



**Dempo Charities Trust's
Dhempe College of Arts and Science
Panaji, Goa**

**“INSPIRE THE NEXT”
REPORTS OF ANNUAL SCIENCE EXHIBITION
2017-20**

FOR THE YEAR 2017-18

Themes followed by various departments are as follows:

DEPARTMENT OF ZOOLOGY: “Genesis :The Dawn of Life”,

DEPARTMENT OF BOTANY: “Forgotten Rice varieties”

DEPARTMENT OF GEOLOGY: “Minerals, Rocks and Fossils”

DEPARTMENT OF COMPUTER SCIENCE: “Mobile Apps”

DEPARTMENT OF BIOTECHNOLOGY: “Chiasma”

DEPARTMENT OF PHYSICS: “Hit the optics”

DEPARTMENT OF CHEMISTRY: “Chem-magic”

DEPARTMENT OF MATHEMATICS: “ Magic Maths”

Department of Zoology

The Department of Zoology worked on the theme of ‘Genesis: The Dawn of Life’. The students of F.Y., S.Y. & T.Y.B.Sc. Zoology participated enthusiastically. Right from the selection of the

topics to bringing the theme into reality, the students worked on the display of posters, exhibits and 3-D models.



F.Y. Students prepared posters on Genesis: The origin of Life, Evolutionary tree of Life, Reproduction: The life continues, Journey of Nervous system, Animals living in Extreme Conditions.

S.Y. students prepared 3D Models of 'Animal cell', Cell Organelle - Plasma membrane, Mitochondria, Nucleus, Ribosome, Dentition in Animals & Working model of Human lungs, DNA model.

T.Y.B.Sc. Students prepared models on larval stages of Frog & Life cycle of Mosquito.



The exhibition received overwhelming response from various schools & Higher secondary Schools like Our lady of the Rosary, Vasantrao Dempo HSS, Sharada Mandir School, PACE -HSS, and 9th & 10th Std students of Govt. High School, Dadachiwadi, Dargal, Pernem-Goa & G.H.S.Vaddem Curdi-Sanguem Goa.(Schools adopted by Dempo Vishwa Gramashala).

15 exhibits were displayed and around 364 people visited the exhibition in our Department. The students and the staff received oral and written compliments for the efforts, well organization and presentation of the exhibits.



Department of Botany

Department of Botany organized a plant exhibition in Botany Department of Dhempe College of Arts & Science on 12th and 13th December 2017 with the theme “Forgotten Rice varieties of Goa”.

School and Higher secondary students also visited the exhibition.



Department of Geology

Science exhibition was held on 12th and 13th December 2017 by exhibiting beautiful minerals, rocks, fossils specimens along with various equipment used in geology. Two documentaries based on Earth Science was screened during the exhibition.

Department of Computer Science

Computer Science organised exhibition on 12th & 13th December 2017. Various strengths of the department were exhibited by students. The main exhibits were the Useful Mobile Apps., World of Ecommerce, All about Hardware.



Department of Biotechnology

A two day Science exhibition ‘Inspire the Next’ was organised by Dhempe College of Arts and Science on 12th and 13th December 2017. The inaugural ceremony was held in the distinguished presence of the dignitaries, Mr. Rajesh Bhatikar, the Administrator, Dr. Vrinda Borker, Principal, Dr. Mukta Karamadi, Vice-Principal, and the chief guest Dr. Janarthanam Malapati K., Dean of Faculty of Life Sciences and Environment, Goa University. Mrs. Suchana Amonkar, Assistant Professor, Department of Zoology compered the inaugural ceremony and welcomed the dignitaries on the dais. The principal introduced the chief guest Janarthanam Malapati K. The chief guest encouraged team work and focused on sharing their knowledge with the society. He then declared the exhibition open. The ceremony concluded with Mrs. Amonkar thanking the chief guest for his presence and also the sponsors of the Chiasma Exhibition of the Department of Biotechnology –

MJ Aryan Khedekar from 92.7 Big FM, Casant Power, RGS Arts and Jayant Barve. The exhibition was open for the general public. The dignitaries visited the exhibition in the various Science Departments.

