Shripatrao Chongule Arts and Science College.



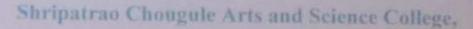


Malwadi - Kotoli Tal - Panhala, Dist - Kolhapur

Science Exhibition Model List 2023-2024

Sr.No	Department Name	Model Name
1	Botany	1.Phytoremedation
		2. Photosynthesis
2	Physics	1.Water alarm
		2.Hadroelectricity
		3. Chandryan
3	Electronics	1.Smart irrigation system
3	A MARCHAN	2. Smoke detector
		3. Alcohol detector
4	Microbiology	1.Bioplastic
		2. Edible bacterial model
5	Mathematics	1.Application of vedic maths
6	Chemistry	1.Foggy amine
		2.Acid rain
		3.Chemical blood
7	Zoology	1.DNA Structure model
8	Computer Science	1.Parts of computer
1	THE RESERVE	2.Types of computer

Shripatrao Changute Aris and Wade Kotol Science Coll. Tal. Pank





Tal - Panhala, Dist - Kolhapur

Department of Physics

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Water Alarm Project

Date: 28th February2024

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation : Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To generate awareness about Water Alarm system & encourage student for scientific research.

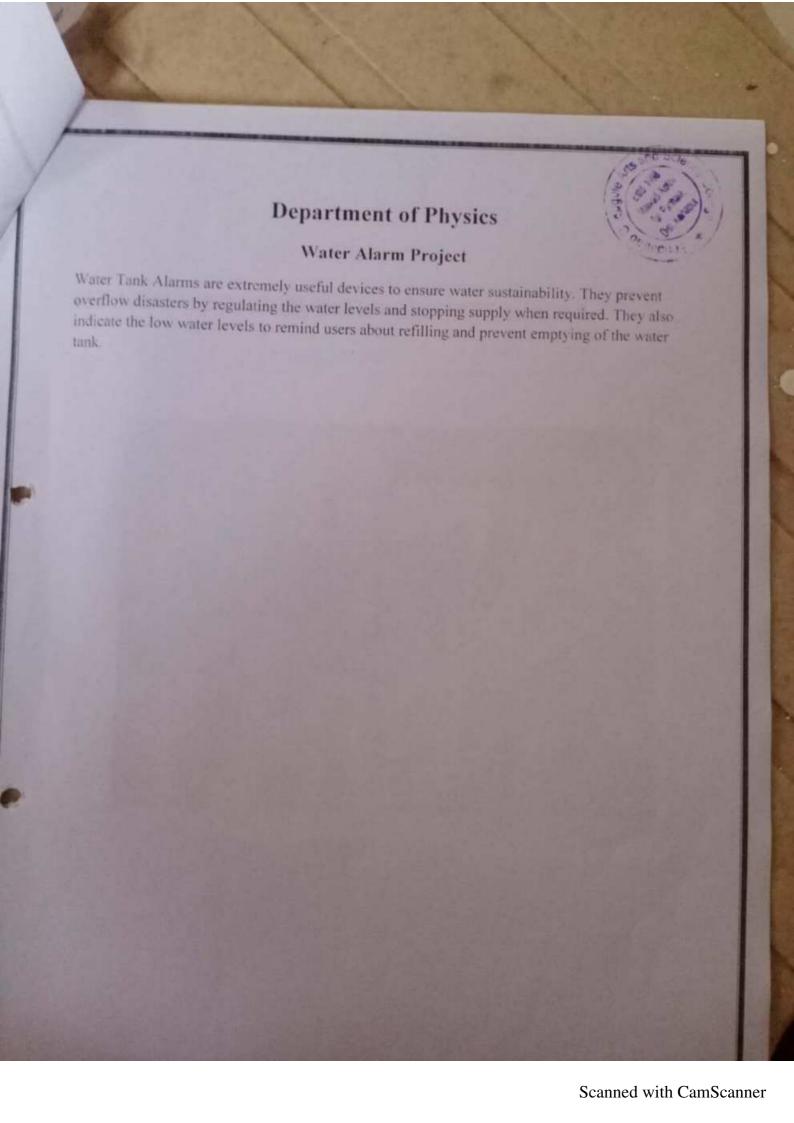
Program Specific Outreach

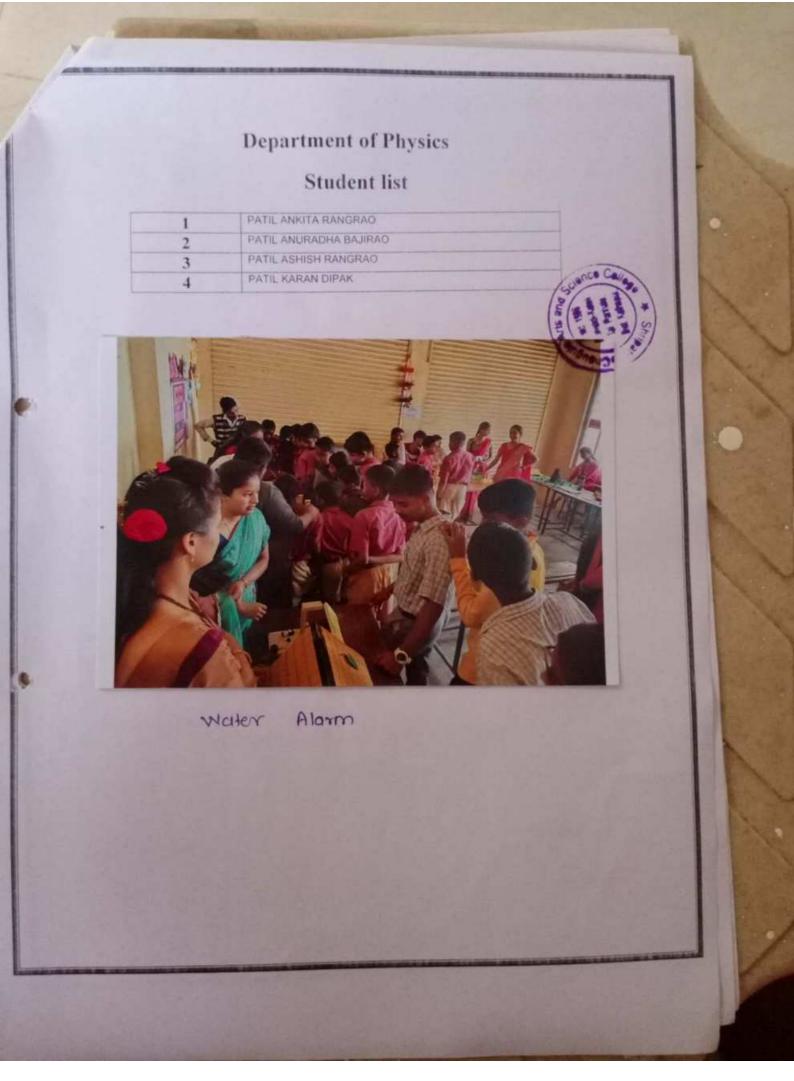
The water alarm project aims to enhance safety and prevent water damage by providing early warnings of leaks or flooding.

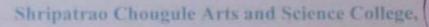
Organizer

Smt. S. N. Mane

Smt. P.M. Karale









Tal - Panhala, Dist - Kolhapur

Department of Physics

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Chandrayan-3

Date: 28th February2024

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

THE RESERVE OF THE PERSON NAMED IN

Number of Student Invovled: 05

Guide and observation : Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To develop this outreach project aims to educate and inspire the public about the mission's objectives, advancements, and importance in space exploration.

Program Specific Outreach

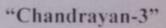
Through a comprehensive outreach program, we can educate, inspire, and engage diverse audiences about the mission's goals, technological advancements, and potential discoveries. This outreach will not only foster interest in space science but also highlight India's contributions to global space exploration.

Organizer

Smt. S. N. Mane

Smt. P.M. Karale

Department of Physics

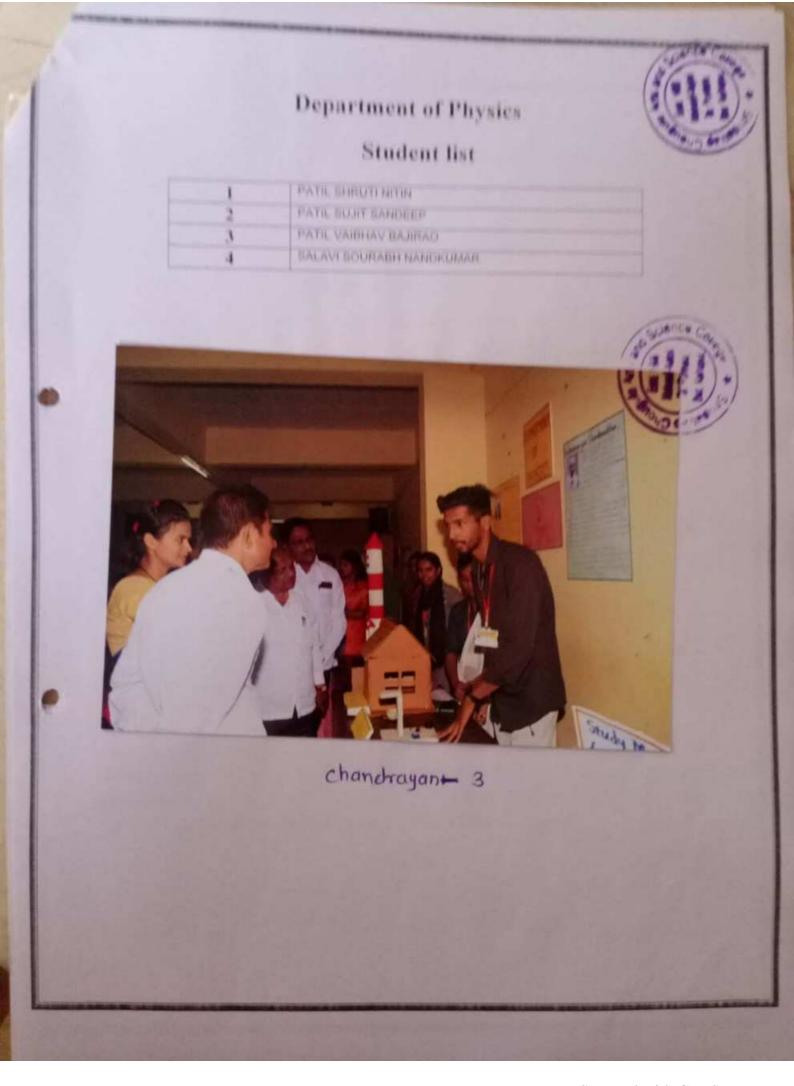




Chandrayaan-3 is a follow-on mission to Chandrayaan-2 to demonstrate end-to-end capability in safe landing and roving on the lunar surface. It consists of Lander and Rover configuration. It will be launched by LVM3 from SDSC SHAR, Sriharikota. The propulsion module will carry the lander and rover configuration till 100 km lunar orbit. The propulsion module has Spectro-polarimetry of Habitable Planet Earth (SHAPE) payload to study the spectral and Polari metric measurements of Earth from the lunar orbit.

To achieve the mission objectives, several advanced technologies are present in Lander such as,

- 1. Altimeters: Laser & RF based Altimeters
- 2. Velocimeters: Laser Doppler Velocimeter & Lander Horizontal Velocity Camera
- 3. Inertial Measurement: Laser Gyro based Inertial referencing and Accelerometer package
- Propulsion System: 800N Throttleable Liquid Engines, 58N attitude thrusters & Throttleable Engine Control Electronics
- 5. Navigation, Guidance & Control (NGC): Powered Descent Trajectory design and associate software elements
- 6. Hazard Detection and Avoidance: Lander Hazard Detection & Avoidance Camera and Processing Algorithm
- 7. Landing Leg Mechanism.



Shripatrao Chougule Arts and Science College, Malwadi - Kol Tal - Panhala, Dist - Kolhapur

Department of Electronics

Report: 2023-2024

Theme of Program : Science Festival

Name of Model: Smart Irrigation System

Date: 28th Feb 2024

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Invovled: 07

Guide and observation : Shri. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Smt. S. A. Patil

Program Outreach :1) Generate awareness about Smart Irrigation

System & encourage student for scientific

research.

Organizer

Smt. S. M. Chougule

Smt. S. A. Patil

DEPARTMENT OF ELECTRONICS



NAME OF THE MODEL:

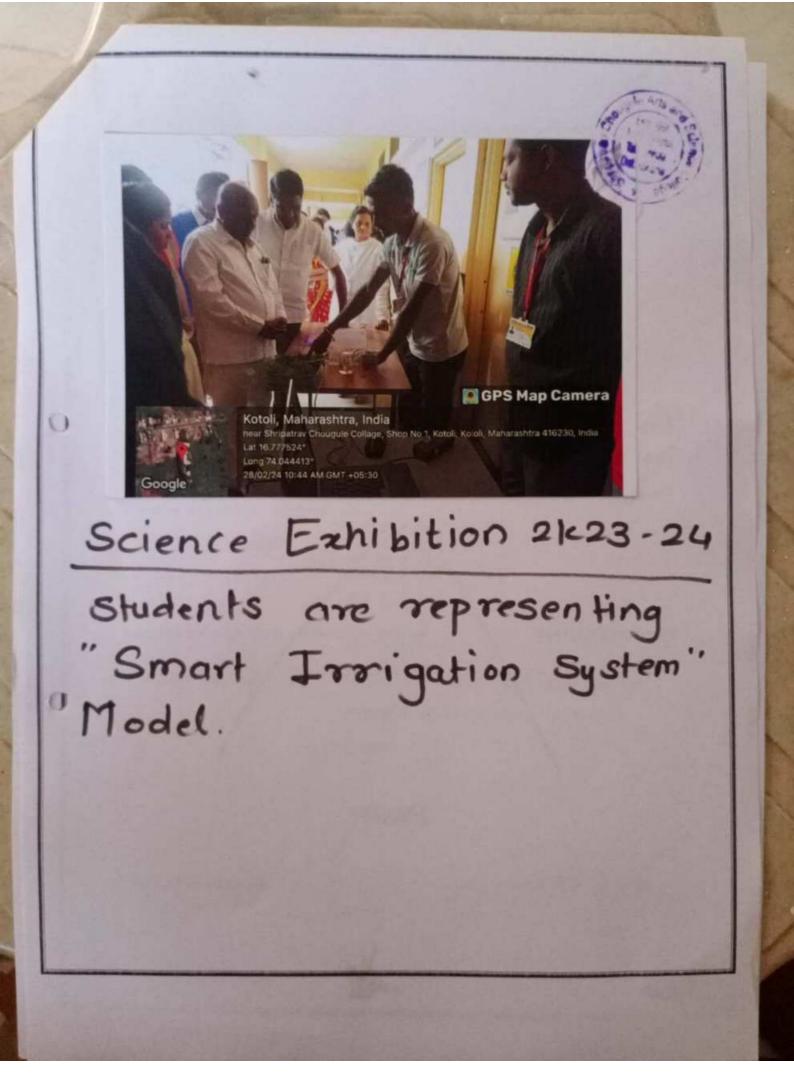
SMART IRRIGATION SYSTEM USING ARDUINO UNO

This Science festival was useful to students, to get knowledge about Smart Irrigation System using Arduino Uno project & their applications in day today life..

- > Find out the following:
 - Detail information about Smart Irrigation System using Arduino Uno project
 - Applications of Smart Irrigation System using Arduino Uno in agricultural field.

<u>DEPARTMENT OF ELECTRONICS</u> <u>STUDENT LIST</u>

NAME OF STUDENTS
Jadhav Ruturaj Pandurang
Patil Vivek Yuvraj



Shripatrao Chougule Arts and Science College, Malwadi - Kotoli Tal - Panhala, Dist - Kolhapur

Department of Electronics

Report: 2023-2024

Theme of Program : Science Festival

Name of Model: Smoke Detector

Date: 28th Feb 2024

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Invovled: 07

Guide and observation : Shri. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Smt. S. A. Patil

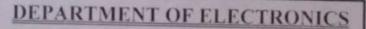
Program Outreach :I) Generate awareness about Smoke Detector &

encourage student for scientific research.

