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Sign /-
(Dr. S.P. Jagadale, Principal)
(The editor and publisher may not agree with the views expressed in articles.)

Corpse Flower: Facts about the Smelly Plant

The corpse flower (*Amorphophallus titanum*) also known as titan arum, reeks of rotting flesh and death when in bloom. Lucky for us, this stinky plant blooms once every seven to nine years according to the Eden Project and each bloom only lasts 24 to 36 hours.

Not only is the corpse flower one of the smelliest plants on Earth, but it also has the largest collection of flowers (inflorescence) in the world. The unpredictable blooming spectacle makes this enigmatic flower a popular visitor attraction at botanic gardens worldwide. The first corpse flower to bloom outside its native Sumatra was at Kew Gardens UK. in 1889. The putrid-smelling plant has intrigued botanists since it was first scientifically described by Italian botanist Odoardo Beccari in 1878, according to Royal Botanic Garden Edinburgh

Native to the rainforests of Western Sumatra, Indonesia, the corpse flower is listed as “endangered” on the International Union for Conservations of Nature’s (IUCN) Red List of Threatened Plants. There are fewer than 1,000 individuals thought to be left in the wild according to the United States Botanic Garden.

Why Does The Corpse Flower Smell So Bad?

There is a good reason for the plant's strong odor. "It all comes down to science," said Tim Pollak, outdoor floriculturist at the Chicago Botanic Garden. "The smell, color and even temperature of corpse flowers are meant to attract pollinators and help ensure the continuation of the species."

Pollak explained that dung beetles, flesh flies and other carnivorous insects are the primary pollinators of this type of flower. These insects typically eat dead flesh. The smell and the dark burgundy color of the corpse flower are meant to imitate a dead animal to attract these insects.

"Corpse flowers are also able to warm up to 98 degrees Fahrenheit (36.7 Celsius) to further fool the insects," Pollak told Live Science. "The insects think the flower may be food, fly inside, realize there is nothing to eat, and fly off with pollen on their legs. This process ensures the ongoing pollination of the species. Once the flower has bloomed and pollination is complete, the flower collapses."

Pollak wrote on the Chicago Botanic Garden's blogthat analyses show that chemically the stench consists of:

- Dimethyl trisulfide (also emitted by cooked onions and limburger cheese)

- dimethyl disulfide (which has an odor like garlic)
- trimethylamine (found in rotting fish or ammonia)
- isovaleric acid (which also causes sweaty socks to stink)
- benzyl alcohol (a sweet floral scent found in jasmine and hyacinth)
- phenol (sweet and medicinal, as in Chloraseptic throat spray)
- indole (like mothballs)

Corpse Flower Anatomy

The corpse flower is what is called an inflorescence — a stalk with many flowers, according to the University of California Botanical Garden. A mixture of tiny male and female flowers grow at the base of the spadix, the central phallus-like structure, which is surrounded by the spathe, a pleated skirt-like covering that is bright green on the outside and deep maroon inside when opened. If pollinated, the spadix grows into a large club-like head of orange-red seeds.

The plant itself grows to around 10 to 15 feet (3 to 4.6 meters). The plants typically can grow to a massive 8 feet (2.4 m) tall and the leaves can be as big as 13 feet (4 m) wide. According to the Guinness Book of World Records, the tallest bloomwas a corpse flower that measured 10 feet 2.25 inches (3.1 m) tall. It bloomed on June 18, 2010, at Winnipesaukee Orchids in Gilford, New Hampshire.

Corpse Flower Bloom

According to the Eden Project, corpse flowers can take seven to nine years to bloom; some corpse flowers only bloom once every few decades.

Unlike many plants, the corpse flower does not have an annual blooming cycle. The corpse flower only blooms when it has sufficient energy to do so, according to United States Botanic Garden.

The plant's energy is stored in the corm – a swollen stem base typically weighing around 100 lbs. (45 kilograms). The corpse plant has the world's largest known corm, sometimes weighing up to 220 lbs. (100kg). During the non-flowering years, a single leaf, the size of a small tree, shoots up from the corm. This leaf branches out into three sections with each of these sprouting more leaflets. Each year, this shooting leaf dies and a new one grows in its place. After many years, the plant finally gathers enough energy to bloom, and once it does, it can only hold the bloom for 24 to 36 hours before it collapses.