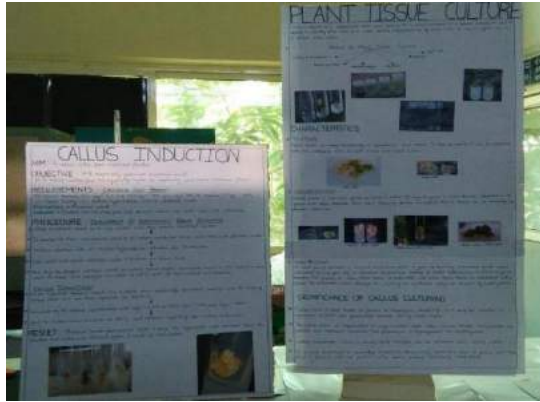
The Department of Biotechnology organised Chiasma 2017 under 'Inspire the Next' Science Exhibition. The F.Y.B.Sc. and S.Y.B.Sc. students had put up exhibits pertaining to different fields of Biotechnology-Environmental Biotechnology, Food Biotechnology, Plant Biotechnology, Animal Cell Culture, Immunology, Zoology, Molecular Biology, Industrial Biotechnology, Biochemistry and Biological Engineering. Projects and Models of each field of Biotechnology were displayed. The instruments in the laboratory like Laminar Air Flow, Fluorescent Microscope, Inverted Microscope, gel Electrophoresis unit and many more were explained by the T.Y.B.Sc. students.

A group of students made a hologram which was kept as the centre piece. An F.Y.B.Sc. student, Mr. Kenan Vaz displayed his taxodermic collection 'Little giants from Kenan's Backyard' of insects, reptiles, mammals collected by him over the years.

The Higher Secondary School students of Dempo Higher secondary School of Arts and Science, Cujira, Dempo Higher Secondary School of Science, Miramar, Our Lady of Rosary Higher Secondary School, Dona Paula; School students of Sharada Mandir High School, G.H.S. Dadachiwadi and G.H.S.Vaddem, Curdi, Sanguem and College students of Goa College of Home Science, Campal, Panaji and inhouse students visited the exhibition. Faculty members of the College from Science as well as Arts department visited the exhibition and highly appreciated the efforts of the students. Three journalists from local daily newspaper Tarun Bharat, Goan Vaarta and Dainik Herald also covered the exhibition. Feedback from the visitors was also taken.

Around 600 students and faculty attended the exhibition making it a success.







Department of Physics

As a part of the Science Exhibition of the institution, the Department of Physics, organized a Science exhibition on 12th and 13th December'2017. The exhibition was held in the Laboratory and Dark room of the Physics department as all the exhibits will involve live demonstrations involving light and lasers. Ideas with regard to live demonstrations were discussed at length with students and about 13 live demonstrations were displayed at the exhibition.

The lists of exhibits are as mentioned below:

1. Diffraction effect using solid state lasers.
2. Interferometry techniques using Michelson Interferometer.
3. Launching of light using Optical fibre as a medium and propagation of laser light using single mode optic fibre.
4. Demonstration of Reflection, Refraction and Total Internal Reflection using Laser.
5. Demonstration of Polarization effects.
6. Demonstration of Optoacoustic effect.
7. Liquid switch for LED lighting.
8. Presentation on Advancements in Physics.
9. Phenomenon of Single refraction.
10. Phenomenon of Double refraction.
11. Construction of Amplifier.
12. Demonstration of determination of Atomic energy levels using Franck Hertz apparatus.
13. Demonstration of Rainbow effect using solar radiation (Open air display).





20 Students from FYBSc, SYBSc and TYBSc Physics, and the entire Physics department staff (Teaching and Administrative), participated in the fabrication, display and demonstration of exhibits in the laboratory of the Physics department. Exhibition was viewed by more than 200 visitors, which included College students from various departments, teaching and administrative staff from various departments of the institution and School students. Visitors voluntarily offered to give their feedback and the overall response were expressed as being well organized, which provided encouragement to the students and staff of the Physics department.

Department of Chemistry

A two day Science Exhibition was organized by Department of Chemistry with the theme “CHEM MAGIC” on 12-13 Dec 2017. The event was managed by young enthusiastic chemistry students of college putting up fascinating chemistry related experiments. The key objective of this exhibition was to inculcate the scientific temperament within students and with a focus on creating more awareness of science and its importance in society.