Organizer

Smt. S. M. Chougule

Smt. S. A. Patil





NAME OF THE MODEL:

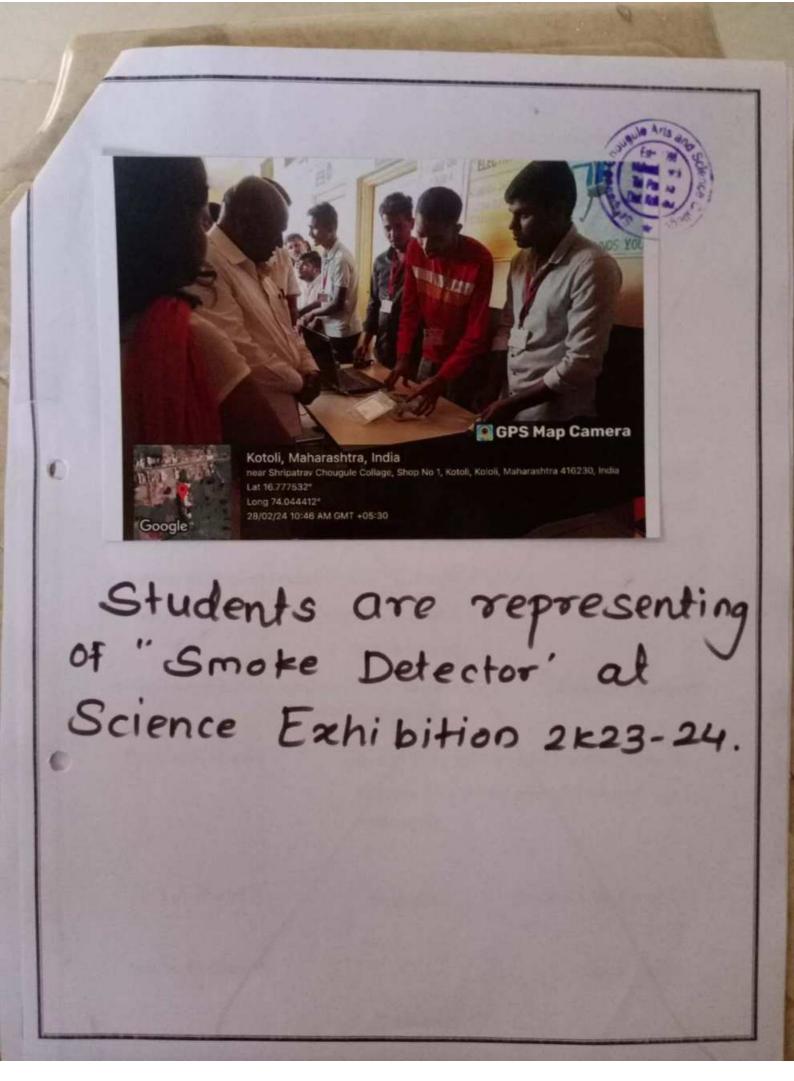
SMOKE DETECTOR

This Science festival was useful to students, to get knowledge about how SMOKE DETECTOR can be used for security purpose for industrial and driving safety...

- Find out the following:
 - The information about SMOKE DETECTOR system
 - · How smoke detector can be used for industrial security

<u>DEPARTMENT OF ELECTRONICS</u> <u>STUDENT LIST</u>

Sr. No	NAME OF STUDENTS
1	Gavali Pratik Arjun
2	Patil Gaurav Bharat
3	Patl Omkar Sarjerao



Shripatrao Chougule Arts and Science College, Malwadi -Tal - Panhala, Dist - Kolhapur

Department of Electronics

Report: 2023-2024

Theme of Program : Science Festival

Name of Model: Alcohol Detector

Date: 28th Feb 2024

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Invovled: 07

Guide and observation : Shri. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Smt. S. A. Patil

Program Outreach :I) To give information about Alcohol Detector

and their applications.

Organizer

Smt. S. M. Chougule

Smt. S. A. Patil



DEPARTMENT OF ELECTRONICS

NAME OF THE MODEL:

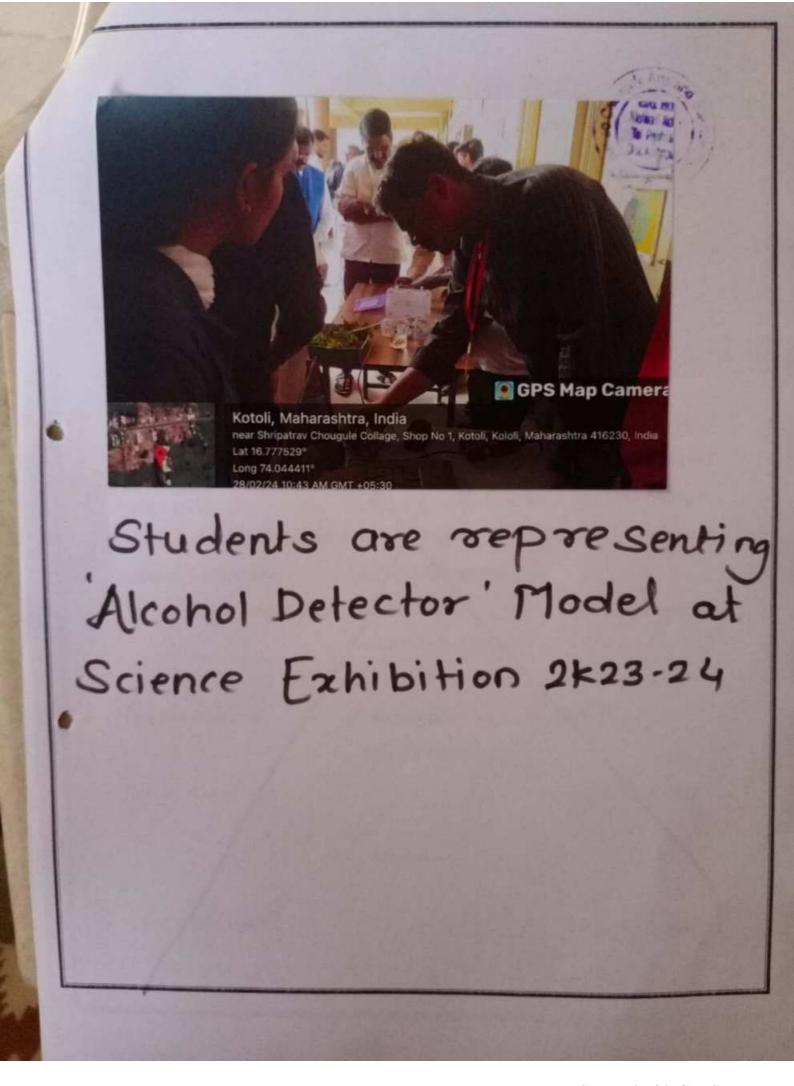
ALCOHOL DETECTOR

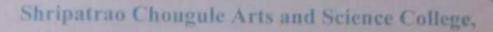
This Science festival was useful to students, to get knowledge about how ALCOHOL DETECTOR can be used for security purpose for industrial and driving safety...

- Find out the following:
 - The information about ALCOHOL DETECTOR system
 - · How smoke detector can be used for driving safety.

<u>DEPARTMENT OF ELECTRONICS</u> <u>STUDENT LIST</u>

Sr. No	NAME OF STUDENTS	
1	Patil Harshvardhan Shrirang	
2	Yadav Adinath Ashok	





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Microbiology

Report: 2023 - 2024

Theme of Programme: Science Festival 2K24

Model Name: Edible Bacterial Model

Date: 28th Feb 2024

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 03

Guide and observation : Smt.P.A.Mane

Smt. P.D.Patil

Program Outreach

To study the cell model with fun and joy knowledge using edible material.

Program Specific Outcome

This lesson allows students to construct a cell model in a fun and engaging way using edible materials such as cereals and candies .

Organizer

Smt.P.A.Mane

Smt. P.D.Patil

DEPARTMENT OF MICROBIOLOGY

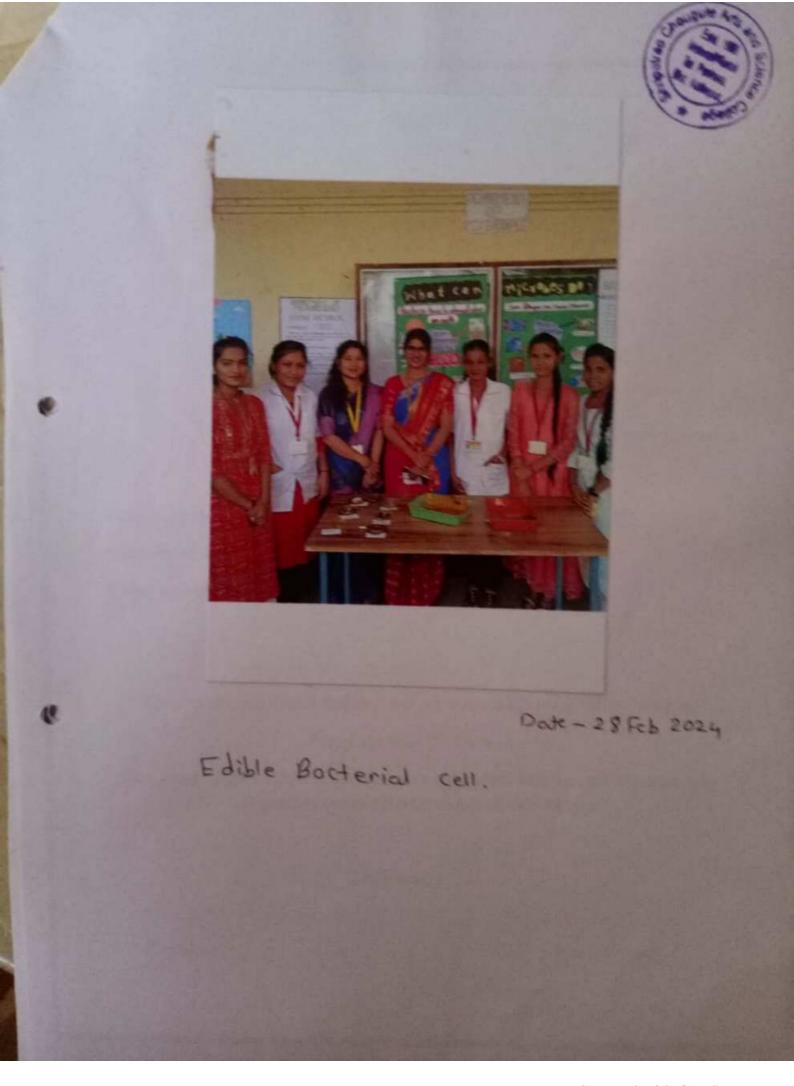
The cell is the structural and functional unit of all known living organisms. It is the smallest unit of an organism that is classified as living, and is sometimes called the building block of life. Some organisms, such as most bacteria, are unicellular (consist of a single cel). Other organisms, such as humans, are multicellular. (Humans have an estimated 100 trillion or 10" cells; a typical cell size is 10 um; a typical cell mass is 1 nanogram.) The largest known cell is an ostrich egg.

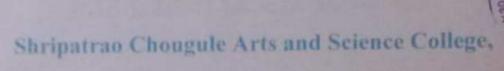
In 1837 before the final cell theory was developed, a Czech Jan Evangelista Purkyně observed small "granules" while looking at the plant tissue through a microscope. The cell theory, first developed in 1839 by Matthias Jakob Schleiden and Theodor Schwann, states that all organisms are composed of one or more cells. All cells come from preexisting cells. Vital functions of an organism occur within cells, and all cells contain the hereditary information necessary for regulating cell functions and for transmitting information to the next generation of cells.

Model explains that components they used are:

Cell membrane.

- · Cell wall.
- · Cell organelles.
- Nucleolus, Nuclear membrane, Endoplasmic reticulum, Golgi Bodies, Ribosome, Mitochondria, Lysosomes, Chloroplast, Vacuoles





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Mathematics

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Application of vedic Maths

Date: 28th February2024

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Involved: 07

Guide and observation

: Shri. U. B. Pawar

Smt. M. N. Kamble

Program Outreach

To develope this outreach project aims to find the various concept of mathematics like addition, Multiplications, Squares etc.

Program Specific Outreach

Using these methods to solve any problem of mathematics, operation on mathematics in within seconds in a competitive exams

Organizer

Shri. U. B. Pawar

Smt. M. N. Kamble

DEPARTMENT OF MATHEMATICS



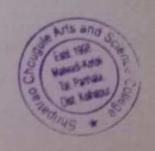
NAME OF THE MODEL:

1) VEDIC MATHEMATICS

Vedic Mathematics introduces the wonderful applications to Arithmetical computations, theory of numbers, compound multiplication, algebraic operations, factorisation simple quadratic and higher order equations, simultaneous quadratic equations, partial fractions calculus, squaring, cubing, square root. It consists of 16 sutras called Formulae and 13 subsutras called formulae and 13 subsutras called Sub Formulae, which can be applied to the solving of problems in arithmetic, algebra, geometry, calculus, conics, etc. All the sutras and subsutras of Vedic maths help to perform mathematical operations quickly and accurately.



Department Of Mathematics Student List



Sr. No.	Name of Students	
1	KAMBLE SHLOK SURESH	
2	KAMBLE YASH KRISHNAT	
3	PATIL KARAN SHIVAJI	
4	PATIL SANDHYA KRISHNAT	
5	PATIL SHREYASH BABAN	
6	PAWAR ROHAN RAMCHANDRA	
7	SUTAR RUCHITA RAJU	



ShripatraoChougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2020-2021

Theme of Program: Science Festival 2K21

Model Name: Chemical blood

Date: 1 & 2 March 2021

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 3

Guide and observation

: Smt. T. S. Kavathekar

Smt. K. T. Dige

Program Outreach

To understand about chemical blood

Program Specific Outcome

To build interest in chemistry

Organizer

Smt. T. S. Kavathekar

Smt. K. T. Dige



Department of Chemistry

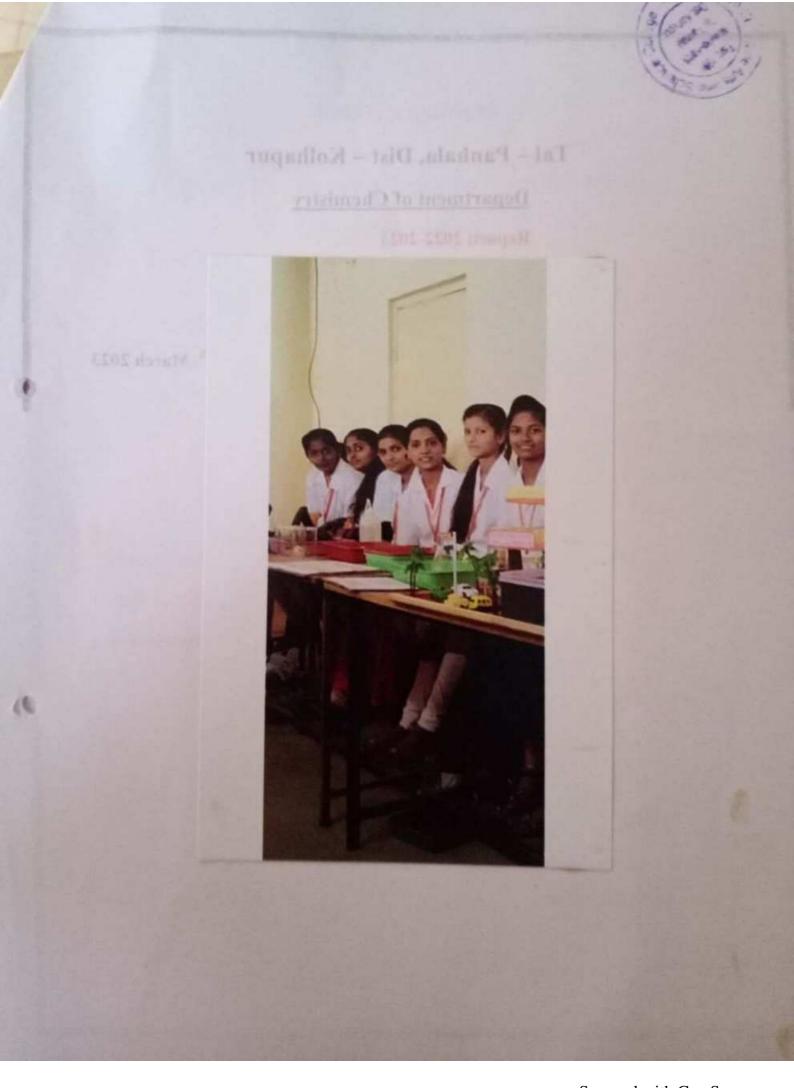
Model Name: Chemical Blood

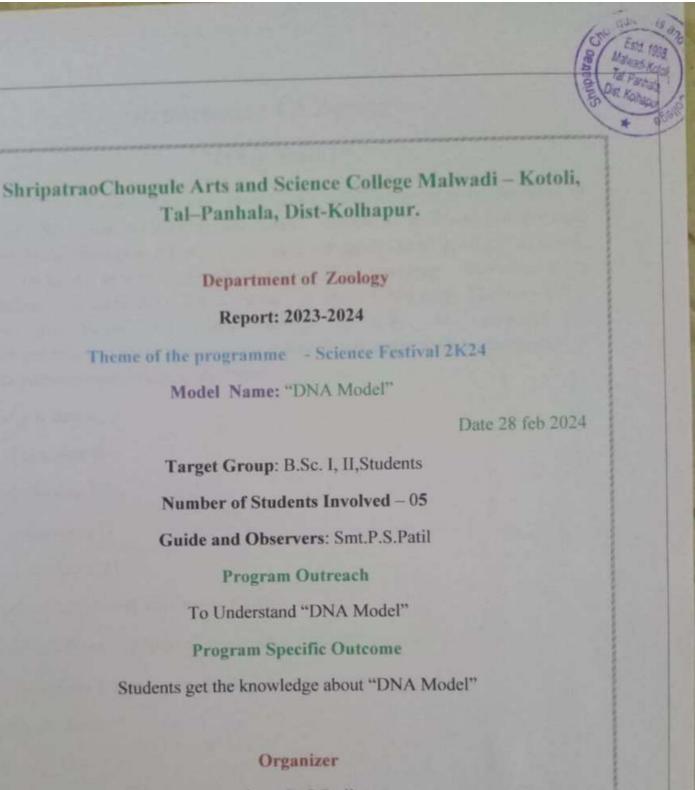
These substances include electrolytes (such as sodium, potassium, and chloride), fats, proteins, glucose (sugar), and enzymes. Blood chemistry studies give important information about how well a person's kidneys, liver, and other organs are working. Hemoglobin is the oxygen-carrying protein that is found within all RBCs. It picks up oxygen where it is abundant (the lungs) and drops off oxygen where it is needed around the body. Blood consists of cellular material (99% red blood cells, with white blood cells and platelets making up the remainder), water, amino acids, proteins, carbohydrates, lipids, hormones, vitamins, electrolytes, dissolved gasses, and cellular wastes. Each red blood cell is about one-third hemoglobin, by volume.