Because the flower stays open and emits its odour for just a few days, it can be quite an exciting event for scientists and botany enthusiasts. These bloomings garner media coverage and large crowds of visitors. In July 2016, the New York Botanical Gardenextended its summer hours so that guests could catch a glimpse of the blooming flower. In June 2021, a corpse flower bloomed at the United Stated Botanic Garden, visitors watched the eventon a live video camera feed posted on the garden’s website.

Once the blooming begins, it occurs in two stages on consecutive nights: essentially a "female" stage and a "male" stage. The female flowers form a ring at the bottom of the spadix (inner tube structure), and the male flowers form a ring around the spadix just above the female flowers.

During the first stage, carrion beetles drawn by the stench of death and human-like body temperatures, creep inside the vase-like structure and unknowingly deposit pollen on

the receptive female flowers. During the second stage, the structure begins to collapse, the "fragrance" fades and the insects begin to head out. As they leave, the beetles rub up against the pollen in the male flowers and are now ready to carry the pollen to a nearby female flower.

Corpse Flower Name

The scientific name of the corpse flower is *Amorphophallus titanum.* According to Gustavus Adolphus College, the name is from the Latin words amorphos (without form, misshapen), phallos (penis) and titanum (giant).

The corpse plant is also known as the titan arum, said Ross Koning, a professor of biology at Eastern Connecticut State University (ECSU). According to the UC Botanical Garden, British naturist and television producer Sir David Attenborough first used the name titan arum in the BBC series "The Private Lives of Plants" because he thought viewers might be offended by the plant's Latin name. The corpse flower is in the Aroid subfamily of flowering plants. Relatives include the common duckweed, skunk cabbage, calla lily and Jack-in-the-pulpit.

ECSU has two genotypes (genetically different individuals) of corpse flower. "Our genotype known locally as Rhea has bloomed many times since 2008," said Koning. "Rhea has larger inflorescence parts and a much stronger scent than our other genotype, known locally as Hyperion."

Conservation Status

The corpse flower is classified as "endangered" on the International Union for Conservation of Nature's (IUCN) Red List of Threatened Plants.

According to the ICUN, the wild copse flower population is severely fragmented and has declined by 50% in the last three generations (90 to 150 years). The main threat is habitat loss and destruction. Botanic gardens around the world are playing a crucial role in the conservation of the corpse flower.

According to the ICUN, since the plant was first cultivated in the late 1800s, it has been grown in 18 countries across the world in over 90 botanic gardens. The corpse flower has successfully flowered outside of its native habitat around 100 times.

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Article by
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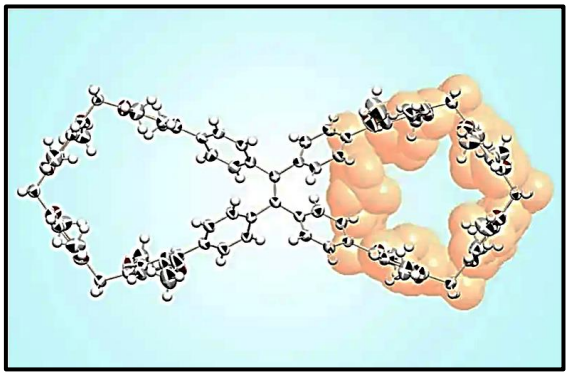
Scientists Made a Bow Tie-Shaped Molecule and It Changes Color



Looking smart

Huan Cong, Technical Institute of Physics and Chemistry, China

Chemists have constructed a bow tie-shaped molecule that changes colour under different conditions. It could be used to monitor toxic chemicals in air.

Huan Cong at the Technical Institute of Physics and Chemistry in China and his colleagues assembled the substance, which they call Bowtie Arene, by connecting two pentagon-shaped molecules called pillararenes. The two pillararenes were joined by a fluorescent molecule called tetraphenyl ethylene that formed the "knot" of the bow tie.

When they mixed individual bow tie molecules together, their electron interactions caused them to stack neatly on top of each other in a herringbone-like arrangement. The resulting orderly crystals interacted with light to produce blue fluorescence.

In contrast, when the researchers broke these ordered structures apart, either by mechanically grinding or scratching the crystals or dissolving them in liquid, the separated bow ties emitted green or yellow fluorescence.

Next, the team showed they could make the bow ties blue again by exposing them to the vapour of a chemical called xylene, which pulled the individual molecules back into an orderly arrangement.

