



THE PSC INSIGHTS

THE ANNUAL E-NEWSLETTER

PRESIDENT SCIENCE COLLEGE

AFFILIATED TO GUJARAT UNIVERSITY



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Dr. Urvi Gupta and Dr. Jaivik Shah

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<i>Student Achievements</i>	Dr. Aarti Thakkar and Dr. Stuti Patel
<i>Faculty Achievements</i>	Mr Vikas Gurbani and Ms Asma Shaikh
<i>Beyond classroom</i>	Dr. Richa Dubey, Ms Juhi Yadav and Ms. Tanvi Sevak
<i>Latest in Science</i>	Dr. Darshana Patel and Dr. Adwait Mewada

THE PSC INSIGHTS

NEWSLETTER

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MESSAGE FROM MANAGING TRUSTEES

“Collective work is the secret behind the progress that President Science College has witnessed”.

The Group has established a name for themselves in various fields like Higher Education, Media, IT, and Construction businesses. Group plans to expand the business further at a greater pace, with an aim to achieve as much growth in the coming years. Shayona also aims to create numerous job opportunities for youth and contribute for the development of Gujarat. In the sector of education Shayona group has established various schools and colleges. President Science College, President Nursing College and President Institute of Computer Application are colleges associated with this group.

With a view of being a part to Shayona institution, President science college has always been in the good books, the achievements of students have radiated the collective work done by the

management the faculty members, and the students body respectively.

The purpose of higher education should always be holistic, as graduation becomes the initial stage of leaning not only through books but also through learning practical ways of living life, skill-based hands-on training as well as quality education plays a major role towards the development of students. President Science College has always made efforts to train their students in the same manner.

For students - “Stagnation is death so keep moving”.

In the world full of competition, you have to make a way for yourself, you may have institutes for support but success always demands a bit of hard work and dedication.

-Wish you all the luck

REFLECTION FROM PRINCIPAL'S DESK

“With experience, dedicated faculties and excellent team work President Science College helps students to realize their goals in life”.



According to me quality education would be the sole differentiator in long term, being the principal of president science college, my priority revolves around providing the best of knowledge to students, where along with their educational voyage they can develop themselves in various fields. In this macrocosmic universe of knowledge, they can stand by their own is my sole purpose.

President Science College associated to Shayona group thrives for the betterment of students; Institute's prior purpose revolves around giving them training based on planned curriculum in their courses with amalgamation of worthy methods of learning. With result to this our student's achievement radiates in Gujarat university rank holders list, collaborations of industries, signing up various MOU, along with scientific projects and much more.

We have best faculties where they are given a free hand to train

students by implementing latest educational apparatus as it develops the reasoning as well as logical thinking in student through which they can give their maximum outputs, hence a student can be a critical thinker, a lifelong learner and versatile contributor to a global society.

My message to students,

“The thrust for Knowledge would lead you to the path of success”

For improving lives, a student is the best contributor. Excellence is never a child's play, but efforts made to gain that excellence can guide to a long way, Remember – You are your own creator of a bright future, a bright mind and a bright world,

Keep growing...

Dr. Shivangi Mathur

ADMINISTRATION

Education is the key to investment of new concepts, new ideas to build a better world around us.

- Mr. Bhavin Patel



Education leads to proper management for a superior success story

- Mr. Ankit Chaudhary

OFFICE STAFF

MR. UMANG PAWAR

MR. HARSHAD PATEL

MS. NIMISHA SOLANKI (LIBRARIAN)

ACHIEVEMENTS



President Science College has always put students' success as mark of college's success and to achieve that, the team PSC is constantly working. As a result of it, students of the president science college have not only stood out in Gujarat University top 50 ranking but also at various scientific competitions of state and national level.

