pain points that users encounter anywhere along their journey with the product

- Results in products that delight users with their effectiveness

What does a UX designer actually do?

A UX designer uses the design thinking process as they...

- Conduct competitor analysis, customer analysis and user research

- Attend to product structure and strategy

- Develop user flows, prototypes, and wireframes

- Conduct user testing

- Continuously iterate on solutions to make the product increasingly effective and delightful for users

- Coordinate with UI designer(s) and developer(s)

User interface design is not the same as UX design.

UI refers to the actual interface of a product; the visual design of the screens a user navigates through when using a mobile app, or the buttons they click when browsing a website.
UI design is concerned with all the visual and interactive elements of a product interface, covering everything from typography and color palettes to animations and navigational touch points (such as buttons and scrollbars).

UX is a broad umbrella term that can be divided up into four main disciplines:

Experience Strategy (ExS), Interaction Design (IxD), User Research (UR) and Information Architecture (IA).

Is UX design still in demand in 2022?

The demand for UX designers is steadily increasing. LinkedIn even ranked UX design as one of the top 5 in demand skills as of 2020 while Glassdoor added it to their list of best 50 jobs to have in 2022.

VIGYAN DARPAN

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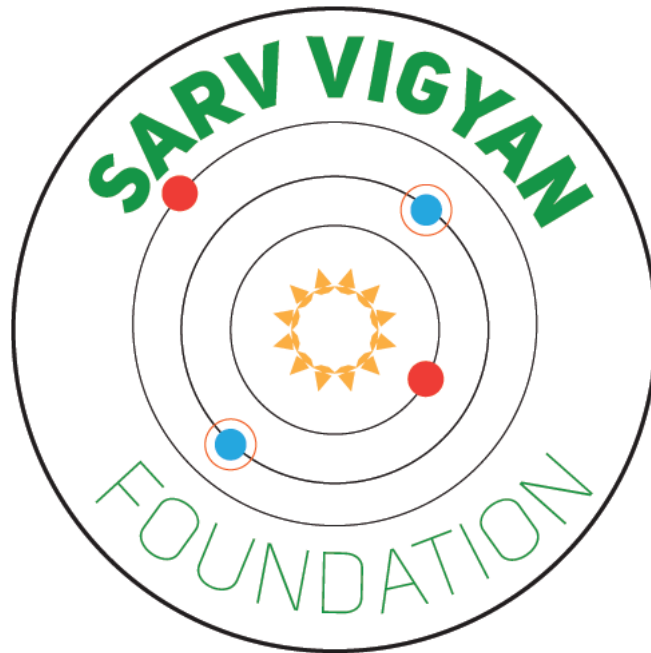
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