In all 32 students comprising of 10 groups of T.Y.B.Sc. students exhibited various experiments in the Laboratory, Magical Experiments included were: Blood Iron, Copper Nano Particles, Colorful Necklace of different Inorganic salts, Burning of currency, Hibiscus indicator, Azo dye, Color changing Flower, Chameleon reaction, Popping sodium, Glittery Magma. All the above experiments were colorful, eye catching and proved to be learning experience among the student community.

The College administrator Mr. Rajesh Bhatkar and Dr. Janarthanam Malapati.K, Dean of Life Science and Environment, Goa University along with college Principal Dr. (Mrs) Vrinda Borker visited the exhibition and commended the efforts of the students in promoting scientific attitude among the young budding scientists and science lovers.

On 1st day our own college students visited the department and had glimpses of some interesting magical chemical reaction experiments which were put to display. The organizing students explained the visiting participants about the essence and chemistry behind each experiment.

On 2nd Day many school students across Goa visited college for the science exhibition. The schools which visited were; Govt. High School Kurdi-Sanguem, Govt. High School Pernem, Shardamandir

High School, Dhempe Higher secondary. The visiting students appreciated the exhibitors for their innovative ideas and new interesting learning experience. The event was coordinated by Mrs. Manisha Mhalsekar, Miss Aishwarya Nazre and Mrs. Celia Braganza.



Department of Mathematics

- Students of Fy and Ty of Mathematics took active participation in the exhibition.
- MATH MAGIC was illustrated by the TY students

- Values of sine and cosine of standard angles on finger tips was demonstrated by a TY student
- Demonstration of application of APP to get the graph(2D/3D) of any function was done by a first year students . The first year students also explained the sum of angles of a regular polygon .
- Mathematics students also put up various mathematical tricks for the audience.



**Dempo Charities Trust's
Dhempe College of Arts and Science
Miramar, Panaji, Goa**

Report of the Science exhibition '**Inspire the Next**' organized by Dhempe College
of Arts & Science on 29th and 30th January 2019

Dhempe College of Arts & Science organized its Annual Science exhibition to showcase the immense talents of its students. On day one i.e. on the 29th of Jan 2019 the exhibition was inaugurated by the Chief Guest Shri Venkata Durga Prasad K - Project Coordinator Goa Science Centre and The Chairman and trustee of DCT's Dhempe college of Arts and Science, Shri Shrinavas Dempo.

They visited the science depts and were seen to take a keen interest in every exhibit displayed on the occasion. They were accompanied by Administrator Shri Rajesh Bhatikar along with College Principal Dr. Vrinda Borker, Vice Principal Mrs. Manjiri Barve and Co-ordinator of Annual Science Exhibition Mrs. Varsha Virginkar. The dignitaries commended the efforts of the students in promoting scientific attitude among the young budding scientists and science lovers. The total number of exhibits amounted to 100 with a student participation of 373 students. The Inaugural function for the exhibition was held on the same day.

The Principal welcomed the dignitaries and expressed her pleasure that 100 exhibits and 373 students were involved on a large scale for participation in the exhibition. She said that students fueled by teacher's encouragement and support can create wonders for their growth and development. She also introduced the Chief Guest Shri Venkat Durga Prasad K - Project Coordinator Goa science Centre on the occasion.

The Chief Guest Shri Venkat Durga Prasad K expressed happiness that students were taking a keen interest in science and technology and their efforts could go a long way for paving and achieving new frontiers in science and technology.

The Chairman Shri Shrinavas Dempo expressed happiness in seeing the enthusiasm of students displaying various models by the application of scientific rules and said that it could lead them to starting their own start-ups and ventures which could contribute to the society at large not only economically but also socially.

As a part of the Green Campus Campaign of Dhempe college the formal inauguration of the Annual Science exhibition was done by watering a plant which is a symbol of prosperity and health for the planet earth.

The Coordinator of the annual science exhibition Mrs. Varsha Virginkar and the Co-coordinator for the CHIASMA event of the biotechnology dept Ms. Alisha Fernandes were also present on the occasion.

The Vote of thanks was given by the Vice-Principal Mrs. Manjiri Barve, wherein she thanked all dignitaries for attending and encouraging the students as well as the staff and students of Dhempe college for all their hard work and efforts in the organization and conduct of the Science Exhibition.