STUDENTS' ACHIEVEMENTS

- ❖ **Best Poster Presentation Award in National e-conference "RAFTBCSPS-2021".**
Posters presented were "*Chocolate Chemistry*" presented By **Vishruti dave, Vidhi Mahida and Shloka Patel** and poster on "*Dual Carbon Battery*" presented By **Yashish Hedao and Maulin Modh**
- ❖ **Mishnat Kakdiya, won 1st Prize with 1000 Rs. In National level Quiz** organized by Nesamony Memorial Christian College, Tamilnadu, 12th June 2021.
- ❖ **Hardi Panchal won 3rd Best Poster Presentation, National e-Conference** on Recent Advancement and trends in Biological, Physical and Chemical Sciences- 2021 organized by President Science College.
- ❖ **Ms. Bhakti Vora from T.Y. Physics won Best Poster Presentation, National e-Conference** on Recent Advancement and trends in Biological, Physical and Chemical Sciences- 2021 organized by President Science College. (Poster topic- *The Galaxy: Collection of Million Stars*).
- ❖ **Ms. Viniben Mistry of Sem 3 PM won Best Poster Presentation, National e-Conference** on Recent Advancement and trends in Biological, Physical and Chemical Sciences- 2021 organized by President Science College. (poster topic- *Special theory of relativity*).
- ❖ **Semester 5 (Botany) students have grabbed all three Budding Researcher Awards** in the **National webinar** on "*Incredible Phytohormones*" organized by Gujarat University.
Theme A: Phytohormones for better productivity - Ms. Nivedita Tripathi

Theme B: Phytohormones for plant defense - Ms. Meesha Prajapati

Theme C: Synthetic PGRs in Horticulture - Ms. Hardi Panchal

- ❖ Ms. Khushi Pradipkumar Joshi (Sem 1 MIBTC) won **2nd prize in the digital poster competition**

“BILLBOARD'21” conducted in accordance with the World Antibiotics Awareness Week (WAAW-2021) program as per WHO mandate to raise awareness for antimicrobial resistance (AMR) from 18th - 24th November 2021.

- ❖ Meesha Prajapati student of S.Y. B.Sc. (BZ group) has achieved **GOLD MEDAL** in **Gujarat University** semester 4 exam. She has achieved **Rank 1** position out of 6,644 candidates registered in Gujarat University.

- ❖ Sem-5 Botany and Sem-2 CBZ students presented posters at Gujarat University **National Webinar on Wetlands: Versatile, Valuable and Vulnerable**. All students grabbed four **Budding Researcher Awards** Theme- A Saloni Rani Swain, Theme-B Jaydeep Parmar and Pooja

Dubey, Theme-C Nivedita Tripathi.

- ❖ With great pleasure we would like to share that PSC students once again proved their excellence in Academics and extra-curricular activities. **41** students of B.Sc. attended **SCIENCE MANTHAN-2022**, organized by P. D. Patel Institute of Applied Sciences, CHAROTAR University of Science and Technology (CHARUSAT), Changa on 26th of March, 2022. Seven students actively participated in different competitions amongst which, three of them have **secured first position**.

1) Sakshi Shah (Sem-4 BTMI)- Scientific Photography

2) Renu Tripathi (Sem-4 BTMI)- Scitoon

3) Krishna Chodavadiya (Sem-6 Microbiology)- Scientific Poem

- **Secured Gold Medal in T. Y. BSc. University examination in the subject of Biotechnology (2020-2021).**

T.Y. Biotechnology student named **Aayushi Bhatt** secured **1st rank in Biotechnology** and awarded **Gold Medal**.

- **Golden breakthrough for semester-1 students in Gujarat University top 50 (2021-22)**

Golden glory for President Science College as 19 students from semester 1 B.Sc. has secured their places among top 50 including 1st rank (Gold Medal) in Gujarat University ranking.