This colour-switching property could be used to make sensors that detect toxic chemicals in the air or reveal when mechanical forces are present, says Cong. His team is currently designing different versions of the bow tie molecule to detect a range of different chemicals.

This isn't the first time that chemists have made molecules with wacky shapes. They have also assembled molecules in the shape of churches, houses, Japanese pagodas, baskets, bird cages, and Olympic rings.

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Article by

Miss. Namrata Gandhi

Department of Chemistry

Rights of the Hawkers under the Constitution of India

Street vendors are essentially traditional salesmen who use marketing tactics, particularly sales tactics, to boost their sales. Their marketing techniques vary from product to product, but occasionally they also vary from location to location and region to region.

Street hawkers are an excellent example of traditional salesmen. Traditional salespeople are those salespeople that solely sell things to make money, steer clients by personal self-interest, and want recognition for their efforts.

Hawkers play an important role in the urban economy. The majority of the population relies on hawkers for low-cost goods and services. Hawking contributes significantly to the informal sector and provides opportunities for entrepreneurship and self-employment. It is not only regarded as a source of self-employment for the poor in cities, but also as a 'affordable' and 'convenient' source of income for the majority of the urban population.

Rights of the Hawkers under the Constitution of India:

The Indian Constitution is a social document, and the majority of its provisions are aimed at promoting equality, justice, fraternity, and liberty by establishing the favorable conditions required for their attainment.

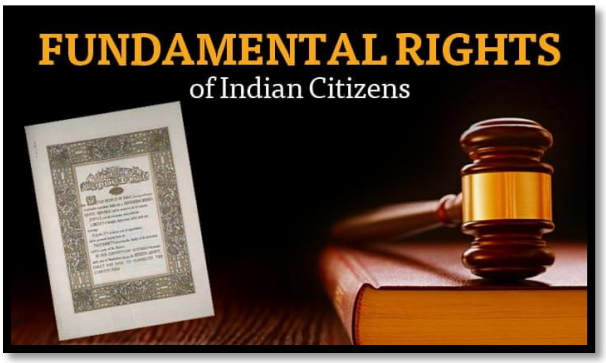
Right to equality:

Article 14 of the Indian Constitution guarantees the right to equality, stating that the state shall not deny any person, citizen or non-citizen, 'equality before the law' and 'equal protection of the law.' At the same time, it ensures that the same law is not equally applicable to all people because no two people are the same by nature, attainment, or circumstance. The varying needs of different classes of people frequently necessitate different treatment, and the government provides special protection to any special class of citizen by applying reasonable classification. Hawkers require special protection as a class in society because of their profession.

Right to Practice any Profession or to Carry on any Occupation, Trade or Business:

The court ruled that hawkers have a fundamental right to conduct business on public streets, but that this right should be regulated. Proper regulation, on the other hand, is a necessary condition, as otherwise the very purpose of laying out roads to facilitate traffic may be defeated, and thus the right to practice any profession or to carry on any occupation, trade, or business as mentioned in Article 19(1)(g) of the Indian Constitution cannot be denied to hawkers on the grounds that the streets are only for passing or re-passing and no other use is permitted.

Judicial Pronouncement on the Rights of the Hawkers in India:



"Street trading, as a fundamental right, must be made available to citizens in accordance with Article 19(6) of the Indian Constitution." Any law imposing reasonable restrictions in the interest of the general public is within the purview of the state. This can be accomplished through an enactment, similar to what is done in England, or through any other law permissible under Article 19(6) of the Indian Constitution. Despite the Apex Court's repeated suggestions, nothing has been done in response. Because a citizen has no right to choose a specific location in any street for trading, it is up to the State to designate the streets and mark the locations from which street trading can take place.

Government Policies on the Rights of the Hawkers in India:

The Government of India issued a National Policy on Urban Street Vendors, keeping in mind the interests of the hawkers and the orders issued by the Court in its various judgments. Although national policy is essentially a statement of the government's intent and lacks the legal "teeth" that a law has in order to be ratified at the state level and give effect to cities, the Supreme Court's decision reinforced the need for state and local governments to implement binding laws based on national policy.

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Article by
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Cyber Crimes

Any criminal activity carried out over the internet is referred to as cybercrime. With 4.5 million attacks in July 2020, India was the country with the highest number of attacks, making it vital to raise awareness about cybercrime.

The first incident of cybercrime was documented in 1973. A computer was used by a teller at a New York bank to pilfer over two million dollars. The first email spam was sent in 1978.