Department of Chemistry

Student List

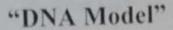
Sr. No.	Name of the Students	
1	BHOSALE SHIVANI ANANDA	4.50
2	PATIL UTTAM SHAMRAO	
3	CHAVAN AJAY JAYSING	-

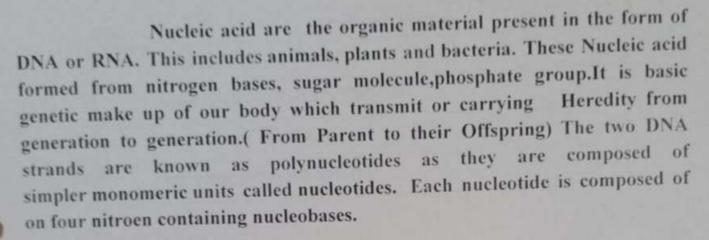




Smt. P. S.Patil

Department Of Zoology





a)Nitrogen Bases

- 1.cytosine [C]
- 2.guanine [G]
- 3.adenine[A]
- 4. thymine[T]
- b) Nucleotide is a molecule made up of:
 - 1. deoxyribose (a kind of sugar with 5 carbon atoms)
 - 2.phosphate group made of phosphorus and oxygen and nitrogenous base.



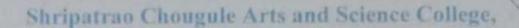
Department Of Zoology

Student List

Sr.No.	Student Name	
1	Arande Nikita Ankush	
2	Gaikwad Amruta Sambhaji	
3	Patil Anjali Babaso	
4	kolekar Amruta Vitthal	



Student Presenting DNA Model Structure



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Computer Science

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Parts of Computer

Date: 28th February 2024

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Involved: 03

Guide and observation : Smt. P.P.Patil

Shri.A.N.Doiphode

Program Outreach

The basic parts of a desktop computer are the computer case, monitor, keyboard, mouse, and power cord.

Program Specific Outreach

Each computer receives input from a variety of devices, processes that data with the CPU and memory, and sends results to some form of output.

Organizer

Smt. P.P.Patil

Shri.A.N.Doiphode

Shripatrao Chougule Arts and Science College Malwadi - Kotolf, Tal-Panhala, Dist-Kolhapur.

Department of Computer Science

Report: 2023-2024

Science Festival 2K24

Date: 28th February

Them of the Activity

"Parts of Computer"

Target Group: B.Sc. I, II, III Students

Number of Students Involved -50

Guide and Observers: Smt.P.P.Patil

Shri.A.N.Doiphode

Program Outreach

The basic parts of a desktop computer are the computer case, monitor, keyboard, mouse, and power cord.

Program Specific Outcome

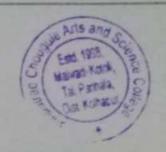
Each computer receives input from a variety of devices, processes that data with the CPU and memory, and sends results to some form of output.

Organizer

Smt.P.P.Patil

Shri.A.N.Doiphode

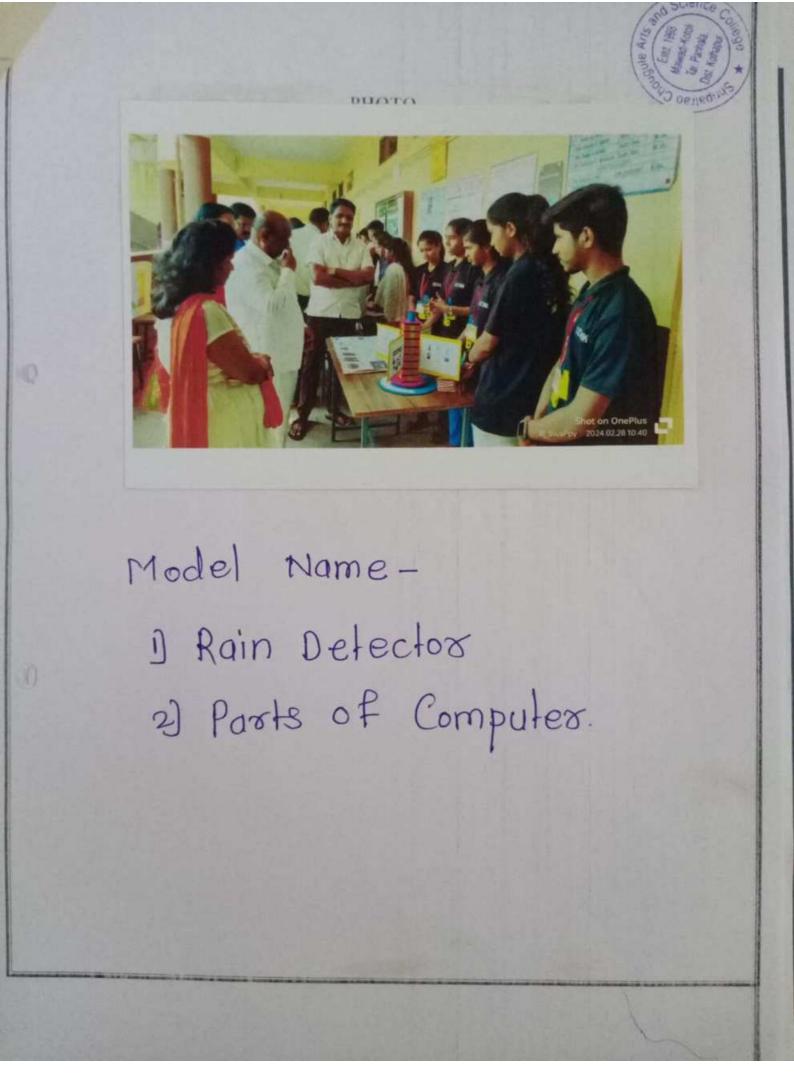
Department Of Computer Science "Parts of Computer"

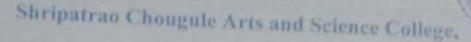


The most basic computer setup usually includes the computer case, monitor, keyboard, and mouse, but you can plug many different types of devices into the extra ports on your computer. These devices are called peripherals. Let's take a look at some of the most common ones.

A computer is an electronic device that accepts data, performs operations, displays results, and stores the data or results as needed. It is a combination of hardware and software resources that integrate together and provides various functionalities to the user. Hardware is the physical components of a computer like a processor, memory devices, monitor, keyboard, etc

The five basic parts of a computer are the motherboard, central processing unit (CPU), input-output units, memory (RAM and ROM), and storage (SSD or HDD). Please share this... The basic parts of computer usually include a motherboard, CPU, RAM, ROM, and storage devices such as SSD/HDD.





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Computer Science

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Types of Computer

Date: 28th February 2024

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Involved: 03

Guide and observation

: Smt. P.P.Patil

Shri.A.N.Doiphode

Program Outreach

The 10 types of computers include personal computers, desktops, laptops, tablets, hand-held computers, servers, workstations, mainframes, wearable computers and supercomputers.

Program Specific Outreach

Computers can come in all shapes and sizes, and they perform a variety of functions to allow our society to function.

Organizer

Smt. P.P.Patil

Shri.A.N.Doiphode

arts an Shripatrao Chougule Arts and Science College Malwadi - Kotol Tal-Panhala, Dist-Kolhapur. Department of Computer Science Report: 2023-2024 Science Festival 2K24 Date: 28th February Them of the Activity "Computers Types" Target Group: B.Sc. I, II, III Students Number of Students Involved -50 Guide and Observers: Smt.P.P.Patil Shri.A.N.Doiphode Program Outreach The 10 types of computers include personal computers, desktops, laptops, tablets, hand-held computers, servers, workstations, mainframes, wearable computers and supercomputers Program Specific Outcome Computers can come in all shapes and sizes, and they perform a variety of functions to allow our society to function Organizer Shri.A.N.Doiphode Smt.P.P.Patil Scanned with CamScanner

Department Of Computer Science

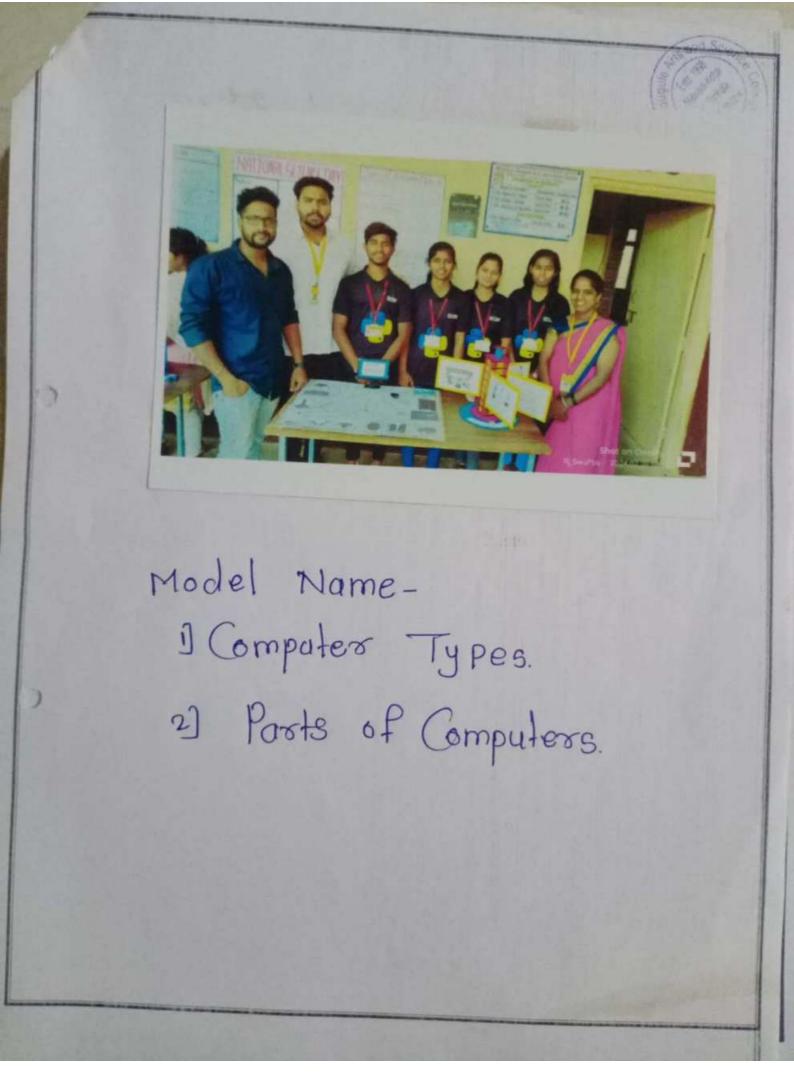


"Computers Types"

There are billions of computers in our society today. Computers can come in all shapes and sizes, and they perform a variety of functions to allow our society to function. You use computers to purchase goods, perform a math calculation for a test, or watch TV. It would be hard for you to complete a day without directly or indirectly using a computer.

The 10 types of computers include personal computers, desktops, laptops, tablets, hand-held computers, servers, workstations, mainframes, wearable computers and supercomputers. What is a computer? A computer is any device that has a microprocessor that processes information. It has hardware, software and a screen for display.

A computer is a machine that can store and process information. Most computers rely on a binary system, which uses two variables, 0 and 1, to complete tasks such as storing data, calculating algorithms, and displaying information. Computers come in many different shapes and sizes, from handheld smart phones to supercomputers weighing more than 300 tons.



Department Of Computer Science

Student List

Sr.No.	Student Name
1	Sonali Uttam Patil
2	Payal Yuvraj Mahadik
3	Patil Pratiksha Sambhaji



Shripatra gule Arts and Science College,
Malwadi – Kotoli

Tal - Panhala, Dist - Kolhapur

Science Exhibition Model List 2022-2023

Sr.No	Department Name	Model Name
1	Botany	1.Solid Waste Managment
2	Physics	1.Rain water Detector
		2.Earthquake Alarm
		3. PSLV
3	Electronics	1.Agni-V-Model
		2. LASER Security system
4	Microbiology	1.3D DNA helix model
		2. SARS-Cov2 virus
5	Mathematics	1.Age calculator
6	Chemistry	1.Elephant toothpest
		2.Chemical snake
		3.Atomic structure model
		4.Chemistry clock
7	Zoology	1. Volcanic eruption
8	Computer Science	1.Smart reading room

Shippatroo Champule Arts and Science College Interadi-Kololi Tal Panhari Jasa Kolhabur

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Botany

Report: 2022 -2023

Theme of Programme: Science Festival 2K23

Model Name: Solid Waste Management

Date: 09th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 04

Guide and observation

: Smt. R.P.Nale

Smt. P. P.Kamble

Programme Outreach

To promote solid waste management practices

Programme Specific Outcome

To identify and analyse different method of solid waste management

Organizer

Smt. R.P.Nale

Smt. P.P.Kamble



DEPARTMENT OF BOTANY ADVANCE LEARNER 2022-2023

Solid Waste Management

Improperly managed solid waste can have serious environmental consequences. It can contaminate soil, water ,air and harm wildlife and ecosystem. Effective solid waste management help reduce amount of waste. Proper solid waste management also protects citizens from hazardous and physical harm, nurtures community health, promote sanitization and provide opportunities to earn from cycling.

Steps Involved In Solid Waste Management

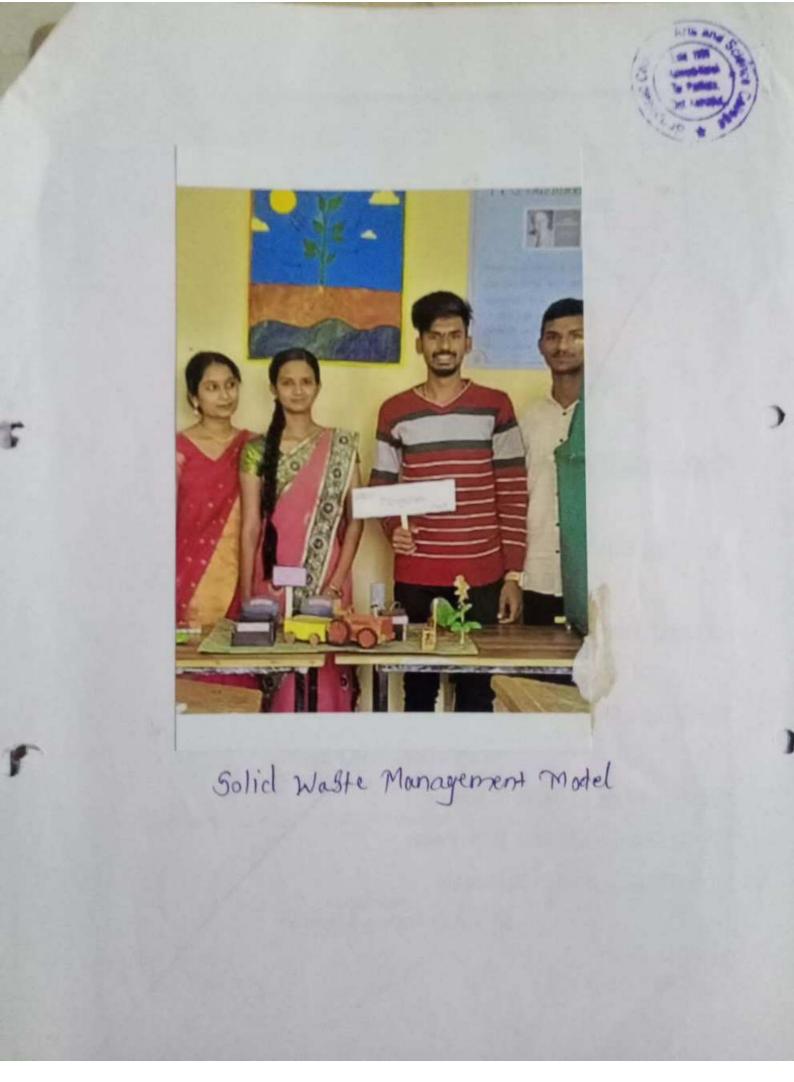
- Collection
- Weighing
- Sorting
- Mixing
- Loading
- Temperature control
- Moisture control
- Maturing



DEPARTMENT OF BOTANY

Student List

NAME OF STUDENT
PATIL SANIKA SHAHAJI
PATIL RAJASHREE RAMCHANDRA
BHOSALE ROHINI YUVRAJ
CHOGULE PRIYANKA SAHDEV
LAVHTE SANIKA KRUSHNAT





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Physics

Report: 2022 -2023

Theme of Program: Science Festival 2K23

Model Name: Rain Detector

Date: 09th March 2023

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation : Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

Generate awareness about Rain Detector system & encourage student for scientific research.