List of students who succeeded in top 50 ranks in B.Sc. result of GUJARAT UNIVERSITY

List of Gujarat University Toppers Academic Year 2020-21		
Semester	Name of Student	GU Rank
1	Yadav Chandani	13
	Talati Krisha	16
	Shyora Ravikumar	36
	Bhavsar Meet	37
	Dubey Yash	49
3	Prajapati Meesha	1
	Prajapati Hitarthi	2
	Zala Purvarajsinh	20
	Sharma Krishita	34
	Kapasi Zainab	38
4	Prajapati Meesha	1
	Prajapati Hitarthi	2
	Kapasi Zainab	17
	Sharma Krishita	22
	Zala Purvarajsinh	31
5	Patel Megha	7
	Patel Nikita	8
	Bhatt Ayushi	18
	Thacker Paras	21
	Trivedi Rashi	33
	Panchal Dhvani	37
	Patel Pratiksha	49

**List of Gujarat University Toppers Academic Year
2021-22**

Semester	Name of Student	GU Rank
1	Panchal Dhanusha Mehulkumar	1
	Joshi Khushi Pradipkumar	4
	Hemali Vinodbhai Halai	5
	Namdev Diksha Sanjeevkumar	7
	Vachheta Nisha Gautambhai	8
	Shah Hiral Devendrakumar	10
	Dubey Pooja Bhavani Prasad	15
	Swain Saloni Rani Bijaykumar	16
	Patel Ami Dilipkumar	17
	Chaudhari Sweetyben Sendhabhai	21
	Gavadiya Bhavyata Dhudabhai	24
	Trivedi Vishwa Jayeshkumar	26
	Joshi Riddhi Chaitanyabhai	31
	Pardeshi Dhruvi Minesh	35
	Padia Aayushi Jaiminbhai	37
	Shah Vrushti Samirkumar	39
	Jasaliya Ishita Pareshbhai	41
	Payghode Zeal Naineshkumar	44
	Panchal Komal Rajeshbhai	47
3	Talati Krisha	6
	Bhavsar Meet	27
	Yadav Chandani	38
	Thakkar Foram	42
	Rathod Tanishka	46
5	Prajapati Meesha	5
	Zala Purvarajsinh	26
	Vavdara Kishan	27

Faculties of President Science College are equally active when it comes to research publications, participating and organizing conferences, serving as judge in scientific events or spreading knowledge through invited talks. The PSC faculties never fail the students who admire them as their role models.

FACULTY ACHIEVEMENTS

Faculty Name	Dr. Shivangi Mathur
Department	Biotechnology
Research Publication	<ul style="list-style-type: none"> • Richa Dubey, Dhari Sheth, Shivangi mathur, Ruby Patel (2021) New generation CRISPR–Cas technology and its applications. 2. Research Journal of Agricultural Science (RJAS) UGC listed International Journal P-ISSN: 0976-1675, E- ISSN: 2249-4538/ Vol. 12 (05), 1572 - 1575. • Plant Physiology, Development and Adoptions (Editor in Chief- Poonam Meena; Associate Editors- Shivangi Mathur, Ravi Kumar Deshwal, Garima Gupta and Vijendra Singh. 2021. AgroBios Research, Jodhpur (Rajasthan) • Shivangi Mathur and Nirmala Devi. 2021. Molecular genetics Agrobios, Jodhpur-343003 (RAJASTHAN) INDIA (in press) • Falguni Panda , Samar Gourav Pati , Abhipsa Bal , Shivangi Mathur , Ramalingam Nirmaladevi and Biswaranjan Paital (2021). Temporal morphometric analyses of Pila globosa in India for its use in aquaculture and food industry. The Journal of Basic and Applied Zoology. 82:17 (https://doi.org/10.1186/s41936-021-00216-z) (Springer)
Projects	<ul style="list-style-type: none"> • 2 SSIP Projects entitled Proteinmayo and Biocolours • 1 Major Research Project entitled "Development of microbial consortium for biodegradation of Bio polyethylene and assessment of ALK B gene expression among potential strains

Faculty Name	Dr. Aarti Thakkar
Department	Microbiology
Others	<ul style="list-style-type: none"> • Contributed as a TREASURER in Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021" • Delivered Guest lecture in Government polytechnique on AZADI AMRIT MAHOTSAV • Become member of BOS in Gujarat University in June 2021 • Invited as GU pannel member in Microbiology interview at Swaminarayan Science College, Gandhinagar