What is the Definition of Cyber Crime?

Let us start with the definition of cybercrime. Cybercrime refers to criminal conduct committed with the aid of a computer or other electronic equipment connected to the internet. Individuals or small groups of people with little technical knowledge and highly organized worldwide criminal groups with relatively talented developers and specialists can engage in cybercrime.

Cybercriminals or hackers who want to generate money, commit a majority of cybercrimes. Individuals and organizations are both involved in cybercrime. Aside from that, cybercriminals might utilize computers or networks to send viruses, malware, pornographic material, and other unlawful data.

To make money, cybercriminals engage in a range of profit-driven criminal acts, including stealing and reselling identities, gaining access to financial accounts, and fraudulently utilizing credit cards to obtain funds.

Examples of Basic Cyber Crimes

1. **Stolen credit card information:** The most common cybercrime is when a person's credit card information is stolen and used unlawfully to acquire or purchase goods or services over the internet.
2. **Hacking into a government website:** Another type of cybercrime is tampering with sensitive government data.
3. **Theft of user accounts:** Yahoo experienced a serious data breach from 2013 to 2016 that resulted in the theft of three billion user accounts. The attackers gained access to private information and passwords that were used to access user accounts in other online services. Most of this data is available even today on the dark web.
4. **Compromised IoT devices:** In 2016, over one million connected devices in the IoT were compromised by attackers who took advantage of existing software vulnerabilities. It is the largest DDoS attack to date and one that caused outages in the global DNS affecting popular services including Netflix, PayPal, Twitter, and many more.
5. **Loss of control and access to content:** The WannaCry attack, which was allegedly launched by North Korea, in 2017, unleashed ransomware that locked down content on user devices. This ransomware rapidly spread itself and infected

300,000 computers worldwide. The victims had to pay hundreds of dollars to restore their data.

6. **Phishingcampaigns:** The phishing campaigns infiltrate corporate networks by sending authentic-looking fraudulent emails to users in an organization and tricking them into performing actions such as downloading attachments or clicking on links**.** The viruses or malware then spreads to the systems, and, eventually, ends up in the organizations' networks.

Some other common examples of cybercrimes include the sale of illegal items, such as drugs, arms, or counterfeit goods, illegal gambling, solicitation, production, distribution, or possession of child pornography, etc.

How to Prevent Cyber Crimes?

- **Backup all data, system, and considerations:** This enables data stored earlier to assist businesses in recovering from an unplanned event.
- **Enforce concrete security and keep it up to date:** Choose a firewall with features that protect against malicious hackers, malware, and viruses. This enables businesses to identify and respond to threats more quickly.
- **Never give out personal information to a stranger:** They can use the information to commit fraud.
- **Check security settings to prevent cybercrime:** A cyber firewall checks your network settings to see if anyone has logged into your computer.
- **Using antivirus software:** Using antivirus software helps to recognize any threat or malware before it infects the computer system. Never use cracked software as it may impose the serious risk of data loss or malware attack.
- **When visiting unauthorized websites, keep your information secure:** Using phishing websites, information can easily bypass the data.
- **Use virtual private networks (VPNs):** VPNs enable us to hide our IP addresses.
- **Restriction on access to your most valuable data:** Make a folder, if possible, so that no one can see confidential documents.

Article by -
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Ocean Acidification

Global temperature rise has not only affected the surface, but it is the main cause of ocean acidification. Our oceans absorb about 30% of carbon dioxide that is released into the Earth's atmosphere. As higher concentrations of carbon emissions are released thanks to human activities such as burning fossil fuels as well as effects of global climate change such as increased rates of wildfires, so do the amount of carbon dioxide that is absorbed back into the sea. The smallest change in the pH scale can have a significant impact on the acidity of the ocean. Ocean acidification can have a ripple effect across marine ecosystems and species, its food webs, and provoke irreversible changes in habitat quality. Once pH levels reach too low, marine organisms such as oysters, their shells and skeleton could even start to dissolve.

However, one of the biggest environmental problems from ocean acidification is coral bleaching and subsequent coral reef loss. This is a phenomenon that occurs when rising ocean temperatures disrupt the symbiotic relationship between the reefs and algae that lives within it, driving away the algae and causing coral reefs to lose their natural vibrant colours. Some scientists have estimated coral reefs are at risk of being completely wiped by 2050. Higher acidity in the ocean would obstruct coral reef systems' ability to rebuild their exoskeletons and recover from these coral bleaching events. Some studies have also found that ocean acidification can be linked as one of the effects of plastic pollution in the ocean. The accumulating bacteria and microorganisms derived from plastic garbage dumped in the ocean to damage marine ecosystems and contribute towards coral bleaching.