The compere for the function was Dr Durga Kamat.

The Annual Science exhibition was continued on day 02 i.e. the 30th of Jan 2019.

On 1st day college students visited the departments and had glimpses of some interesting exhibits which were put to display. The organizing students explained the visiting participants about the exhibits in a simple and lucid manner.

On 2nd Day many school students from Dr.K.B.Hedgewar high school, Cujira, St. Michael High school, Taleigao, etc. visited college for the science exhibition. Also, members of Goa Science Centre, Miramar visited and appreciated the exhibitors for their innovative ideas and new interesting learning experience.

The Chemistry dept had 14 exhibits. The theme for the exhibition was “CHEMystery” and the exhibits included Colour magic with ammonia, sodium flowers, Blow to know, Slicing ice, blue bottle, detection of argemone oil in various oil brands and others. Exhibits that captured the attention of everyone were bleeding heart, fire creation, chemical cocktail, chameleon chemical reaction. All the above experiments were colorful, eye catching and proved to be a learning experience among the student community.

The Maths dept had in all 15 exhibits with mind teasing and introspecting exhibits like mathematical puzzles, shortest path, secret sum and 3-D shapes.

The Botany Dept had in all 11 exhibits which involved Creative gardening: where in various left-over articles at home were used in creative garden aiming at reducing waste, such as old shoes, bottles etc. Also, others like Adulteration of food items: where simple methods of testing adulteration at home were demonstrated by the students. i.e. honey, asafetida, milk, etc. An interesting exhibit was on Hydroponics and Fogponics: culture of plants without soil and fertilizers in plants where they are grown in water with nutrients called hydroponics. Hydroponic solution when converted to vapor form and the plants are treated with fog is called fogponics. The plants grown by the hydroponics utilizes 90% nutrients and fogponics requires 98%.

The Physics dept shared responsibility in the science exhibition “Inspire the Next” under its theme “OORJA” and displayed fourteen exhibits in the Physics laboratory. The term OORJA was

appropriate to the context of the exhibits which tried to focus on the role of energy in various forms .The list of exhibits included Demonstration of Seeback effect and its applications in thermo power generation, Demonstration of Peltier effect using a thermocouple , Steam engine based on a power cycle and others. Going through the exhibits many visitors expressed their happiness about the ingenuity of the ideas posed by Physics students and remarked that the ideas contain potential to lead up to an innovation and startups.

The Computer science dept had 10 exhibits which included guessing number using binary search tree ,Auto file tools,Infomedia and computer hardware components to name a few.

The dept of Zoology had12 exhibits some of which were the digestive system of cockroach ,the aerial motion of birds ,pressure detection and blood group detection kits.

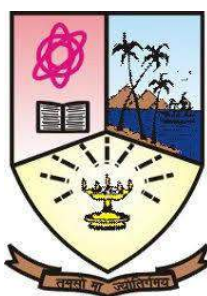
The dept of Geology exhibited various models, minerals, rocks and equipment in the Departmental Laboratory. A movie was screened on “**Evolution of Earth & Life**”. Following is the list of some of the articles displayed along with the number of items in each category.a)Rock forming Minerals (10), b)Economic Minerals (30), c)Samples of crude oil (02) d) Zeolite Minerals (15),e)Fossil Specimens (20) and others.

Department of Biotechnology organized an exhibition CHIASMA 2019. Students presented fourteen exhibits pertaining to various fields of Biology. The exhibition had a footfall of two hundred thirty-three form different high schools, higher secondary schools and colleges of Goa. The exhibit titled ‘Little Giants from Kenan’s Backyard’ presented by Mr. Kenan Vaz was the major attraction. Various competitions like Brain wars (Debate), Mendelian Art (Chromosome plate puzzle), Inquisitive (Quiz) and Bio-spectrum (Fashion show) were conducted in which four colleges and three higher secondary schools participated.