Program Specific Outreach

The rain detector project is a crucial initiative that helps predict the onset of rain, aiding in the protection of the environment. Effective outreach and promotion of this device will ensure that more people benefit from its advantages.

Organizer

Smt. S. N. Mane

Smt. P.M. Karale



Department of Physics Rain Detector

In the irrigation, it will detect the rain and immediately alert the farmer.

In automobiles, when the rain detector detects the rain it will immediately active the wipers and inform the driver.

In communications, it will boost the power of the antenna and increase the signal strength to send or receive the signals.

In normal house hold, with the help of rain water detector we can automatically save the rain water. (This can be done only when home automation is done and there is proper equipment to save the rain water. In this, rain water detector will detect the rain and helps to switch ON the equipment which will automatically save rain water for different purposes).

This can also be used if there is a chemical rain also. This is very common in industrial areas.

Department of Physics Student list Patil Poonam Mansing Patil sanket Sanjay Patil Tejashri Krushnat Patil Rohini



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Physics

Report: 2022 -2023

Theme of Program: Science Festival 2K23

Model Name: Earthquake Alert project

Date: 09th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation

: Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To generate awareness about Earthquake Alert project & Encourage Students for scientific research.

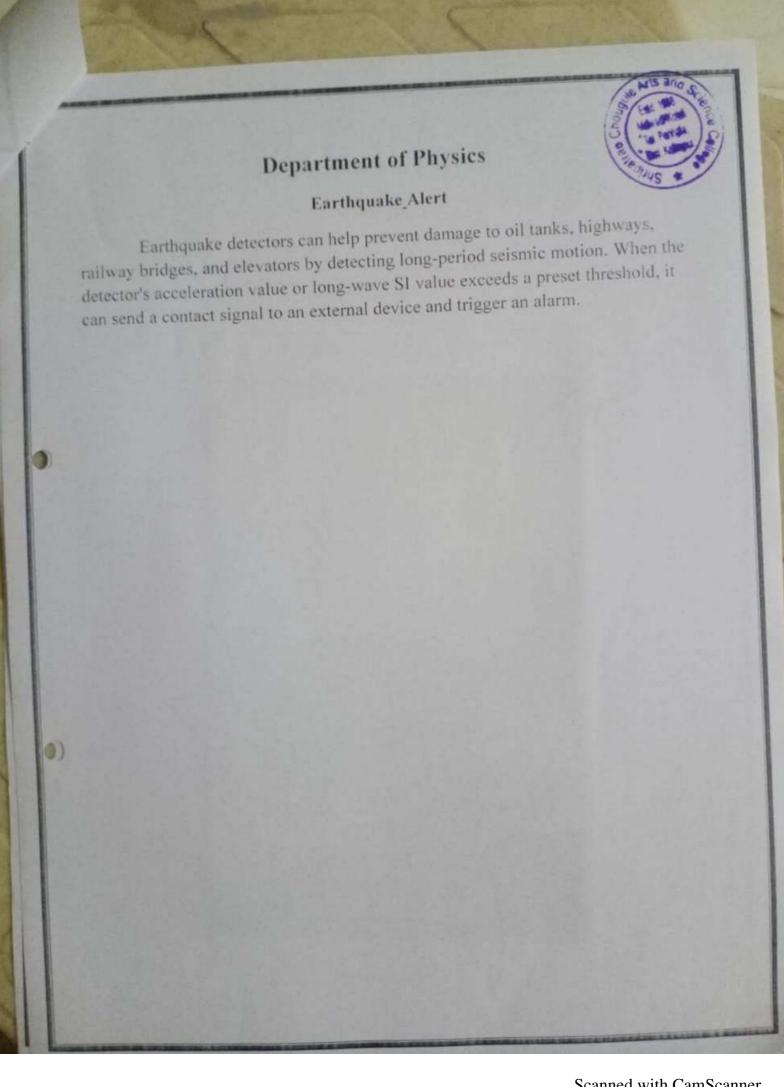
Program Specific Outreach

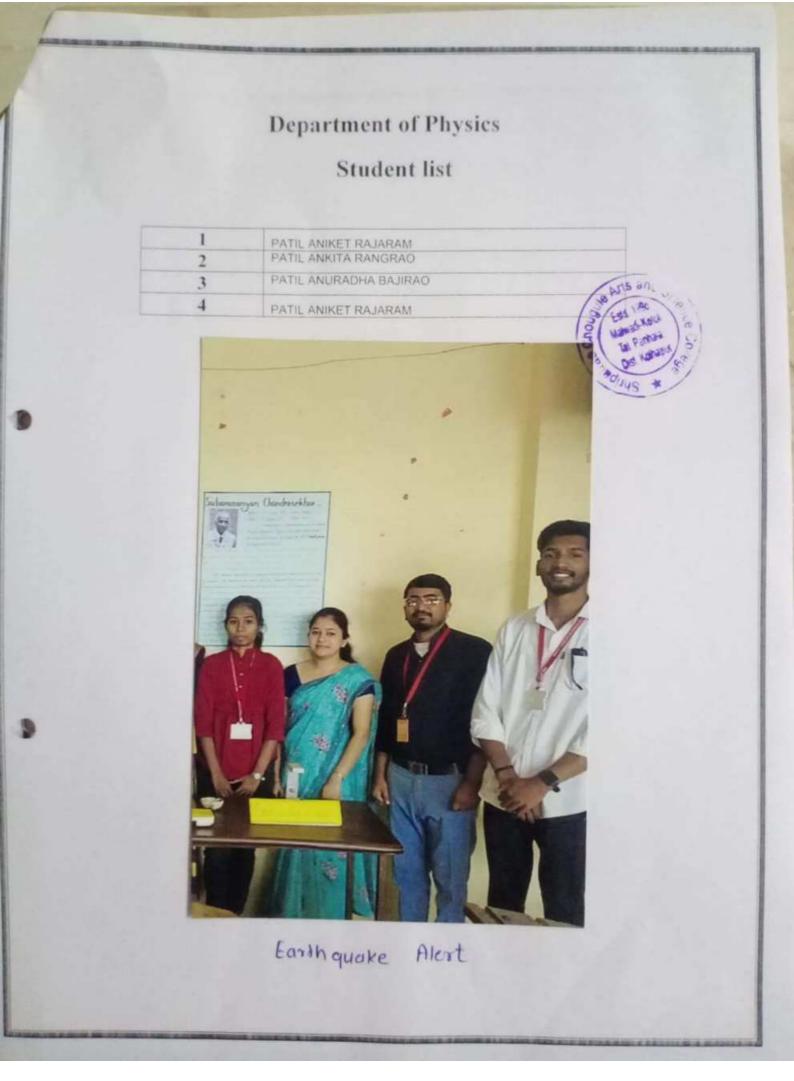
The earthquake alarm project aims to enhance safety and preparedness by providing early warnings of seismic activity. Through comprehensive outreach efforts, we can educate communities, encourage the adoption of this life-saving technology, and ultimately reduce the impact of earthquakes on lives and property.

Organizer

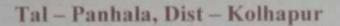
Smt. S. N. Mane

Smt. P.M. Karale









Department of Physics

Report: 2022-2023

Theme of Program: Science Festival 2K23

Model Name: Chandrayan-3 (PSLV)

Date: 1&2 March

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation : Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To develope this outreach project aims to educate and inspire the public about the mission's objectives, advancements, and importance in space exploration.

Program Specific Outreach

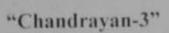
Through a comprehensive outreach program, we can educate, inspire, and engage diverse audiences about the mission's goals, technological advancements, and potential discoveries. This outreach will not only foster interest in space science but also highlight India's contributions to global space exploration.

Organizer

Smt. S. N. Mane

Smt. P.M. Karale

Department of Physics

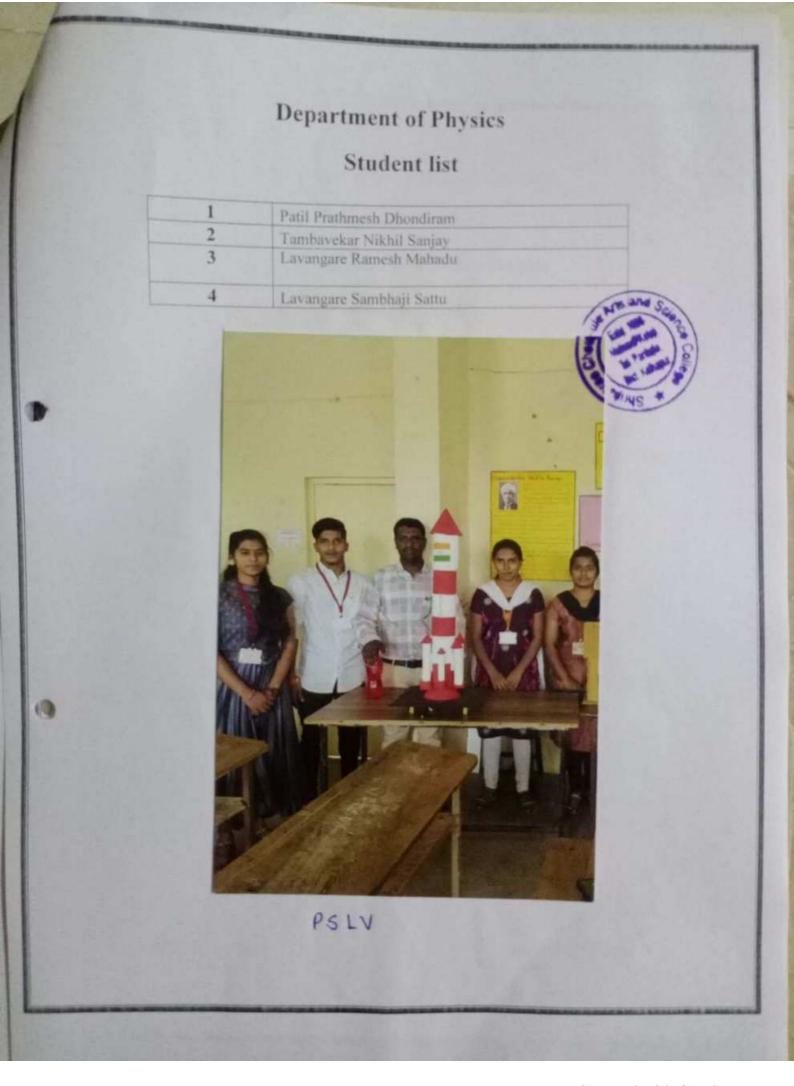


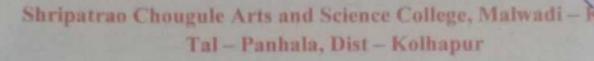


Chandrayaan-3 is a follow-on mission to Chandrayaan-2 to demonstrate end-to-end capability in safe landing and roving on the lunar surface. It consists of Lander and Rover configuration. It will be launched by LVM3 from SDSC SHAR, Sriharikota. The propulsion module will carry the lander and rover configuration till 100 km lunar orbit. The propulsion module has Spectro-polarimetry of Habitable Planet Earth (SHAPE) payload to study the spectral and Polari metric measurements of Earth from the lunar orbit.

To achieve the mission objectives, several advanced technologies are present in Lander such as,

- 1. Altimeters: Laser & RF based Altimeters
- 2. Velocimeters: Laser Doppler Velocimeter & Lander Horizontal Velocity Camera
- 3. Inertial Measurement: Laser Gyro based Inertial referencing and Accelerometer package
- Propulsion System: 800N Throttleable Liquid Engines, 58N attitude thrusters & Throttleable Engine Control Electronics
- 5. Navigation, Guidance & Control (NGC): Powered Descent Trajectory design and associate software elements
- 6. Hazard Detection and Avoidance: Lander Hazard Detection & Avoidance Camera and Processing Algorithm
- 7. Landing Leg Mechanism.





Department of Electronics

Report: 2022-2023

Theme of Program : Science Festival

Name of Model: AGNI - V

Date: 09th March 2023

Target group : B.Sc I, B.Sc II & B.Sc III Students

Number of Student Invovled: 30

Guide and observation : Shri. V. D. Nivadekar

Smt. S. A. Patil

Program Outreach : I) To develop knowledge about AGNI - V.

Organizer

Shri. V. D. Nivadekar

Smt. S. A. Patil

DEPARTMENT OF ELECTRONICS



NAME OF THE MODEL:

I) AGNI - V

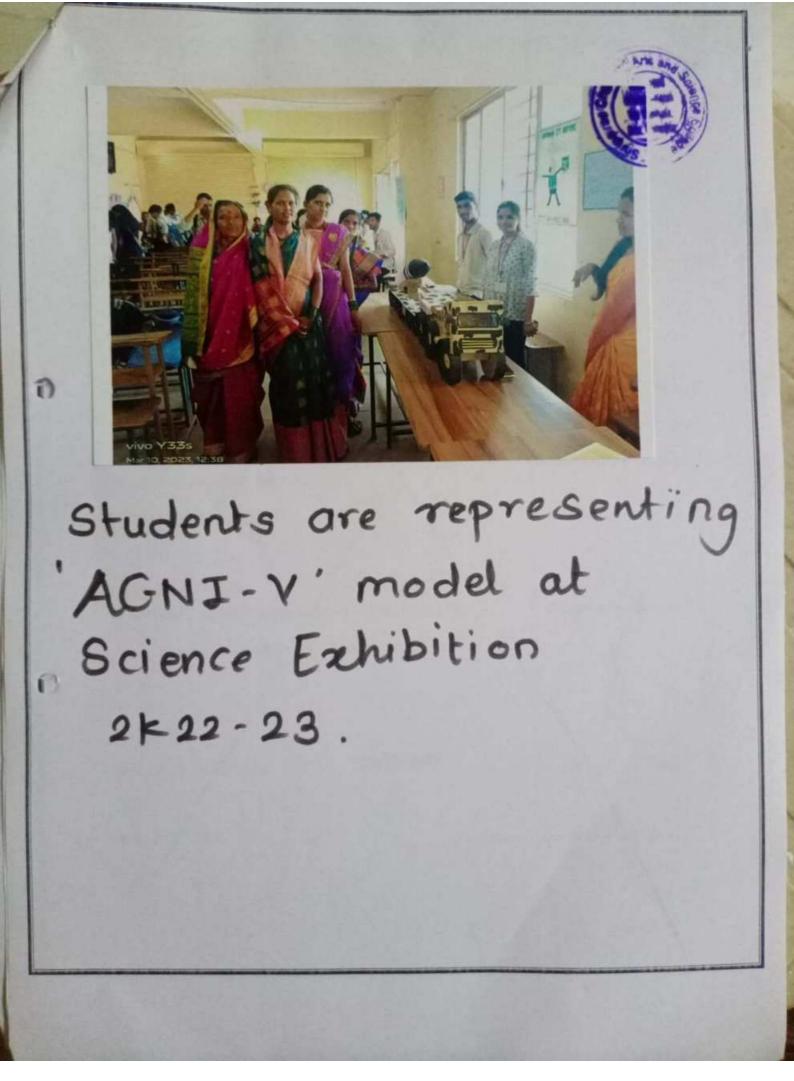
This Science festival was useful to students, to get knowledge about AGNI - V project & their detailed information.

Find out the following:

- · Detail information about AGNI V project.
- The history of AGNI V.

DEPARTMENT OF ELECTRONICS <u>STUDENT LIST</u>

Sr. No	NAME OF STUDENT
1	Kumbhar Nikita Keshav
2	Redekar Tejashree Tanaji
3	Patil Sonali Uttam
4	Mahadik Payal Yuvraj



Shripatrao Chougule Arts and Science College, Malwadi Tal - Panhala, Dist - Kolhapur

Department of Electronics

Report: 2022-2023

Theme of Program : Science Festival

Name of Model: LASER Security System

Date: 09th March 2023

Target group : B.Sc I, B.Sc II & B.Sc III Students

Number of Student Invovled: 30

Guide and observation : Shri. V. D. Nivadekar

Smt. S. A. Patil

Program Outreach : I) Generate awareness about LASER security

system & encourage student for scientific

research.