Faculty Name	Dr. Richa Dubey
Department	Microbiology
Research Publication	<ul style="list-style-type: none"> Richa Dubey, Dhari Sheth, Shivangi mathur, Ruby Patel (2021) New generation CRISPR–Cas technology and its applications. Research Journal of Agricultural Science (RJAS) UGC listed International Journal P-ISSN: 0976-1675, E- ISSN: 2249-4538/ Vol. 12 (05), 1572 -1575. Richa Dubey, Janvi Sharma, Jas Trivedi (2021) A review on the use of Giloy (<i>Tinospora cordifolia</i>) as a herbal medicine in targeting Novel Corona Virus (Sars-Cov -2) Research Journal of Agricultural Science (RJAS)- UGC listed International Journal P-ISSN: 0976-1675, E- ISSN: 2249-4538/ Vol. 12 (06), 2100 -2103. Ruby Patel, Ranna Chaudhary, Richa Dubey, Archana Mankad (2021) Estimation of Protease & free amino acid content during postharvest shelf life of <i>Tithonia rotundifolia</i> Blake. International Journal of Research & Analytical Review (IJRAR) ISSN -2349-5138, , E- ISSN 2348-1269/Vol 8/Issue 1/234-236 {UGC listed (old list), Peer reviewed & ISSN approved Journal}
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Conducted two days workshop on "Mushroom Cultivation" By Dr. Sachin Chauhan, Research Scientist, Navsari Agriculture University, Valsad
Others	<ul style="list-style-type: none"> Received honour of Ph.D. Guideship of Gujarat University in December 2021
Project	<ul style="list-style-type: none"> 1 SSIP Project entitled "Ashtachakra"

Faculty Name	Dr. Darshna Patel
Department	Microbiology
Research Publication	<ul style="list-style-type: none"> Asma Shaikh, Harpreet Kaur Janday, Darshna Patel (2021) PGPR diversity for plant growth promotion. Lambert academic publishing, Mauritius. ISBN: 978-620-3-46408-5 Darshna Patel, Asma Shaikh (2021) Biogas: A sustainable approach towards waste to energy. Lambert academic publishing, Mauritius. ISBN: 978-620-3-58110-2 Darshna Patel, Shailesh Dave (2020) Bacterial lipases: Isolating lipase producing bacteria. Lambert academic publishing, Mauritius. ISBN: 978-620-0-53121-6

Faculty Name	Dr. Stuti Patel
Department	Biotechnology
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as certificate committee in Physical, chemical and biological sciences in all categories in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Ms. Urja Joshi
Department	Biotechnology
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as a certificate committee in Physical, chemical and biological sciences in all categories in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Dr. Dhara Jani
Department	Zoology
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as Judge in biological poster session in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021""

Faculty Name	Dr. Pragnesh Patel
Department	Zoology
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as Technical head in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Dr. Rachana Shukla
Department	Microbiology
Seminar/Conferences/Workshop	<ul style="list-style-type: none"> Contributed as Judge in biological poster session in Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"
Others	<ul style="list-style-type: none"> 4 Days Training Program on "Basic Disaster Management" organized by NSS committie, President Science College from 21st to 24th December, 2021