**A REPORT
OF
'SCIENCE EXHIBITION' JANUARY 2020**

**SUBMITTED BY
MRS. SUCHANA AMONKAR
CO-ORDINATOR**

**DHEMPE COLLEGE OF ARTS AND SCIENCE,
MIRAMAR, GOA**

Annual Science Exhibition Jan.2020

The Annual Science Exhibition of Dhempe college of Arts & Science, Miramar, Panaji was held on 17th January,2020 under the guidance of their teacher students displayed nearly 100 exhibits on various themes showcasing their scientific skills through static and self-designed working models. Innovative models on display were thermoelectric cooler, fire alarm using 10T, Biofuel model, website using flask python.

The Chief Guest on the occasion was Dr.Pradip Sarmokadam, Member Secretary, Goa State Biodiversity Board. While speaking at the formal function, he laid stress on a need for a pragmatic approach in education and exploring subjects beyond classrooms. Mrs. Rupa Khope, Principal, Vasant Rao Dempo Higher Secondary School of Arts & Science was the Guest of Honour. She impressed upon the students to inculcate ethical and skill based knowledge. Trustee, Mr.Yatish Dempo graced the occasion. Other dignitaries present were Dr. Vrinda Borker, Principal and Vice Principal Mrs. Manjiri Barve and Co-ordinator of the event, Mrs.Suchana Amonkar.

Large number of students and teachers from various schools visited the exhibits and placed their valuable remarks. The exhibition received a lot of appreciation from everyone.





A BRIEF REPORT AND LIST OF THE EXHIBITS BY DIFFERENT DEPARTMENT

DEPARTMENT OF BIOTECHNOLOGY

Students of Department of Biotechnology displayed various exhibits on 17th January 2020 as a part of the College Science Exhibition. Total eleven exhibits on various topics like mitosis, cancer, bacteria found in our body, chemical traffic lights, Forensic Science were displayed. Faculty members of the department Dr. Gauri Achari (department In-charge), Dr. Samantha Fernandes, Dr. Saroj Babar, Ms. Preethi Poduval, and Ms. Valinka Fernandes attended the formal inauguration function at 2:30 P.M. in the Seminar hall. Our Principal Dr. Vrinda Borker, Chief guest Dr. Pramod V. Sarmokadam, Guest of Honour Mrs. Rupa Kope and ex-faculty of the department of geology Mr. R.P. Gurav visited the exhibits after the formal inauguration function. Faculty from various departments of the college and students from our college as well as Vasant Rao Dempo higher secondary school visited the exhibits. The exhibition had a footfall of 32 visitors. Refreshment coupons were provided to 27 volunteer students. Teachers of the department Dr. Gauri Achari, Dr. Samantha Fernandes, Dr. Saroj Babar, Ms. Preethi Poduval, Ms. Gauri Silimkhan, Ms. Sujata Limaye and Ms. Valinka Fernandes visited the exhibits displayed in the other departments of the college.





DEPARTMENT OF BOTANY

As part of the college science exhibition held on 17th January 2020, Department of Botany organised its exhibition in the Botany laboratory from 10am to 5pm. A total of 24 students from F.Y B.Sc., S.Y. B.Sc. and T.Y. B.Sc. (Botany) participated and presented 13 exhibits which were:

1. Improvised water filtration system
2. Bottle ecosystem
3. Organic Holi Colours
4. Formulations of ayurvedic kasai
5. Bio plastic
6. Bio electricity from *Aloe vera*
7. Bio fuel from algae
8. Effect of plant extracts on bacteria from teeth
9. Fungi as nutritional supplement and flavour enhancer
10. Plant mirages
11. Comparison of vitamin C in fruit juices
12. Noni fruit and its benefits
13. Fruit preservation techniques

Overall the exhibition reflected theoretical as well as applicative aspects of Botany. Approximately 250 visitors visited the exhibition. Many of the exhibits were much appreciated by them.



DEPARTMENT OF COMPUTER SCIENCE

Annual Science Exhibition was hosted by Dhempe College of Arts and Science on 17th January 2020. The event saw student's enthusiastic participants from department of Computer Science putting up 10 exhibits comprising of innovative projects.