Organizer

Shri. V. D. Nivadekar

Smt. S. A. Patil

DEPARTMENT OF ELECTRONICS



NAME OF THE MODEL:

1) LASER SECURITY SYSTEM

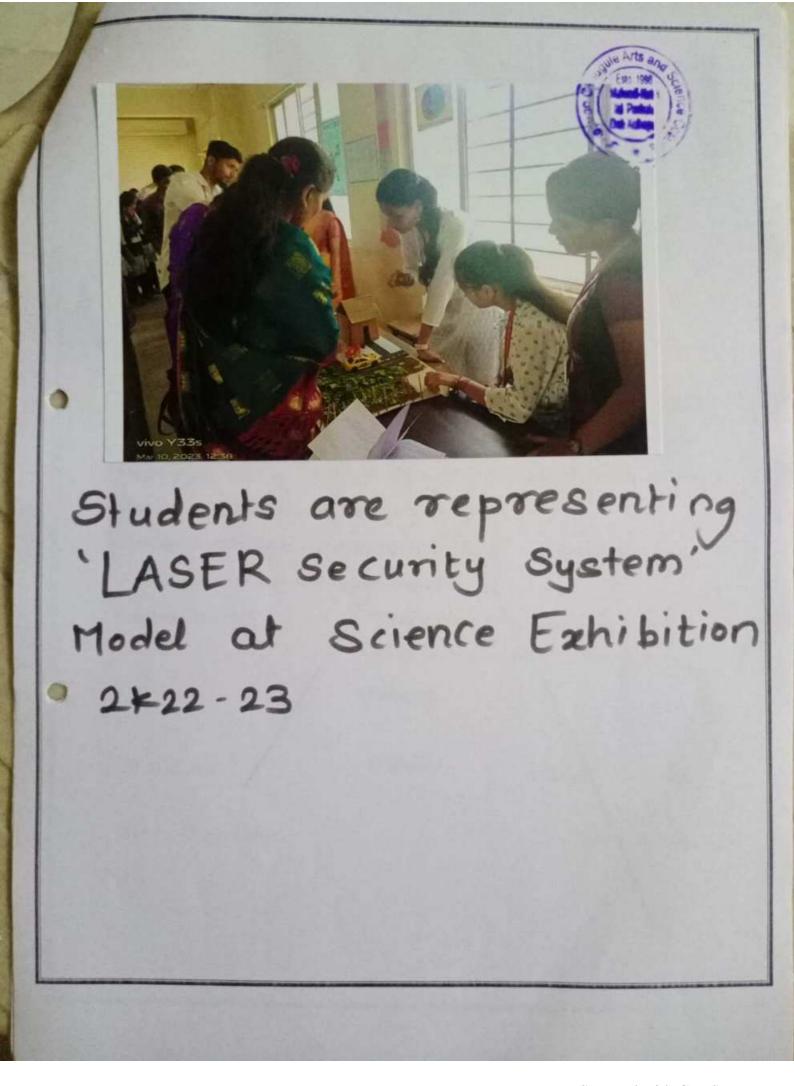
This Science festival was useful to students, to get knowledge about LASER security system & how LASER can be used for security purpose for household safety.

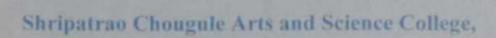
Find out the following:

- The information about LASER security system
- · How LASER can be used for household security
- · It is useful to protect a human being from wild animal & thieves

DEPARTMENT OF ELECTRONICS <u>STUDENT LIST</u>

Sr. No	NAME OF STUDENT
1	KARALE ONKAR GANPATI
2	KSHIRSAGAR SHREYASH GAMA
3	YADAV ADINATH ASHOK





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Microbiology

Report: 2022 -2023

Theme of Programme: Science Festival 2K23

Model Name:3D DNA Helix Model

Date: 09th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 20

Guide and observation

: Smt.P.A.Mane

Shri. P.P.Pawar

Programme Outreach

To understand the arrangement of atoms in three dimensional structure.

Programme Specific Outcome

To study the use of DNA in

Organizer

Smt.P.A.Mane

Shri. P.P.Pawar

DEPARTMENT OF MICROBIOLOGY



Deoxyribonucleic acid or DNA is a molecule which is the carrier of genetic information in nearly all the living organisms. It contains the biological instructions for the development, survival and reproduction of organisms. DNA is found in the nucleus of a cell where it is packaged into a compact form called a chromosome with the help of several proteins known as histones. It is also found in cell structures called mitochondria. However in case of prokaryotes DNA is not enclosed in a nucleus or a membrane but is present in the cytoplasm. The DNA in prokaryotes in generally circular and supercoiled without any histones. DNA stores genetic information as a sequence of nucleotides in special regions known as genes which are used to make proteins.

The expression of genetic information into proteins is a two-stage process wherein the sequence of nucleotides in DNA is converted to a molecule called Ribonucleic acid or RNA by a process called transcription. RNA is used to make proteins by another process called translation. The human genome contains nearly 3 - 109 bases with around 20,000 genes on 23 chromosomes

Model explains that components they used are:

- · 1 Features of a DNA Molecule
- · 2Double Helix
- · 3 Complementary Bases
- · 4 Grooves
- 5 Biological Functions
- 6History of DNA Structure

DEPARTMENT OF MICROBIOLOGY



Student List

Sr.No	Student Name -
	Bhosale Namrata Laxman
2	Patil Sangram Yuvraj
3	Buva Akshata Krishnat
4	Chougale Shivani Shivaji
5	Dabhade Pooja Anil
6	Sawant Seema Babaso
7	Kulkami Vedantika Chandrakant
8	Mane Pooja Ananda
9	Patil Deepali Bajirao
10	Patil Pratiksha Sarjerao
11	Patil Snehal Shrikant
12	Patil Ujjwala Sardar
13	Potdar Shital Sanjay
14	Sutar Gitanjali Babaso
15	Chopade Sangram Ananda
16	Chougale Rahul Vijay
17	Sutar Kajal Pandurang
18	Gaikwad Dhanashri Shankar
19	Gaikwad Omkar Eknath
20	Kumbhar Prathamesh Sanjay





3d - DNA Helix Model

Date-og March 2023



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Microbiology

Report: 2022 -2023

Theme of Programme: Science Festival 2K23

Model Name: SARS-CoV2 Virus

Date: 09th March 2023

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 10

Guide and observation : Smt.P.A.Mane

Shri. P.P.Pawar

Programme Outreach

To understand the structure and pathogenecity of SARS-CoV 2 Virus

Programme Specific Outcome

To study the prevention to control the disease

Organizer

Smt.P.A.Mane

Shri. P.P.Pawar

DEPARTMENT OF MICROBIOLOGY

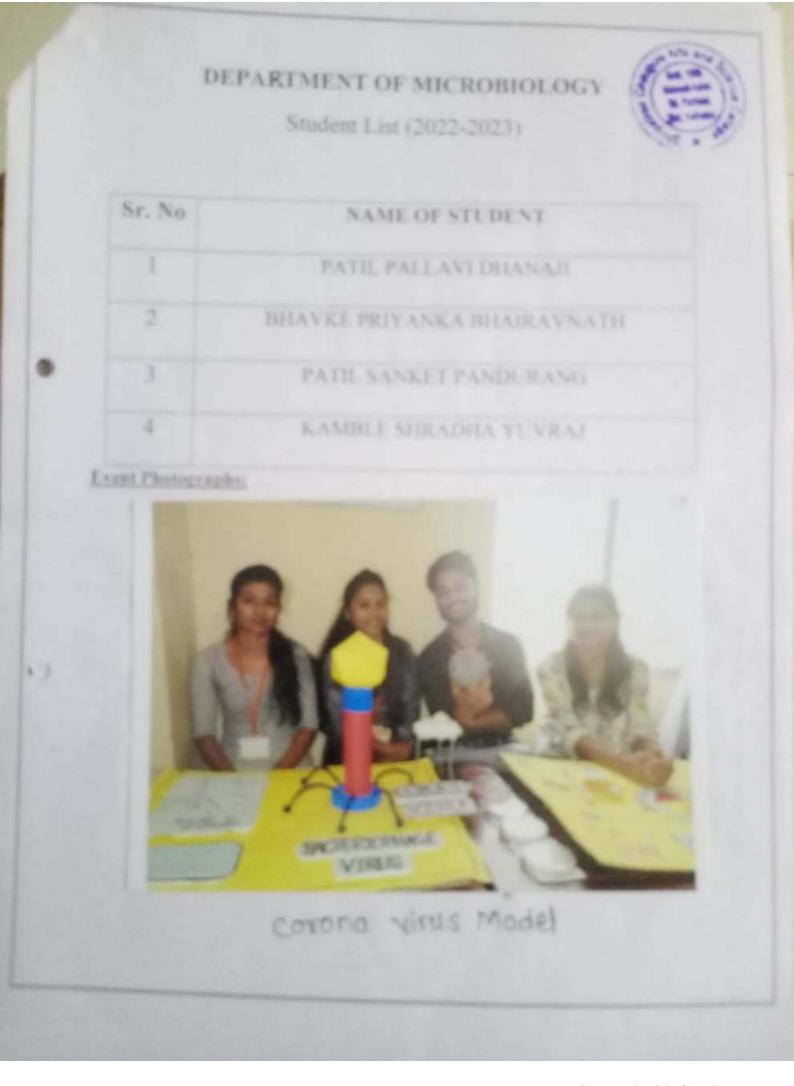


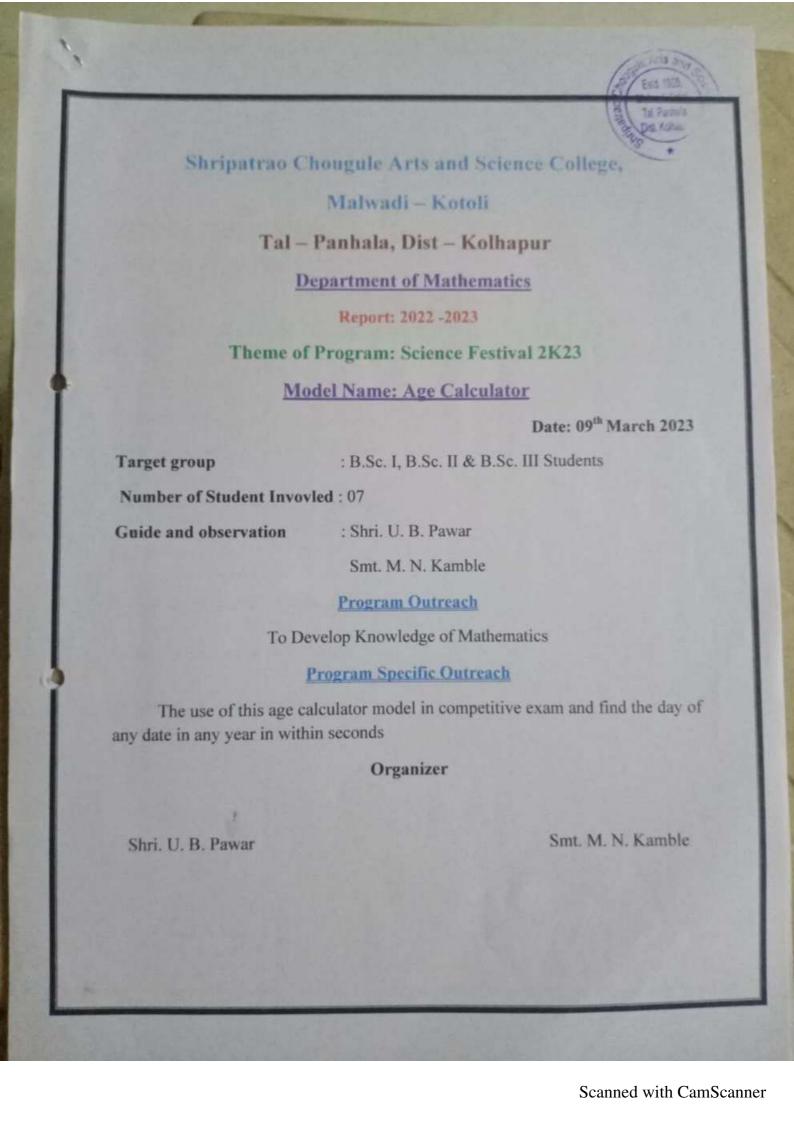
SARS Cov-2 Working Model

In December 2019, a novel corona virus crossed species barriers to infect humans and was effectively transmitted from person to person, leading to a worldwide pandemic. Development of effective clinical interventions, including vaccines and antiviral drugs. Each identified model provides a valuable insight into SARS-CoV-2 cellular tropism, replication kinetics, and cell damage that could ultimately enhance understanding of SARS-CoV-2 pathogenesis and protective immunity.

Model explains that the components they used are:

- 1. Spike (S) protein binds to ACE2 receptor
- 2. Envelope (E) protein forms an ion channel
- 3. Membrane (M) protein and vision assembly
- 4. SARS Cov-2 virus interaction with host cell.
- Virus replicative cycle through the characterization of entry pathways
- Virus survival and replication in the cytoplasm.





DEPARTMENT OF MATHEMATICS



NAME OF THE MODEL:

1) AGE CALCULATER

This Science festival was useful to students, to develop Knowledge of mathematics and Practicals

Find out the following:

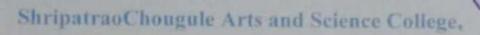
- · Your star sign
- · The day on which you were born
- · The number of days until your next birthday
- · Your birthstone
- How old you are in years, months and birthday
- · The number one song on your birthday
- The number one song on your birthday





Department Of Mathematics Student List

Sr. No.	Name of Students
1	CHOUGULE VINAYSAGAR BHIMRAO
2	JADHAV SUVARDHAN SANJAY
3	JAGTAP PRATHMESH SARJERAO
4	PATIL SANDHYA KRISHNAT
5	SAVARE PRASAD SANJAY
6	ATIKIRE SAYALI DILIP
7	SUTAR RUCHITA RAJU



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2022-2023

Theme of Program: Science Festival 2K21

Model Name: Chemical clock.

Date: 09 March 2023

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 04

Guide and observation : Smt. T. S. Kavathekar

Smt. K. T. Dige

Program Outreach

To understand about elephant toothpaste

Program Specific Outcome

To build interest in chemistry

Organizer

Smt. T. S. Kavathekar

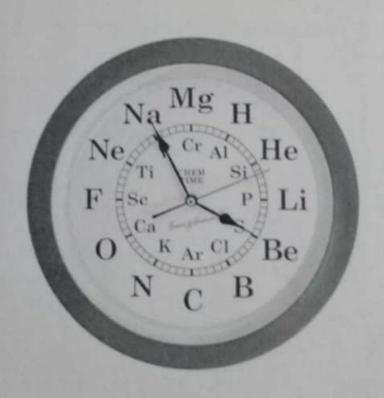
Smt. K. T. Dige



Department of Chemistry

Model Name: Chemistry Clock

A clock reaction involves measuring the time taken for a particular amount of product to be produced by a chemical reaction for different reactant concentrations. An observable end point is used to determine when the wanted amount of product has been produced and hence when to stop the timer. A clock is a circle with 360 degrees on it. It's separated into 12 equal pieces with numbers ranging from 1 to 12, 360/12 = 30° for each section. One hour is when the minute hand completes a full round, i.e., covers 360°.





Department of Chemistry Student List

Sr.No.	Name of the student
1	PATIL SUSHMA DHANAJI
2	KUMBHAR MADHURI SAMBHAJI
3	GHARGE DIPALI SHIVAJI
4	PATIL SANJYOTI BHAGWAN





ShripatraoChougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2022-2023

Theme of Program: Science Festival 2K23

Model Name: Atomic Structure model

Date: 9th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 4

Guide and observation

: Smt. T. S. Kavathekar

Shri. P.S.Jadhav

Program Outreach

To understand Atomic Structure of compound

Program Specific Outcome

To identify and analyse different atomic structure

Organizer

Smt. T. S. Kavathekar

Shri.P.S.Jadhav

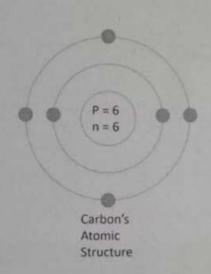
ShripatraoChougule Arts and Science College,



Department of Chemistry

Model Name: Atomic Structure model

Once the basic ideas are understood, people can then progress to the Quantum Mechanical model. Quantum mechanical model is more correct and accurate than any other model. Structure of Atom: Understanding the atomic structure, isotopes, and electronic configuration of elements is comparatively easier. Classification of Elements and Periodicity in Properties: Learning about the periodic table and periodic trends is relatively straightforward.



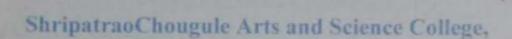


Department of Chemistry

Student List

Sr.No.	Name of the student
1	PATIL OMKAR SHANKAR
2	MANE RUSHIKESH ANANDA
3	KHOT GANESH ANANDA
4	PATIL PRAVIN SURESH





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2022-2023

Theme of Program: Science Festival 2K23

Model Name: Chemical Snake

Date: 9th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 4

Guide and observation

: Smt. T. S. Kavathekar

Shri, P.S.Jadhav

Program Outreach

To understand Chemical snake process

Program Specific Outcome

Fun experiment

Organizer

Smt. T. S. Kavathekar

Shri.P.S.Jadhav



Department of Chemistry

Model Name: Chemical Snake

The carbon dioxide gas and water vapor push the sugar and baking soda mixture upwards. At the same time, these gases get trapped in the solid carbon, creating the lightweight foam snake that you see emerging from the sand. Combine 4 parts icing mixture & 1 part bicarbonate soda in a bowl. Make a small indentation in the sandpile in your baking tray (making sure the sandpile is at least 5cm deep). Place your baking tray in a place away from any flammable materials and near your fire extinguisher, fire blanket or bucket of water





Department of Chemistry

Student List

Sr.No.	Name of the Students
1	PATIL SONALI SUHAS
2	POWAR ASHWINI PANDURANG
3	POWAR YOGIRAJ BHAUSO
4	PUJARI SUSHANT MANGU



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2022-2023

Theme of Program: Science Festival 2K23

Model Name: Elephant Toothpest

Date: 9th March 2023

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 6

Guide and observation

: Smt. T. S. Kavathekar

Shri, P.S.Jadhav

Program Ontreach

To understand Elephant toothpestprocess

Program Specific Outcome

To build interest in chemistry

Organizer

Smt. T. S. Kavathekar

Shri.P.S.Jadhav



Department of Chemistry

Model Name: Elephant Toothpest

Elephant's toothpaste is a foamy substance caused by the rapid decomposition of hydrogen peroxide (H 2O 2) using potassium iodide (KI) or yeast and warm water as a catalyst. The reaction is an example of a decomposition reaction. Hydrogen peroxide is mixed with some dish soap (and food colouring for effect) and then mixed with either potassium iodide or baker's yeast mixed with warm water. The hydrogen peroxide decomposes into water and oxygen. The foam is made as the dishwashing detergent traps tiny oxygen bubbles inside the bottle. Thick foam oozes out the top of the bottle, like toothpaste squeezed out of its tube. It's big enough for an elephant! When a chemical breaks down into smaller molecules, that's called a decomposition reaction.