Faculty Name	Ms. Asma Shaikh
Department	Microbiology
Research Publication	<ul style="list-style-type: none"> • Asma Shaikh, Harpreet Kaur Janday, Darshna Patel (2021) PGPR diversity for plant growth promotion. Lambert academic publishing, Mauritius. ISBN: 978-620-3-46408-5 • Darshna Patel, Asma Shaikh (2021) Biogas: A sustainable approach towards waste to energy. Lambert academic publishing, Mauritius. ISBN: 978-620-3-58110-2
Seminar/ Conferences/ Workshop	<ul style="list-style-type: none"> • Organized a webinar of pharma knowledge centre on medical coding programme orientation and career guidance for Semester-6 students on 7th June 2021 • Contributed in Certificate committee & hosting poster session in Physical, chemical and biological sciences in all categories in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021" • 4 Days Training Program on "Basic Disaster Management" organized by NSS committie, President Science College from 21st to 24th December, 2021. • Participated in the National Webinar on "Wetlands: Versatile, Valuable and Vulnerable" on 21st January, 2022 organized by Gujarat University Botanical Society. • Participated in the Invited Talk on "Amazing Mangrove's: A Fragile and Productive Ecosystem"" on 2nd Feb, 2022 organized by GUBS and GULAB. • Participated in the National Webinar on "Intellectual Property Right" on 7th January, 2021 organized by WDC-ICC, Gujarat University. • Organized the Virtual Inauguration ceremony of President Science college collegiate Women's Development cell (CWDC) on 19th February, 2022 • Organized a legal talk on Women's rights for PSC Female students by CWDC on 19th February, 2022 • Organized a Quiz competition on "Female shining stars of our nation" on 19th February, 2022 • Organized a Programme to celebrate International Women's Day under CWDC on 8th March, 2022 • Organized a Workshop on Career Guidance and Industry orientation in association with pharma knowledge centre on 22nd March 2022 • Participated in GSBTM sponsored "National level Hands on Workshop on Bioinformatics: The Virtual reality of biology" organised by Department og Microbiology, LJIAS, L.J. University.
Others	<ul style="list-style-type: none"> • Participated in online FDP on Recent Developments in computational Biology from 21st February - 2nd March, 2022

	<p>organized by Department of Biotechnology in association with Electronics & ICT Academy, NIT Warangal</p> <ul style="list-style-type: none"> Participated as a delegate at the 6th annual international conference "Genomics and Genetic counselling: value in health care" organized by the board of genetic counselling, India from 2nd July- 4th July.
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Faculty Name	Dr. Khyati Patel
Department	Chemistry
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Contributed as a TREASURER in Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Dr. Jaivik V. Shah
Department	Chemistry
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Organized Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"
Others	<ul style="list-style-type: none"> Obtained 'A' Grade certificate in 4 Days Training Program on "Basic Disaster Management" organized by NSS committie, President Science College from 21st to 24th December, 2021.

Faculty Name	Dr. Kiran Rajpara
Department	Chemistry
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Contributed as Host in chemical Sciences poster session in Two days international e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"
Others	<ul style="list-style-type: none"> 4 Days Training Program on "Basic Disaster Management" organized by NSS committie, President Science College from 21st to 24th December, 2021.

Faculty Name	Ms. Bindiya Babariya
Department	Physics
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Organized Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"
Others	<ul style="list-style-type: none"> Qualified GSET 2021 in Physical Science Served as course coordinator in online "Workshop on Skill Enhancement" organized by president science college

Faculty Name	Dr. Adwait Mewada
Department	Physics
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as a certificate committee in Physical, chemical and biological sciences in all categories in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Mr. Piyush Menon
Department	English
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as technical head in Two days National e-conference entitled ""Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Mr. Dashrathsinh Barad
Department	Zoology
Seminar/Conference/Workshop	<ul style="list-style-type: none"> Contributed as registration committee in chemical Sciences poster session in Two days international e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Dr. UPENDRASINH JADEJA
Department	Chemistry
Others	<ul style="list-style-type: none"> 4 Days Training Program on "Basic Disaster Management" organized by NSS committee, President Science College from 21st to 24th December, 2021

Faculty Name	Dr. Trusha vyas
Department	English
Others	<ul style="list-style-type: none"> 4 Days Training Program on "Basic Disaster Management" organized by NSS committee, President Science College from 21st to 24th December, 2021