The exhibits by students was a showcase of various applications using IOT, Python, short movie and model namely:

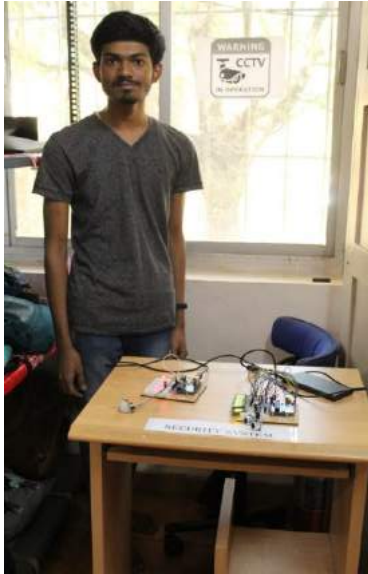
1. Security System
2. Shooter Game Development
3. Fire alarm using IOT
4. Designing Website for Quiz using Flask python
5. Short movie on Cyber Security awareness
6. Quiz application using C
7. Display of Computer System (Hardware Components)
8. Multimedia I/O Devices
9. Website Development Cycle
10. Classification of Networks (Model)

The exhibition provided the students an opportunity to present their work.

Around 36 students attended this exhibition and enjoyed the showcased exhibits.

Applications such as Fire alarm using IOT, Security System, Shooter Game Development and Designing Website for Quiz using Flask python were highly appreciated by the Guest.





DEPARTMENT OF CHEMISTRY

DCT's, Dhempe College of Arts and Science Miramar-Goa, organized science exhibition on 17th January 2020. This exhibition was inaugurated by cutting the ribbon by the Chief Guest in Chemistry Department.

In Chemistry Department, total 18 groups consisting of total 50 students from First year, Second year and Third year participated in the exhibition named "Alchemist". These students showcased their talent by performing various experiments and also by displaying beautiful posters related to chemistry. The topics on which the first year and the second-year students presented were Eno candle water, recycling of copper chloride, innovative ideas to solve global warming, coloured chemistry, chemical cocktail, supersaturated sodium acetate experiment, making of rayon fibre, preparing dyes, bleeding iron nail and pop steam engine boat.



Chemical cocktail



The golden rain



Supersaturated sodium acetate



The Chameleon Reaction



Dye Preparation

Coloured Chemistry

The third year Chemistry students presented on the topics such as dispersion of colours, ferrofluid, copper turning into gold, jumping sodium and chemical cut. This event was judged by Mr. Vishnu Chari and Dr Amol Jadhav.



Dispersion of colours



Jumping Sodium and Chemical cut



Turning copper to gold

The students from various high schools and higher secondary schools along with their teachers from Panaji and other locations came to visit the exhibition and gave very good feedback about it.



Mrs. Deepa Audi, Dr Sonia Parsekar and Mr. Chandan Naik were incharge of the science exhibition from Chemistry Department and they took the initiative of encouraging the students to put up such a wonderful exhibition.

It was a very good opportunity for all the students who participated to bring out their talents in keeping forth their ideas, facing the crowd confidently and learn something absolutely new and informative.

DEPARTMENT OF GEOLOGY

Five staff members and 26 volunteers of Geology Department enthusiastically participated in the 'Science Exhibition held on 17th January 2020 from 9 am to 5pm. Various models, minerals, rocks and equipment were displayed in the Departmental Laboratory. Sculptures carved out of rocks and paintings made by Prof. R. P. Gurav (Retired) were also displayed in the department laboratory. Geo-theatre was set up and a movie was screened on "**Evolving Earth**". Total 75 visitors witnessed the Science Exhibition and experienced the incredible journey of rocks through time.

Following is the list of articles displayed along with the number of items in each category.

- 1) Rock forming Minerals (10)
- 2) Economic Minerals (30)
- 3) Samples of crude oil (02)
- 4) Zeolite Minerals (15)
- 5) Igneous Rock Specimens (15)
- 6) Sedimentary Rock Specimens (10)
- 7) Metamorphic Rock Specimens (10)
- 8) Fossil Specimens (20)
- 9) Structural Models (10)
- 10) Standing banner & Geological Maps (10)
- 11) Instruments used in Geology 10)
- 12) A Movie was Screened on "**Evolving Earth**"
- 13) Geological Museum for Visitors.
- 14) Working model on "Bore hole drilling" by T.Y.B.Sc Geology students
- 15) Rock carving exhibits by Prof. R. P. Gurav (13)
- 16) Paintings by Prof. R.P. Gurav (50)
- 17) Fossils and Rock collection from Gujarat by T.Y.B.Sc Geology students
- 18) Geological Charts and Posters by students (06)





DEPARTMENT OF MATHEMATICS

The following were the Mathematics exhibits by the F.Y, S.Y and T.Y students.