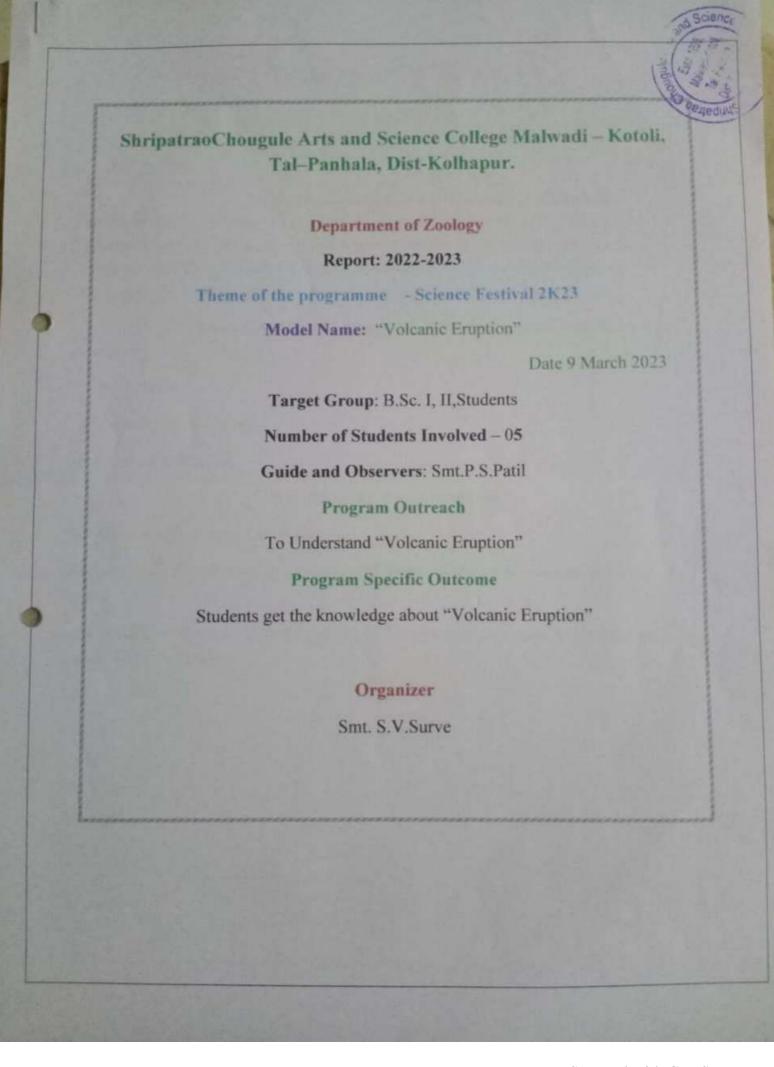




Department of Chemistry

Student List

PATIL RAJASHRI RAMCHANDRA
PATIL SHIVANI NIVRUTTI
PATIL YOGITA SANJAY
VARPE SANIKA SHAHAJI
SHELAR AADITYA DINKAR
SAVAT SANIKA HINDURAO



Department Of Zoology



" Volcanic Eruption"

A volcano is an opening in the earth's surface that allows magma (hot liquid and semi-liquid rock), volcanic ash and gases to escape. They are generally found where tectonic plates come together or separate, but they can also occur in the middle of plates due to volcanic hotspots. It is when gas and lava are released from a volcano

Volcanoes provide a number of environmental benefits, for

example:

1.fertile soils,

2.hydrothermal energy,

3.precious minerals.

they also pose several hazards:

1.volcanic ash, gases, (mud flows),

2.landslides, lava flows, and pyroclastic flows (fast-moving currents of hot gas).

3. Volcanic eruptions can be deadly and often cause population displacement and food shortages.

Department Of Zoology Student List Student Name Sr.No. Jagtap Pranav Uttam 1 Kadam Swaraj Shivaji 2 Mane Rutika Jotiram 3 Patil Abhishek Mohan 4 Sawant Rohit Rajendra 5 (0) & Vollanic Esuption Model ">



Shripatrao Chougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Computer Science

Report: 2022 -2023

Theme of Program: Science Festival 2K23

Model Name: "Smart Reading Room"

Date: 09th March 2023

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 03

Guide and observation : Shri.A.S.Kumbhar

: Smt. A.P.Bachate

Program Outreach

Reading is an essential skill for anyone and plays a crucial role in academic success.

Program Specific Outreach

Achieving your goals brings satisfaction, making reading even more enjoyable Most importantly, SMART reading goals fuel your personal growth, expanding your knowledge and broadening your perspectives.

Organizer

Shri.A.S.Kumbhar

Smt. A.P.Bachate



Shripatrao Chougule Arts and Science College Malwadi - Kotoli, Tal-Panhala , Dist-Kolhapur.

Department of Computer Science

Report: 2022-2023

Science Festival 2K23

Date: 28th February

Them of the Activity

"Smart Reading Room"

Target Group: B.Sc. I, II, III Students

Number of Students Involved -50

Guide and Observers: Shri.A.S.Kumbhar

Smt.A.P.Bachate

Program Outreach

Reading is an essential skill for anyone and plays a crucial role in academic success

Program Specific Outcome

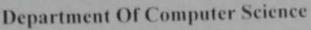
Achieving your goals brings satisfaction, making reading even more enjoyable.

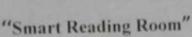
Most importantly, SMART reading goals fuel your personal growth, expanding your knowledge and broadening your perspectives.

Organizer

Shri.A.S.Kumbhar

Smt.A.P.Bachate



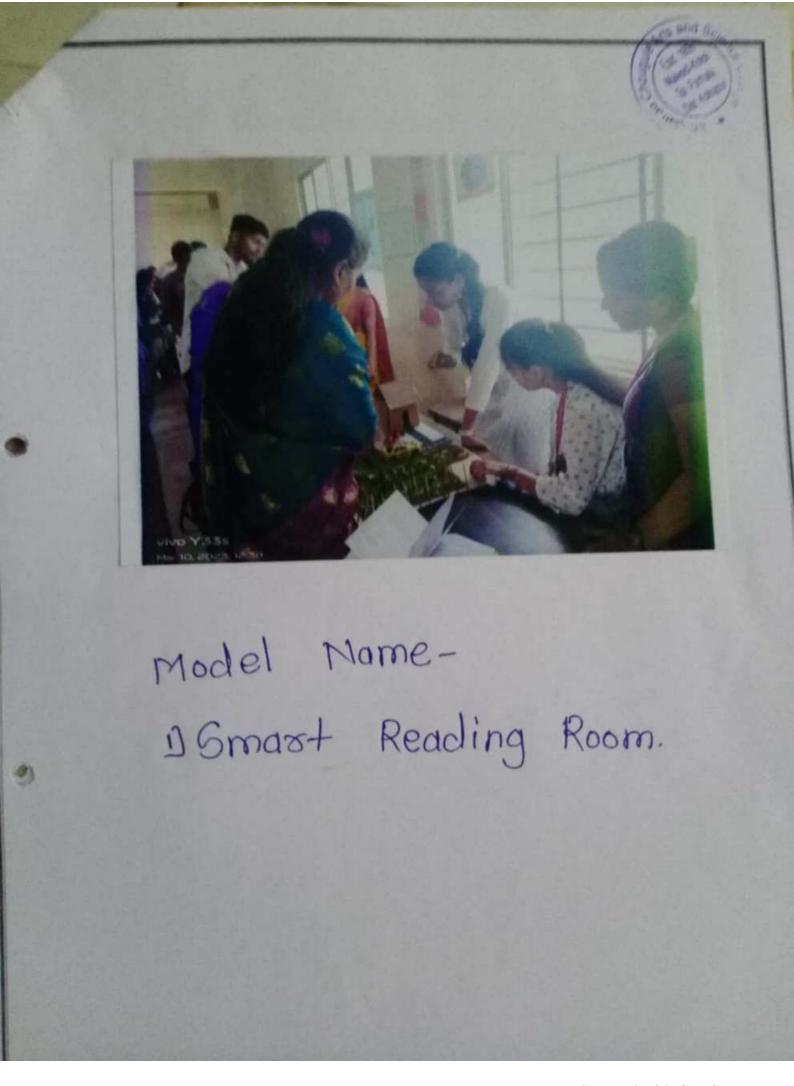




Beyond helping you set effective goals, the SMART framework offers several advantages that enhance your entire reading experience. SMART goals boost your motivation by providing clear targets and achievable milestones.

They eliminate confusion, ensuring you always know what to focus on and how to track your progress. Additionally, SMART goals encourage consistency, helping you develop lasting reading habits.

- Detail information about Smart Reading Room project
- A reading room is a quiet room in a library or museum where you can read and study.
- Studying along with the other readers keeps you motivated towards reading.
- Reading in the reading rooms helps you concentrate better as it is peaceful, and there it is negligible, or say zero distraction.



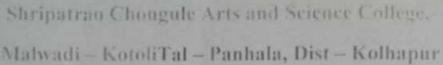
Department Of Computer Science

Student List

Sr.No.	Student Name	
1	Patil Pruthviraj Yuvraj	
2	Mahadik Payal Yuvraj	
3	Redekar Tejashri Tanaji	



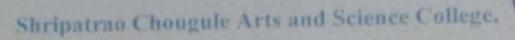




Science Exhibition Model List 2020-2021

Sr.No	Department Name	Model Name
1	Botany	1.Green house
		2.Prokaryotic cell
2	Physics	1. Automatic sanitizer machine
		2. Cooler using Renewable energy
3	Electronics	1. Short range Radar
		2. Smoke detector Alarm
		3. Obstacle avoiding car
4	Microbiology	1.Corona Structure
200		2. Bacteriophage
5	Mathematics	1.Tower of Hanoi
		2. Konigberges 7 bridge problen
6	Chemistry	1. Water Recycling model
		2.Elephant Toothpaste
		3.Chemical blood
		4.Smoke bomb
7	Zoology	1.Apiculture model
8	Computer Science	1. Various types of computers







Tal - Panhala, Dist - Kolhapur

Department of Botany

Report: 2020 -2021

Theme of Programme: Science Festival 2k21

Model Name: Green House

Date: 01& 02 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation : Smt. T.V.Suryvanshi

Programme Outreach

To understand concept of greenhouse

Programme Specific Outcome

Student get knowledge about greenhouse allows a grower to have more environmental control over the conditions in which plants are grown

Organizer

Smt. T.V.Suryvanshi

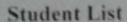
DEPARTMENT OF BOTANY

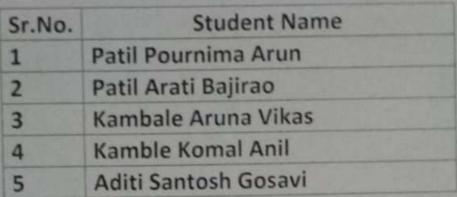


Green House

of plants, either food crops or cash crops are grown in open field. Since time immemorial, man has learnt how to grow plants under natural environmental conditions. In some of the temperate regions where the climatic conditions are extremely adverse and no crops can be grown, man has developed methods of growing some high value crop continuously by providing protection from the excessive cold, which is called as Greenhouse Technology. So, Greenhouse Technology is the technique of providing favourable environment condition to the plants. It is rather used to protect the plants from the adverse climatic conditions such as wind, cold, precepitation, excessive radiation, extreme temperature, insects and diseases. It is also of vital importance to create an ideal micro climate around the plants. This is possible by erecting a greenhouse / glass house, where the environmental conditions are so modified that one can grow any plant in any place at any time by providing suitable environmental conditions with minimum labour.

Department Of Botany











Shripatrao Chougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Botany

Report: 2020 -2021

Theme of Programme: Science Festival 2k21

Model Name: Prokaryotic Cell

Date: 01& 02 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 04

Guide and observation : Smt. T.V.Suryvanshi

Programme Outreach

To understand concept of Prokaryotic cell

Programme Specific Outcome

To identify and analyse different parts of prokaryotic cell

Organizer

Smt. T.V.Suryvanshi

'Prokaryotic Cell'



Organisms that have prokaryotic cells are unicellular. They are called "prokaryotes." The prokaryotic cell has several elements that allow it to function as a living organism. First, prokaryotes are covered in a cell membrane. This membrane allows them to create a specific environment within the cytosol that allows biochemical reactions to take place. Second, these cells house both loose DNA and ribosomes. Though ribosomes are organelles, they are not bound by a plasma membrane. Together, the DNA and ribosomes work to produce the proteins that the cells need to gather nutrients, reproduce, and even defend themselves in the face of predators or environmental changes!

Prokaryotic are much smaller than the smallest eukaryotic cells. In general, a prokaryotic cell is smaller because it has less DNA to create the proteins needed to make an ultra-efficient membrane. So, the cells reach a size where they can no longer import the number of nutrients they need for the volume of cytosol they contain. This is known as a surface-area-to-volume ratio limit. However, bacteria are much larger than viruses because they are actively carrying out the biochemical reactions of life within their cells.

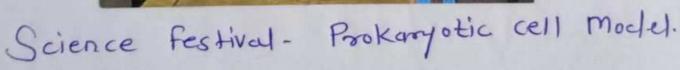


Department Of Botany

Student List

Sr.No.	Student Name
1	Kole Snehal Sardar
2	Patil Aditya Babaso
3	Kamble Arti Shripati
4	Dhumal Sakshi Nivruti
5	Kudale Karan Jotiram





Shripatrao Chougule Arts and Science College, Malwadi – Kotoli Tal – Panhala, Dist – Kolhapur Department of Physics Report: 2020 -2021 Theme of Program: Science Festival 2K21 Model Name: Automatic Sanitizer Machine Date: 1&2 March Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation : Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To develope this outreach project aims to educate and inspire the public about the mission's objectives, advancements, and importance in space exploration.

Program Specific Outreach

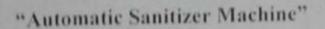
Through a comprehensive outreach program, we can educate, inspire, and engage diverse audiences about the mission's goals, technological advancements, and potential discoveries. This outreach will not only foster interest in space science but also highlight India's contributions to global space exploration.

Organizer

Smt. S. N. Mane

Smt. P.M. Karale

Department of Physics





"Standard recommendations to prevent the spread of COVID-19 include frequent cleaning of hands using alcohol-based hand rub or soap and water; covering the nose and mouth with a flexed elbow or disposable tissue when coughing and sneezing; and avoiding close contact with anyone that has a fever and cough."

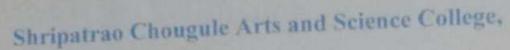
Rub the hand sanitizer all over your hands, making sure to get between your fingers and on the back of your hands. Do not wipe or rinse off the hand sanitizer before it dries. Do not use hand sanitizer if your hands are visibly dirty or greasy; wash your hands with soap and water instead.

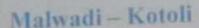
Department of Physics Student list

- 1	PATIL AMRUTA BAJIRAO
2	PATIL SHIVANI TANAJI
-	SHUCKED CAVALINIVAS



Automatic Sonitizer Machine presented by student.





Tal - Panhala, Dist - Kolhapur

Department of Physics

Report: 2020 -2021

Theme of Program: Science Festival 2K24

Model Name: cooler

Date: 1&2 March

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 05

Guide and observation

: Smt. S. N. Mane

Smt. P. M. Karale

Program Outreach

To develope this outreach project aims to educate and inspire the public about the mission's objectives, advancements, and importance in space exploration.

Program Specific Outreach

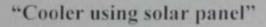
Through a comprehensive outreach program, we can educate, inspire, and engage diverse audiences about the mission's goals, technological advancements, and potential discoveries. This outreach will not only foster interest in space science but also highlight India's contributions to global space exploration.

Organizer

Smt. S. N. Mane

Smt. P.M. Karale

Department of Physics





The creation of renewable energy technologies has been accelerated by the world's rising energy consumption and the necessity of addressing climate change.

Among them, solar-powered air conditioning and refrigeration systems have come to light as a potentially effective way to lower greenhouse gas pollution and energy expenses.

Solar-powered cooling systems have the ability to increase mobility in isolated regions, reduce dependence on electrical infrastructure, and increase the energy economy. Solar-powered cooling systems still have issues with upkeep, weather dependence, and starting expenses, though.

The advantages and difficulties of solar-powered air conditioning and refrigeration will be discussed in this article, along with their present and potential future effects on the cooling sector.

Department of Physics Student list ARANDE NIKHIL ANKUSH BANGADE SAURAMI KUSHAPPA KAMBLE SURAJ VILAS DEPARTMENT Cooler

Shripatrao Chougule Arts and Science College, Malwadi - Kotoli* ** Tal - Panhala, Dist - Kolhapur

Department of Electronics

Report: 2020 - 2021

Theme of Program: Science Festival

Name of Model: A Short Range RADAR

Date: 1st March 2021

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Involved: 07

Guide and observation : Dr. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Shri. V. D. Nivadekar

Program Outreach

: I) Generate awareness about A Short Range

RADAR & encourage student for scientific

research.