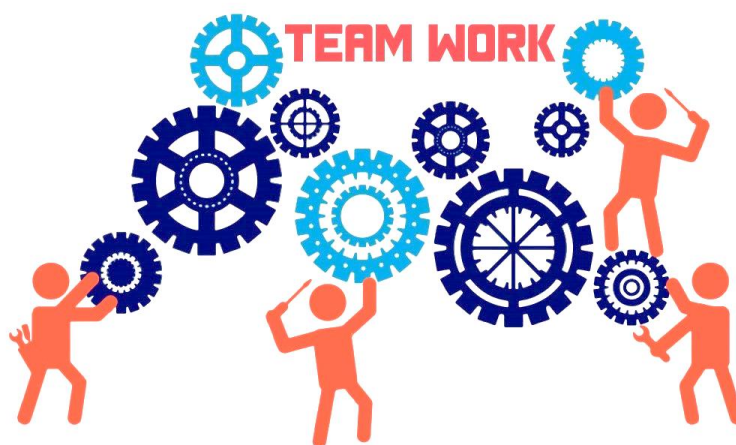
Faculty Name	Ms. Tanvi Sevak
Department	English
Others	<ul style="list-style-type: none"> 4 Days Training Program on "Basic Disaster Management" organized by NSS committee, President Science College from 21st to 24th December, 2021

Faculty Name	Ms. Krisha Shah
Department	Mathematics
Seminar/ Conference/ Workshop	<ul style="list-style-type: none"> Contributed as Host in Physical Sciences poster session in Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021"

Faculty Name	Dr. Urvi Gupta
Department	Botany
Seminar/ Conferences/ Workshop	<ul style="list-style-type: none"> Contributed as moderator at the Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021" Participated in the Invited Talk on "Amazing Mangrooves: A Fragile and Productive Ecosystem" on 2nd Feb, 2022 organized by GUBS and GULAB.

Faculty Name	Dr. Dhruv Pandya
Department	Botany
Research Publication	<ul style="list-style-type: none"> Brilisha Joddha, Dhruv Pandya, Himanshu Pandya, Archana Mankad (2022), Review on Phytoremediation: Environment friendly technique to clean Environment, International Journal of Ecology and Environmental Science, 4 (1); 141-148. Jemima Macwan, Dhruv Pandya, Himanshu Pandya (2022), Microgreens: Swiss Chard and Green Mustard, LAP Lambert Academic Publishing. (ISBN: 978-620-0-34349-2)
Seminar/ Conferences/ Workshop	<ul style="list-style-type: none"> Organized Two days National e-conference entitled "Recent Advances and Future Trends in Biological, Chemical and Physical Science - 2021" as Organizing Secretary- Biological Sciences. 4 Days Training Program on "Basic Disaster Management" organized by NSS committee, President Science College from 21st to 24th December, 2021.
Others	<ul style="list-style-type: none"> Invited as Guest Speaker in the workshop On "Awareness about Environment Conservation and Tree Plantation organized by A. G. Teachers College.

- Editorial Team Member International Journal of Botany Studies, International Peer Reviewed Journal
- Best Paper Presentation Award in Oral Paper Presentation titled "Mitigation of Soil Pollutants from the Soil" Virtual National Conference organized by Mata Gujri Mahila College, Madhy Pradesh and Madhyapradesh Council of Science and Technology sponsored by University Grant Commission on 24th and 25th Sep, 2021.
- 2nd Rank in the Oral Paper Presentation titled "Potential of Tissue Cultured Plants of Polyscias fruticosa L. to mitigate heavy metals from the soil" International Science Symposium organized by Christ College and GSBTM, DSI on 22nd and 23rd January, 2022.



**COMING TOGETHER IS A
BEGINNING,
KEEPING TOGETHER IS
PROGRESS,
WORKING TOGETHER IS
SUCCESS.**

BEYOND



CLASSROOM

President Science College was established in 2015 with the vision & mission of student's development not only on the basis of academics but also make them think out of the box and to learn beyond the classroom. Afterall Overall development happens not just by studying in the classroom, but learning beyond it, is very crucial. Today's students have more access to information and resources beyond the classroom than any prior generation. Foundation of our institute is built on: Learning to know, learning to do, learning to live together, and learning to be international with responsibility toward many cultures, environments & skilled intensity.

Every year PSC organizes various activity which allow students to improve their skills with enjoyment and celebration. Here is the glimpse of previous academic year's activities.