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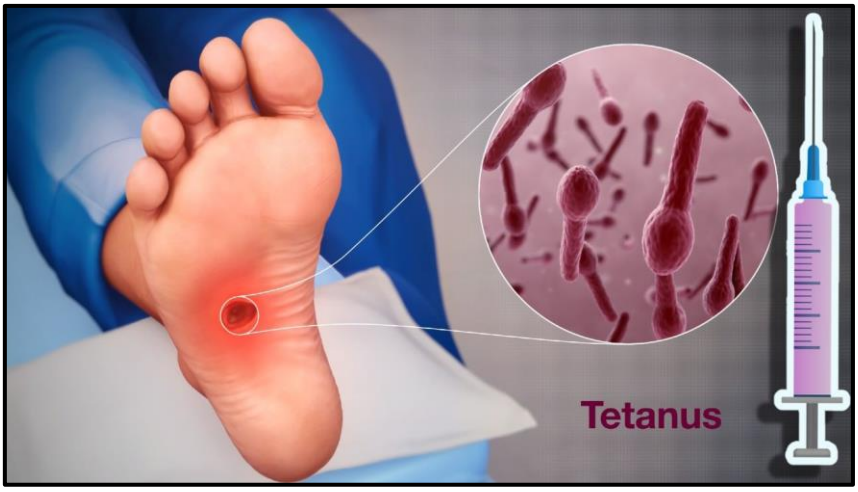
Article by -

Mr. Aniruddha V. Sutar

Department of Environment Science

Clostridium tetani- Tetanus



Tetanus is an acute infectious disease caused by spores of the bacterium *Clostridium tetani*. The spores are found everywhere in the environment, particularly in soil, ash, intestinal tracts/feces of animals and humans, and on the surfaces of skin and rusty tools like nails, needles, barbed wire, etc. Being very resistant to heat and most antiseptics, the spores can survive for years. Anyone can get tetanus, but the disease is particularly common and serious in newborn babies and pregnant women who have not been sufficiently immunized with tetanus-toxoid-containing vaccines. Tetanus during pregnancy or within 6 weeks of the end of pregnancy is called "maternal tetanus", and tetanus within the first 28 days of life is called "neonatal tetanus".

The disease remains an important public health problem in many parts of the world, but especially in low-income countries or districts, where immunization coverage is low, and unclean birth practices are common. Neonatal tetanus occurs when nonsterile instruments are used to cut the umbilical cord or when contaminated material is used to cover the umbilical stump. Deliveries carried out by people with unclean hands or on a contaminated surface are also risk factors.

Symptoms and Diagnosis

The incubation period of tetanus varies between 3 and 21 days after infection. Most cases occur within 14 days.

Symptoms can include:

- jaw cramping or the inability to open the mouth
- muscle spasms often in the back, abdomen and extremities
- sudden painful muscle spasms often triggered by sudden noises
- trouble swallowing
- seizures
- headache
- fever and sweating
- changes in blood pressure or fast heart rate.

In neonatal tetanus, symptoms include muscle spasms, which are often preceded by the newborn's inability to suck or breastfeed, and excessive crying.

Tetanus is diagnosed on the basis of clinical features and does not require laboratory confirmation. The WHO definition of a confirmed neonatal tetanus case is an illness occurring in an

infant who has the normal ability to suck and cry in the first 2 days of life, but who loses this ability between days 3 and 28 of life and becomes rigid or has spasms.

Treatment

Tetanus is a medical emergency requiring:

- care in the hospital
- immediate treatment with medicine called human tetanus immune globulin (TIG)
- aggressive wound care
- drugs to control muscle spasms
- antibiotics
- Tetanus vaccination.

People who recover from tetanus do not have natural immunity and can be infected again, and therefore need to be immunized.

Prevention

Tetanus can be prevented through immunization with tetanus-toxoid-containing vaccines (TTCV), which are included in routine immunization programmes globally and administered during antenatal care contacts.