SNO.	Name	Class	RollNo.	Exhibit Title
1	Aryaa Rege	FY B.Sc	19134	Tangrams
2	Maithili Khandekar	FY B.Sc	19142	
3.	Bengare Mushira Banu	SY B.Sc	18132	Properties of number 2020- (2 posters)
4	Shikha Pandey	SY B.Sc	18156	
5	Swezal Dias	SY B.Sc	18135	Anamorphic Art
6	Rohmila Naik	SY B.Sc	18149	Pop –up Poster on Mathematics puzzles
7	Mansi Nara	SY B.Sc	18144	
8	Teja Parsekar	SY B.Sc	18146	
9	Afsha Shaikh	SY B.Sc	18160	Application of Mathematics in Chemistry-Poster
10	Reshma Kotten	TY B.Sc	84	Parabolic Reflector-Model
11	Sneha Rane	TY B.Sc	89	
12	Siya Mardolkar	TY B.Sc	91	
13	Ambika Naik Paratkar	TY B.Sc	86	
14	Srishti Palkar	TY B.Sc	88	
15	Tanmayee	TY B.Sc	85	Mathematics-Games and Puzzles-(3 games and puzzles)
16	Tanusha	TY B.Sc	81	Rangoli-using mathematical concept
17	Prajakta	TY B.Sc	82	Collecting ball -Game using property of parabola
18	Smitha	TY B.Sc	87	
19	Mohammed Zuber	TY B.Sc	83	Model of 8 octants
20	Azai Sayali	TY B.Sc	90	Clinometer

There was a good response by all the visitors/students. In all there were 14 exhibits presented by 20 students of FY,SY and TY B.Sc and on record 43 visitors visited.



DEPARTMENT OF PHYSICS

23 students participated in the Science exhibition on 17th January 2020 as a part of Science Day celebration in the College. Fourteen exhibits which displayed were based on the concept of Heat and Optics. Dr. Miskil Naik was made in charge of the exhibition. The following exhibits were displayed.

1. Double refraction
2. Refraction
3. Circular Rings due to interference obtained using Michelson's interferometer
4. Newton's Rings produced using LED
5. Newtons rings produced using monochromatic source
6. Absorption spectra
7. Demonstration on laws of thermodynamics
8. Peltier effect
9. Thin Film
10. Brownian motion
11. Technique used to produce 3D hologram
12. Verification of Bernoulli's Principle
13. Frank Hertz
14. Hybrid system

Students, teachers and non-teaching staff visited and appreciated the exhibition.





DEPARTMENT OF ZOOLOGY

The staff and 28 students of the Department of Zoology took part in the Science exhibition on 17th Jan 2020. The students worked for 2 weeks preparing different exhibits based on the topic related to Zoology under the guidance of the Zoology Staff members. The following is the list of the exhibits, that were displayed and explained to the guests and students from various higher secondary and schools, on the day of the event.

Sr. No.	Names of Students	Exhibits
1.	Vivek Cruz	Waggle and round dance of Honey bee
2.	Agnes Monteiro Muriel Fernandes Racheal D'souza Manuella Fernandes Scarlett Pires	Amniocentesis
3.	Marianne Araujo Stenia Palha	Pedigree Analysis Heredity traits
4.	Salima Nadaf Nirali Tari Anishka Khandeparkar Sejal Naik	Nerve Cell
5.	Amrita Gautam Deborah Rodrigues Pooja Hebram Shubhada Phadte	Blood pressure and blood group
6.	Christy Travasso Swizel Palha Joena Mascarenhas	Aquaponics
7.	Jolyan Dias Sapeco Andrisha Fernandes Rahul Rodrigues	Body Mass Index

8.	Prajval Desai Shreya Khorjuvekar	Toxicology
9.	Dikshita Chopdekar Riddhi Saviovereker Dipashree Haldankar Harsha Das	Components of blood



V. S. Desai

Principal
Derr.po Charities Trust's
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Panaji-Goa.