Organizer

Smt. S. M. Chougule

Shri. V. D. Nivadekar

DEPARTMENT OF ELECTRONICS



NAME OF THE MODEL:

A SHART RANGE RADAR

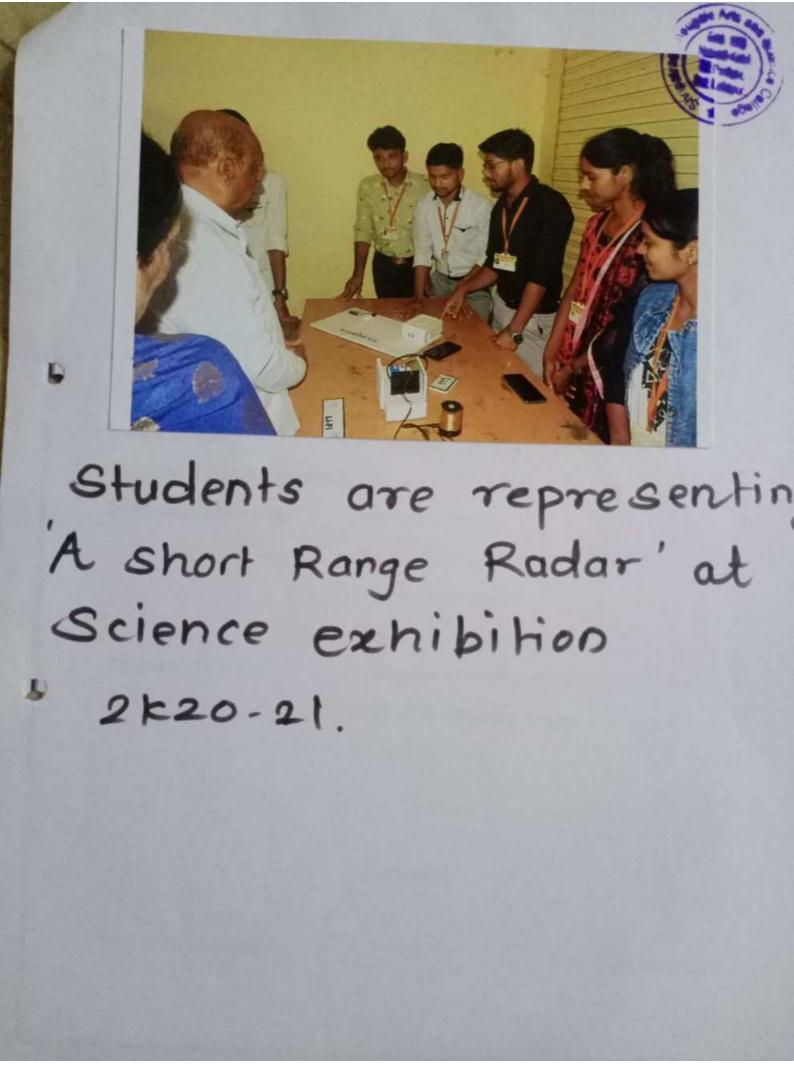
This Science festival was useful to students, to get knowledge about how A SHORT RANGE RADAR can be used for security purpose while driving.

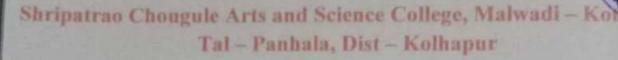
Find out the following:

- The information about A SHORT RANGE RADAR system.
- How A Short Range Radar can be used for security in driving.

<u>STUDENT LIST</u>

Sr. No	NAME OF STUDENTS
1	LAVHATE AVINASH SHAMRAO
2	LAVHATE VIJAY TANAJI
3	KATKAR ANIKET RAJARAM





Department of Electronics

Report: 2020 - 2021

Theme of Program: Science Festival

Name of Model: Smoke Detector Alarm

Date: 1st March 2021

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Involved: 07

Guide and observation : Dr. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Shri. V. D. Nivadekar

Program Outreach :I) Generate awareness about Smoke Detector

Alarm & encourage student for scientific research.

Organizer

Smt. S. M. Chougule

Shri. V. D. Nivadekar



DEPARTMENT OF ELECTRONICS

NAME OF THE MODEL:

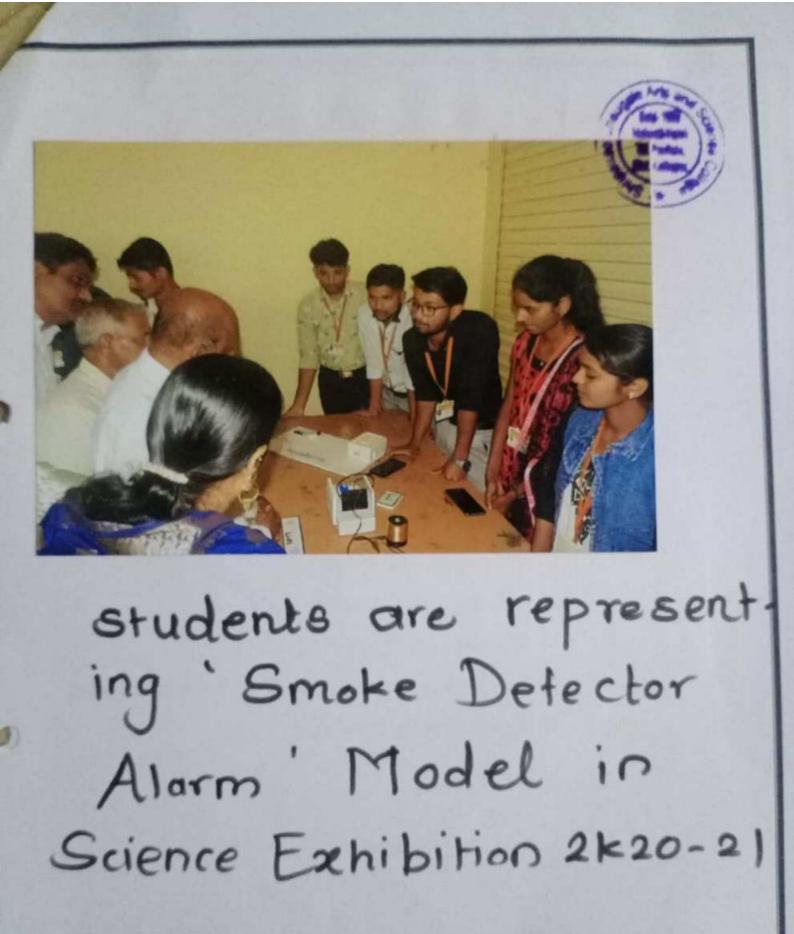
SMOKE DETECTOR ALARM

This Science festival was useful to students, to get knowledge about how SMOKE DETECTOR ALARM can be used for security purpose for industrial and driving safety...

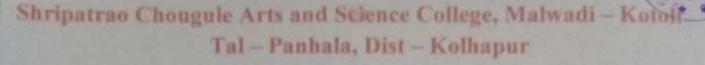
- Find out the following:
 - The information about SMOKE DETECTOR ALARM system.
 - · How smoke detector can be used for industrial security.

<u>DEPARTMENT OF ELECTRONICS</u> <u>STUDENT LIST</u>

Sr. No	NAME OF STUDENTS
1	PATIL SAIRAJ SAMBHAJI
2	POKHALE DAULAT PANDIT



Scanned with CamScanner



Department of Electronics

Report: 2020 - 2021

Theme of Program : Science Festival

Name of Model: Obstacle Avoiding Car

Date: 1st March 2021

Target group : B.Sc I, B.Sc II &B.Sc III Students

Number of Student Involved: 07

Guide and observation : Dr. K. S. Chougule

Shri. S. S. Patil

Smt. S. M. Chougule

Shri. V. D. Nivadekar

Program Outreach : 1) Generate awareness about Obstacle Avoiding

Car&encourage student for scientific research.

Organizer

Smt. S. M. Chougule

Shri. V. D. Nivadekar

DEPARTMENT OF ELECTRONICS



NAME OF THE MODEL:

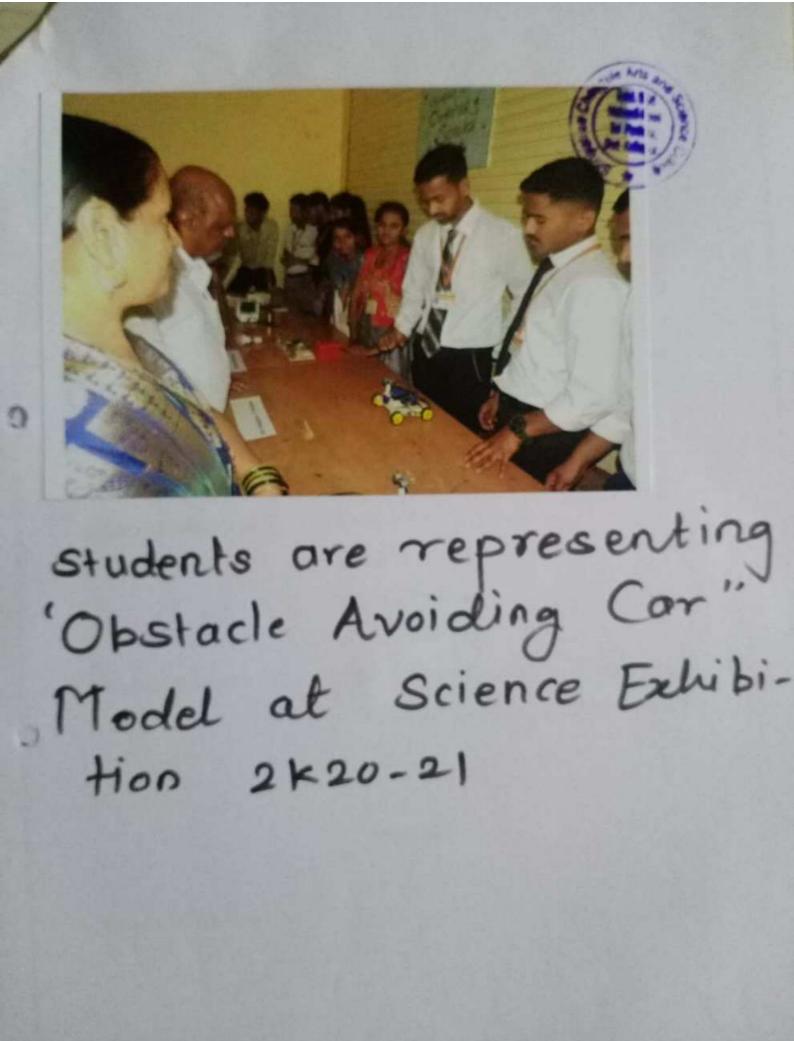
OSTACLE AVOIDING CAR

This Science festival was useful to students, to get knowledge about how OBSTACLE AVOIDING CAR &can be used for security purpose while driving.

- Find out the following:
 - The information about OBSTACLE AVOIDING CAR system.
 - How Obstacle Avoiding Carcan be used for security in driving.

DEPARTMENT OF ELECTRONICS STUDENT LIST

Sr. No	NAME OF STUDENTS
1	KUMBHAR AKSHAY PRADIP
	PATIL LAHU CHANDRAKANT
2	



Shripatrao Chougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Microbiology

Report: 2020 -2021

Theme of Programme: Science Festival 2k21

Model Name: Corona Structure

Date: 01&02 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 10

Guide and observation : Smt.R.B.Jadhav

Smt.P.A.Kamble

Programme Outreach

To understand structure of Virus

Programme Specific Outcome

Student get knowledge about Corona virus and study the pathogenecity

Organizer

Smt.R.B.Jadhav

Smt.P.A.Kamble



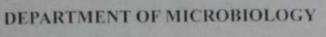
DEPARTMENT OF MICROBIOLOGY

The Coronavirus, scientifically known as SARS-CoV-2, is a novel virus that emerged in late 2019, causing a global pandemic. It belongs to a family of viruses called Coronaviridae, which are known for causing respiratory illnesses in humans and animals. COVID-19 stands for "Coronavirus Disease 2019," reflecting the

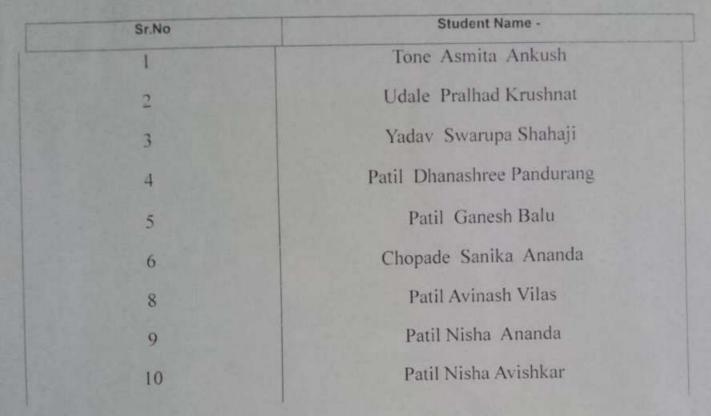
The virus was first identified in the city of Wuhan, Hubei province, China, and quickly spread to various parts of the world. Its rapid transmission and impact on public health systems led the World Health Organization (WHO) to declare it a Public Health Emergency of International Concern in January 2020, and later, a pandemic in March 2020.

Model explains that components they used are:

- · spikes (S-protein):
- Capsid
- · Viral Genome
- · RNA Genetic material
- · Structural Proteins
- Membrane
- Envelope



Student list







corona virus structure

Date - 01802 Morch 2021



Shripatrao Chougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Microbiology

Report: 2020 -2021

Theme of Programme: Science Festival 2k21

Model Name: Bacteriophage

Date: 01&02 March 2021

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 10

Guide and observation

: Smt.R.B.Jadhav

Smt.P.A.Kamble

Programme Outreach

To understand structure of bactriophage

Programme Specific Outcome

To study the parts of bactriophage

Organizer

Smt.R.B.Jadhav

Smt.P.A.Kamble



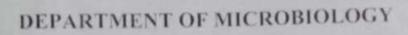
DEPARTMENT OF MICROBIOLOGY

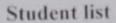
Bacteriophage or phage for short are viruses that infect only bacteria. In contrast to cells that grow from an increase in the number of their components and reproduce by division, viruses are assembled from pre-made components. Viruses are nucleic acid molecules surrounded by a protective coating. They are not capable of generat- ing energy and reproduce inside of cells. The nucleic acid inside the coating, called the phage genome in a bacteriophage, encodes most of the gene products needed for making more phage. The phage genome can be made of either double- or single-stranded DNA or RNA, depending on the bacteriophage in question. The genome can be circular or linear. The protective coating or capsid surrounding the phage genome is composed of phage-encoded proteins.

Many important discoveries have been made using phage as model systems. From the discovery that a nonsense codon stopped protein synthesis to the first develop- mental switch to be understood at the molecular level, phage have proven to be very useful. In this chapter, we will look at phage development using T4, * (lambda), P1. and M13 as examples. Each of these phage infect E. coli. We will examine specific dis- coveries using these phage or specific properties of the phage that have made them particularly useful to biologists.

Model explains that components they used are:

- · Head of bacteriophage
- Capsid
- · Tail fibres
- · Attacment to the vector
- Collar
- Lysis of the cell
- Life Cycle of Bacteriophage





Sr.No	Student Name -
1	Tone Asmita Ankush
2	Udale Pralhad Krushnat
3	Yadav Swarupa Shahaji
4	Patil Dhanshree Pandurang
5	Patil Ganesh Balu
6	Chopade Sanika Ananda
8	Patil Avinash Vilas
9	Patil Nisha Ananda
10	Patil Nisha Avishkar

Event Photo:

0



Students Represent Bacteriophage model

Shripatrao Chougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Mathematics

Report: 2020 -2021

Theme of Program: Science Festival 2K21

Model Name: Tower of Hanoi

Date: 01&02March,2021

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Involved: 09

Guide and observation

: Shri. U. B. Pawar

Smt. M. N. Kamble

Program Outreach

"Tower of Hanoi" model is the game puzzle in maths to develop the students

Program Specific Outreach

Tower of Hanoi" model is the Bramah's Tower. Which is the game puzzle? To solve these game students knowledge was increasing.

Organizer

Shri. U. B. Pawar

Smt. M. N. Kamble

DEPARTMENT OF MATHEMATICS



NAME OF THE MODEL:

1) TOWER OF HANOI

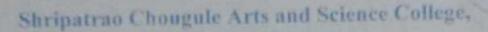
- The tower of Hanoi is a mathematical game or puzzle consisting of three rods and a number of disks of various diameters, which can slide onto any rod.
- 2) The Tower of Hanoi is frequently used in psychological research on problemsolving.
- The Tower of Hanoi is also used as a backup rotation scheme when performing computer data backups where multiple tapes.
- 4) The Tower of Hanoi is also used as a test by neuropsychologists trying to evaluate frontal lobe deficits.