To be protected throughout life, WHO recommends that an individual receives 6 doses (3 primary plus 3 booster doses) of TTCV. The 3-dose primary series should begin as early as 6 weeks of age, with subsequent doses given with a minimum interval of 4 weeks between doses. The 3 booster doses should preferably be given during the second year of life (12–23 months), at 4–7 years of age, and at 9–15 years of age. Ideally, there should be at least 4 years between booster doses.

There are many kinds of vaccines used to protect against tetanus, all of which are combined with vaccines for other diseases:

- Diphtheria and tetanus (DT) vaccines
- Diphtheria, tetanus, and pertussis (whooping cough) (DTaP) vaccines
- Tetanus and diphtheria (Td) vaccines
- Tetanus, diphtheria, and pertussis (Tdap) vaccines

Neonatal tetanus can be prevented by immunizing women of reproductive age with TTCV, either during pregnancy or outside of pregnancy. Additionally, robust medical practices can also prevent tetanus disease including clean delivery and cord care during childbirth, and proper wound care for surgical and dental procedures.

In countries where national programmes have maintained high immunization coverage for several decades, tetanus incidence rates are very low.

References

World Health Organization

Article by:
Miss. Priyanka Salvi
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Integrated Circuit

What is an Integrated Circuit (IC)?

Before the discovery of ICs, the basic method of making circuits was to select the components like diodes, transistors, resistors, inductors and capacitors and connect them by shouldering. But due to size and power consumption issues, it was necessary to develop a small size circuit with less power consumption, reliability and shockproof.

After the invention of the semiconductors and transistors, things were quite simplified to a particular extent, but the development of integrated circuits changed electronics technology's face. Jack Kilby from Texas Instruments and Bob Noyce from Intel are the official creators of integrated circuits, and they did it independently.

The integrated circuit is a fundamental concept of electronics that builds on other basic concepts previously discussed in our syllabus. Therefore, for a quick reference, go through the articles listed below:

- Electric Circuits
- Resistors
- Transistors
- Diodes
- Capacitors

Definition of Integrated Chip

Integrated circuits are made up of several components such as R, C, L, diodes and transistors. They are built on a small single block or chip of a semiconductor known as an integrated circuit (IC). All of them work together to perform a particular task. The IC is easily breakable, so to be attached to a circuit board, it is often housed in a plastic package with metal pins.

Integrated circuits can function as an oscillator, amplifiers, microprocessors or even as computer memory.

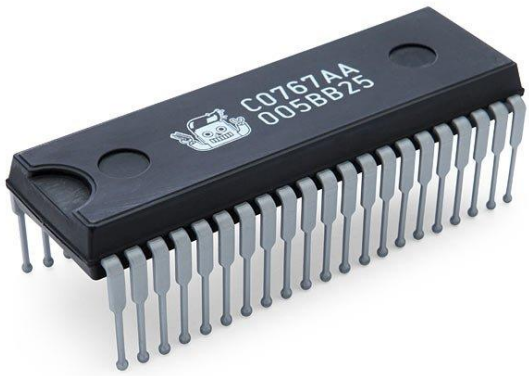
Integrated Circuit Design

An integrated circuit is created using certain logic methods and circuit layouts. The two categories of IC design are as follows:

- **Analog Design**
- **Digital Design**
- **Mixed Design**

Digital Design

The digital design approach is used to create integrated circuits (ICs), which are utilised as computer memories (such as RAM and ROM) and microprocessors. With this approach to design, the circuit density and overall efficiency are both maximised. The ICs created with this technique operate with binary input data like 0 and 1. The process for designing digital integrated circuits is depicted in the diagram below.



Integrated Circuit Features

Construction & Packaging

ICs are built with semiconducting components such as silicon. Because of the small size and delicate nature of IC, a series of tiny gold and aluminium wires are joined together and moulded into a flat block of plastic or ceramic. Metal pins on the block's exterior link to cables inside. The solid block stops the chip from overheating and keeps it cool.

Size of an IC

The size of the integrated chip varies between 1 square mm to more than 200 mm.

Integration of an IC

Because they combine various devices on one chip, integrated chips get their name. A microcontroller is an integrated circuit (IC) that combines a microprocessor, memory, and interface into a single unit.

Commonly Used ICs

Logic Gate ICs

The combinational circuit generates logical outputs based on a variety of input signals. It may only have two to three inputs but one output.

Timer ICs

A Timer IC is produced with accurate timing cycles with a 100 % or 50 % duty cycle.