Department Of Mathematics Student List

Sr. No.	Name of Students
1	CHOUGALE SHUBHAM SADASHIN
2	DALAVI VIDYATAI VILAS
3	DESAI PALLAVI VILAS
4	DHUMAL RUTUJA DNYANDEV
5	GAIKWAD SOURABH VILAS
6	PATIL SAYALI SARJERAO
7	PATIL SNEHAL MAHADEV
8	VICHARE ANANDA DNYANDEV



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Mathematics

Report: 2020 -2021

Theme of Program: Science Festival 2K21

Model Name: Konicbergs 7 bridge problem

Date: 01&02March,2021

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Involved: 09

Guide and observation

: Shri. U. B. Pawar

Smt. M. N. Kamble

Program Outreach

Konigbergs 7 bridge problem is the problem of mathematics in a graph theory Paper is developed

Program Specific Outreach

Konigbergs 7 bridge problem is the problem of mathematics to develop graph theory in mathematics and this concept are used in a google maps, facebbok etc.

Organizer

Shri. U. B. Pawar

Smt. M. N. Kamble



DEPARTMENT OF MATHEMATICS

NAME OF THE MODEL:

1) KONIGSBERG SEVEN BRIDGE PROBLE

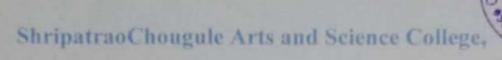
Konigsberg seven bridge problem was beginning regarding that seven bridge in Rusia. Which was connected to land starting to suffer the one venue there to end but it is not possible. It is proved by mathematician and they started the Graph theory paper and it is useful to todays virtual communication like google map, facebook





Department of Mathematics Student List

Sr. No.	Name of Students
1	CHOUGALE SHUBHAM SADASHIV
2	DALAVI VIDYATAI VILAS
3	DESAI PALLAVI VILAS
4	DHUMAL RUTUJA DNYANDEV
5	GAIKWAD SAURABH VILAS
6	PATIL SAYALI SARJERAO
7	PATIL SNEHAL MAHADEV
8	VICHARE ANANDA DNYANDEV



Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2020-2021

Theme of Program: Science Festival 2K21

Model Name: Water recycling model

Date: 1 & 2 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 3

Guide and observation : Smt. T. S. Kavathekar

Smt. K. T. Dige

Program Outreach

To understand about Water recycling process

Program Specific Outcome

Water recycling helps maintain a constant supply of fresh water as long as it is appropriately filtered and treated to ensure it is fit for use.

Organizer

Smt. T. S. Kavathekar

Smt. K. T. Dige



Model Name: Water recycling model

In the Make a Water Cycle Model lesson, students learn about the water cycle and investigate how this natural recycling system is powered by energy from the Sun and the force of gravity.

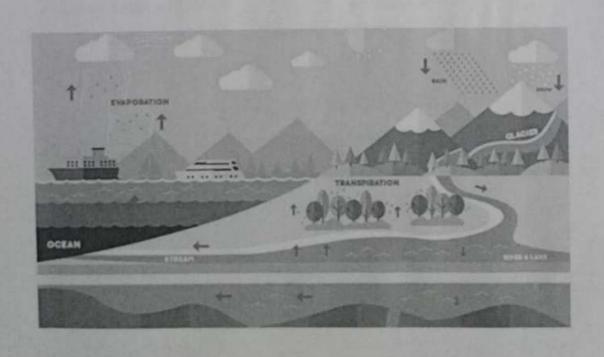
As rainwater runs over the land back to rivers and the sea, some is taken up by and used by plants, and some returns to the air through transpiration. Most rainwater collects in lakes or rivers and flows back to the sea for the water cycle to start again.

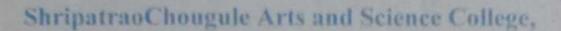




Student List

Name of the Students	
GURAV PALLAVI PRAKASH	
KAMBLE AADARSH ASHOK	3.3
JADHAV RANJIT MARUTI	I P
	GURAV PALLAVI PRAKASH KAMBLE AADARSH ASHOK





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2020-2023

Theme of Program: Science Festival 2K21

Model Name: Elephant toothpaste

Date: 1 & 2 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 3

Guide and observation : Smt. T. S. Kavathekar

Smt. K. T. Dige

Program Outreach

To understand about elephant toothpaste

Program Specific Outcome

To build interest in chemistry

Organizer

Smt. T. S. Kavathekar

Smt. K. T. Dige



Model Name: Elephant Toothpest

Elephant's toothpaste is a foamy substance caused by the rapid decomposition of hydrogen peroxide (H 2O 2) using potassium iodide (KI) or yeast and warm water as a catalyst. The reaction is an example of a decomposition reaction. Hydrogen peroxide is mixed with some dish soap (and food colouring for effect) and then mixed with either potassium iodide or baker's yeast mixed with warm water. The hydrogen peroxide decomposes into water and oxygen. The foam is made as the dishwashing detergent traps tiny oxygen bubbles inside the bottle. Thick foam oozes out the top of the bottle, like toothpaste squeezed out of its tube. It's big enough for an elephant! When a chemical breaks down into smaller molecules, that's called a decomposition reaction.





Student List

Sr.No.	Name of the Students
1	PATIL DIPALI AMAR
2	PATIL PRATHMESH MOHAN
3	PATIL RUTUJA BHIMRAO



Model Name: Chemical Blood

These substances include electrolytes (such as sodium, potassium, and chloride), fats, proteins, glucose (sugar), and enzymes. Blood chemistry studies give important information about how well a person's kidneys, liver, and other organs are working. Hemoglobin is the oxygen-carrying protein that is found within all RBCs. It picks up oxygen where it is abundant (the lungs) and drops off oxygen where it is needed around the body. Blood consists of cellular material (99% red blood cells, with white blood cells and platelets making up the remainder), water, amino acids, proteins, carbohydrates, lipids, hormones, vitamins, electrolytes, dissolved gasses, and cellular wastes. Each red blood cell is about one-third hemoglobin, by volume.





Student List

Name of the Students
MOHITE SHIVANI SANJAY
NAIK SUPRIYA LAXMAN
JADHAV LAXMI DHONDIRAM
KHAMKAR PRATIKSHA RAJARAM
PATIL NEHA SANJAY



ShripatraoChougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2023 -2024

Theme of Program: Science Festival 2K24

Model Name: Chemical Blood

Date: 28th Feb 2024

Target group

: B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 5

Guide and observation

: Smt. T. S. Kavathekar

Smt. D.K.Kamble

Shri.P.S.Jadhav

Program Outreach

To understand Chemical blood process

Program Specific Outcome

Formation of fake blood with the help of chemicals

Organizer

Smt. T. S. Kavathekar

Shri.P.S.Jadhav Smt. D.K.Kamble



ShripatraoChougule Arts and Science College,

Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Chemistry

Report: 2020-2021

Theme of Program: Science Festival 2K21

Model Name: Smoke Bomb

Date: 1 & 2 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 3

Guide and observation : Smt. T. S. Kavathekar

Smt. K. T. Dige

Program Outreach

To understand about smoke bomb

Program Specific Outcome

To build interest in chemistry

Organizer

Smt. T. S. Kavathekar

Smt. K. T. Dige



Model Name: Smoke Bomb

The smoke bomb is non-toxic. It produces white smoke and purple sparks as it burns, but does not blow up. Also, find other simple recipes and safety tips. This is the classic homemade smoke bomb recipe, which only requires two ingredients; sugar and potassium nitrate. Find ordinary granulated sugar (sucrose, C 12 H 22 O 11) in the kitchen.

How do you make a smoke bomb?

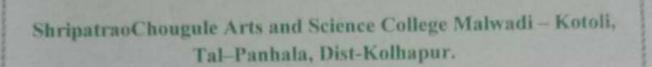
Any advice most appreciated! Smoke bombs are made by reacting potassium nitrate (saltpeter) with sugar over low burner heat. The project won't harm your cookware, plus the ingredients are safe enough that you can use the dishes you would use for eating, as long as you clean them.





Student List

Sr. No.	Name of the Students	
1	PATIL SURAJ LAXMAN	
2	PATIL UDAY MARUTI	
3	PATIL VISHAL ARJUN	



Department of Zoology

Report: 2020-2021

Theme of the programm - Science Festival 2K21

Date:01&02March,2021

Model Name

" Apiculture"

Target Group: B.Sc. I, II, Students

Number of Students Involved - 05

Guide and Observers: Smt. S.V.Surve

Program Outreach

To know the Apiculture

Program Specific Outcome

Students understand the Apiculture

Organizer

Smt. S.V.Surve



Department Of Zoology

"Apiculture"

Apiculture is the maintenance of bee colonies, commonly in artificial beehives. The keeping of bees by humans, primarily for honey production, began around 10,000 years ago. Honey bees in the genus Apis are the most commonly kept species but other honey producing bees such as Melipona stingless bees are also kept.

Beekeepers keep bees to collect honey and other products of the hive like beeswax, propolis, bee pollen and royal jelly, ther sources of beekeeping income include pollination of crops, raising queens, and production of package bees for sale. Bee hives are kept in "bee yard" Johann Dzierzon is considered the father of modern apiology and apiculture. Most modern beehives derive from his design.

Role of Hives in Apiculture:-

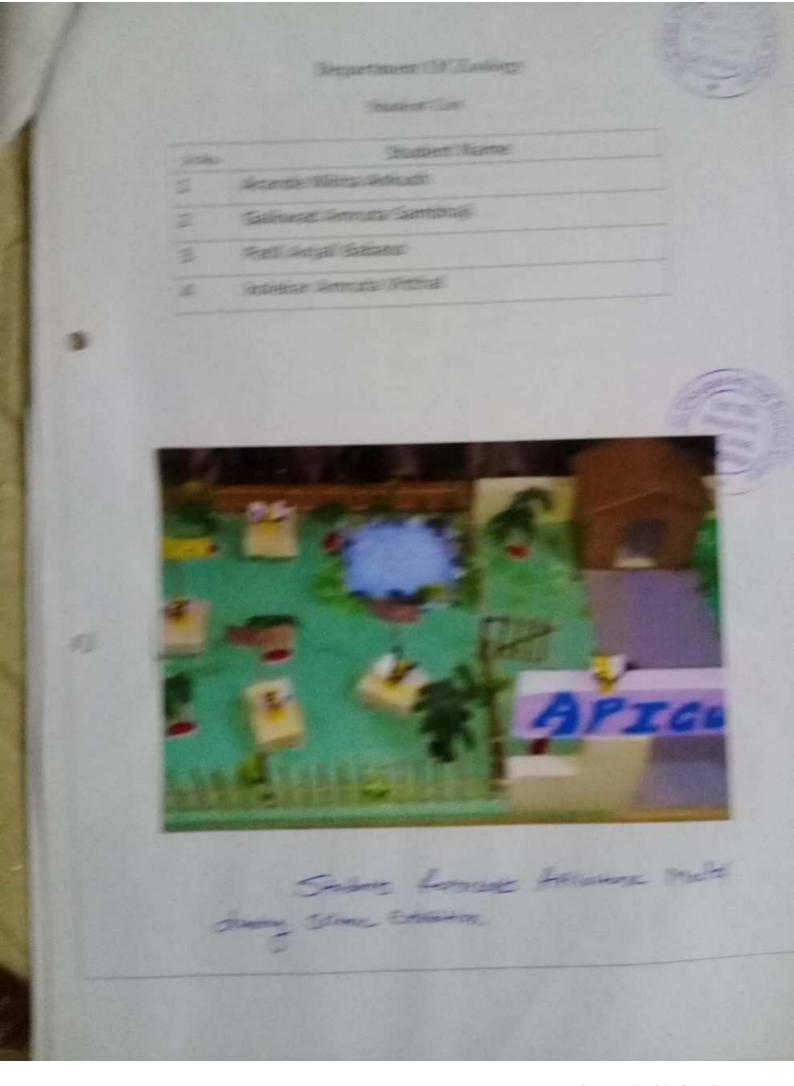
- 1. Providing Shelter and Habitat
- 2. Facilitating Colony Managemen
- 3. Harvesting Bee Products
- 4. Supporting Pollination

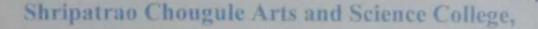
people use honey when treating a wide variety of conditions.

- · eye diseases
- fatigue

13

- dizziness
- hepatitis
- constipation





Malwadi - Kotoli

Tal - Panhala, Dist - Kolhapur

Department of Computer Science

Report: 2020 -2021

Theme of Program: Science Festival 2K21

Model Name: "Various Types Of Computer"

Date: 01 &02 March 2021

Target group : B.Sc. I, B.Sc. II & B.Sc. III Students

Number of Student Invovled: 03

Guide and observation : Shri.A.S.Kumbhar

: Smt. A.P.Bachate

Program Outreach

Reading is an essential skill for anyone and plays a crucial role in academic success.

Program Specific Outreach

Achieving your goals brings satisfaction, making reading even more enjoyable

Most importantly, SMART reading goals fuel your personal growth, expanding
your knowledge and broadening your perspectives.

Organizer

Shri.A.S.Kumbhar

Smt. A.P.Bachate

Shripatrao Chougule Arts and Science College Malwadi – Kotoli,

Tal–Panhala, Dist-Kolhapur.

Department of Computer Science

Report: 2020-2021

Science Festival 2K21

Date: 1st & 2nd March

Them of the Activity

"Various types of Computer"

Target Group: B.Sc. I, II, III Students

Number of Students Involved -50

Guide and Observers: Shri. A.S. Kumbhar

Smt. A.P.Bachate

Program Outreach

The basic parts of a desktop computer are the computer case, monitor, keyboard, mouse, and power cord.

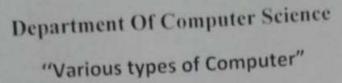
Program Specific Outcome

Each computer receives input from a variety of devices, processes that data with the CPU and memory, and sends results to some form of output.

Organizer

Shri. A.S. Kumbhar

Smt. A.P.Bachate

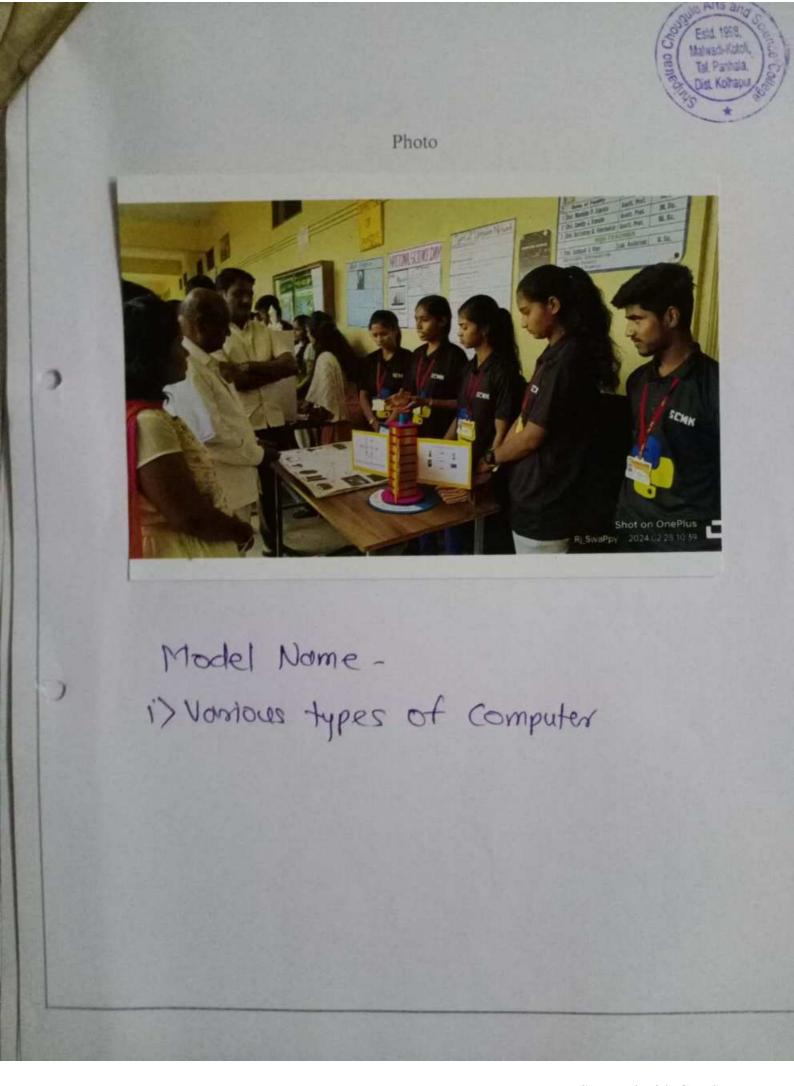


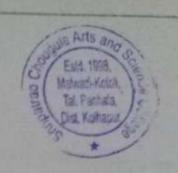


The most basic computer setup usually includes the computer case, monitor, keyboard, and mouse, but you can plug many different types of devices into the extra ports on your computer. These devices are called peripherals. Let's take a look at some of the most common ones.

A computer is an electronic device that accepts data, performs operations, displays results, and stores the data or results as needed. It is a combination of hardware and software resources that integrate together and provides various functionalities to the user. Hardware is the physical components of a computer like a processor, memory devices, monitor, keyboard, etc

The five basic parts of a computer are the motherboard, central processing unit (CPU), input-output units, memory (RAM and ROM), and storage (SSD or HDD). Please share this... The basic parts of computer usually include a motherboard, CPU, RAM, ROM, and storage devices such as SSD/HDD.





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