Operational Amplifiers

An OpAmp or an Operational Amplifier is a high gain voltage amplifier with a differential input and a single-ended output.

Voltage Regulators

A voltage regulator IC provides a constant DC output irrespective of the changes in DC input.

Article by:
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'Turtle Conservation Festival' – At Velas

Lepidochelys olivace is the botanical name for the olive ridley turtle. It is one of the smallest sea turtles, reaching a maximum size of 80 cm and weighing less than 50 kg. The carapace of the olive ridley is heart-shaped and olive green in colour. Males and females are the same size when they reach adulthood. Females' carapaces, on the other hand, are a little more rounded. Each flipper has one or two claws, and the olive ridley turtle has five to nine pairs of costal scutes. Olive ridley turtles achieve sexual maturity at a young age when compared to other sea turtles, at around 15 years of age. Many females lay their eggs each year, and some even do it twice. They lay 100-110 eggs in clutches that hatch in 45 to 65 days. The nesting female leaves 70-80 cm wide track tracks with uneven forelimb impressions. The Endangered Species Act safeguards olive ridley turtles. All other olive ridleys are designated as threatened, with the exception of the breeding colony on Mexico's Pacific coast.

The IUCN Red List status of the Ridley Turtle is Vulnerable, making its conservation critical. Marine turtles are on the endangered species list. NGOs and Maharashtra's wild life department have stepped in to aid with the conservation because they recognize the importance of their preservation and protection. Two of the most important locations where Olive Ridley Turtles lay their eggs have been designated as protected areas as part of this programme. As a result, the turtle conservation campaign at Velas and Anjarle has been so effective that Velas is now responsible for 40% of all egg hatching and turtles returning to the sea in the Konkan Area. During the period when the eggs begin to hatch, the Velas and Anjarle turtle festivals are two of the most important festivities.

Velas Turtle Festival

This isn't simply another animal festival, nor is it one where turtles are paraded or shown. It's a festival where you can see baby Ridley turtles on their first critical journey. Yes, it is their first critical baby steps as they crawl towards the open sea. This is especially essential for young female turtles, as once they reach adulthood, they return to the same beach where they were born to lay their eggs, which can take up to 15 years. However, As the mother abandons the eggs on the beach to hatch, they become prey to predators such as dogs, mongoose, and even people, putting the species in jeopardy.

Organizing Velas Turtle Festival

These juvenile turtles live to return to their nesting locations because to the Sahyadri Nisarga Mitra's tremendous efforts to save the Olive Ridley Turtles, as well as the natural beauty of this community that shares India's wide coastline.

Every year, Sahyadri Nisarga Mitra organizes the Velas Turtle Festival.Newly hatched sea turtle hatchlings are released into the water during the Velas Turtle Festival. The Velas Turtle Festival is one of the year's most popular and talked-about events in and around Mumbai, with hundreds of

nature enthusiasts and photographers eagerly anticipating its start. The Kaasav was founded by the Sahyadri Nisarga Mitra with the active participation of local villagers from Velas.

Olive Ridley Turtle Conservation

Over a decade, the Velas Turtle Conservation Centre, with the cooperation of local villages, has greatly aided Velas turtle conservation efforts in turtle hatching. The working module is straightforward and simple to understand. During nesting season, the people keep vigil 24 hours a day, seven days a week. A hatchery has been constructed for the secure storage of the deposited eggs. The eggs are gathered after the female turtle lays its eggs and incubated for 45-60 days. These newborn turtles make their first excursion to the sea after hatching. Festival of Turtles Every Turtle Festival, the Sahyadri Nisarga Mitra has collaborated with the communities to help save and preserve Olive Ridley turtles, which are rapidly becoming extinct. The Velas Turtle Conservation Project is a non-profit organization dedicated to preserving the turtles of the Velas Islands. Every year between February and April, the Velas Turtle Festival is held. Velas' locals offer to provide home-stay accommodations to the eager tourists who visit the village every year. About 15 families agreed to provide homestay for travellers arriving for this year's festival, according to the organizers. The level of warmth and hospitality shown by visitors is simply overwhelming. The residents make certain that their visitors have no troubles when they are staying in the village for the event.

Hundreds of people watch turtle hatchlings being released into the water during this two-day ceremony. Hatchlings emerge from their nests on the beach and begin creeping towards the water. Approximately 600-700 new turtles are released into the water each year. In general, 600-700 new lives are permitted to begin.

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