Independence Day celebration

On 15th August 2021, Independence Day was celebrated at President Science College. Bright students of the college who



secured prestigious positions in top 50 ranking of Gujarat University, those students were rewarded with cash prize of Rs. 11,000 by the honorable trustees of Shayona Group with their blessings for their future endeavors. Students felt highly delighted upon being rewarded. Meesha Prajapati secured first rank & Hitarthi Prajapati secured second rank in semester 3 and 4 consecutively whereas Megha Patel secured seventh rank and Nikita Patel secured eighth rank in semester 5 at Gujarat University top 50 ranks for the academic year 2019-2020.

Teachers Day Celebration

On 5th September 2021, Teacher's day was celebrated at President Science College.



Where students have presented their skills by participating in various competitions involving shloka, song speech and dance. A drama presenting students education via new online mode was presented by teachers which was very well appreciated. Further, students who secured in top 50 ranks of Gujarat University were felicitated by giving them certificate.



Rangam Day's celebration 2021

Year 2021 ended with new hopes and new horizons for the coming year as President Science College has hosted three days "Rangam Days celebration 2021". Immense talent was shown by budding stars of President Science College. On day one Grand Garba event at Parth party plot, S.G. Highway was celebrated by students and Staff in the presence of Trustees and dignitaries. Day two had its own charm with various themes such as "CHOCOLATE DAY", "MISMATCH DAY", "SIGNATURE DAY", "TWIN DAY" ETC. Third day was celebrated with full enjoyment and was entitled as "TALENT SHOW DAY" in which students participated with excitement and performed in various genre of art such as singing Bollywood songs representing folk lore, different dance art forms including Act on topics such as "Acid attack and women harassment", followed by poetry recitation. Students enjoyed all three days with fun & enthusiasm.



Diwali Celebration "Samarambh-2020-21"

In year 2020-21 President Science College part of Shayona family has hosted the Diwali function with utmost joy and glory and entitled it as "Samarambh-2020-21", the function was covered with various events, starting from Dip pragya following with felicitation of trustees and all the dignitaries present over there. The function had its charm with a welcome note by Principal Ma'am Dr. Shivangi Mathur and insightful words by our trustees were also being added. Participation by faculty members in various events such as Drama entitled as "Online class ek vardan ya tras", a performance on Meme culture and various games followed with Antakshari engaged the audience enthusiastically.

Sports Day Celebration 2022

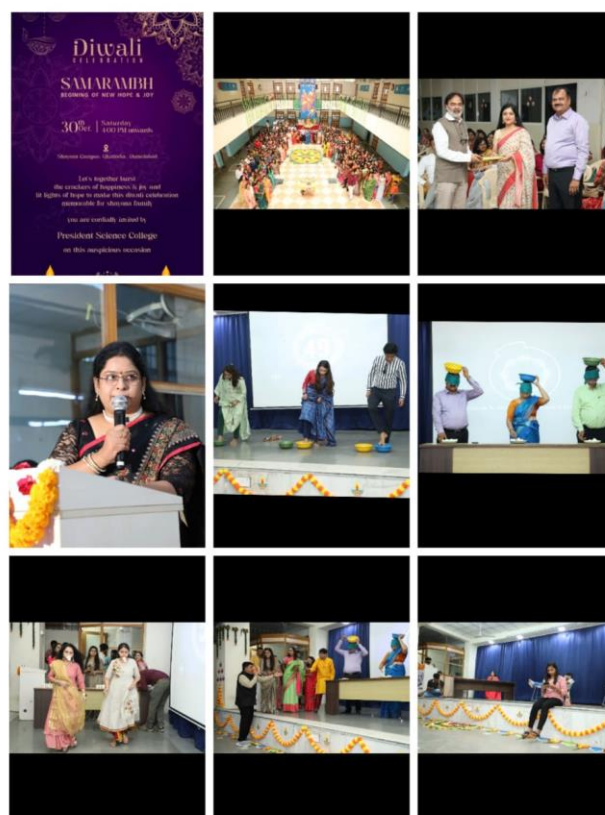
Sports are essential for humans to keep their life fit and fine. It not only strengthens the body but has a great importance in each stage of life. Considering this, to



encourage young minds, President Group of institutes have organized sports day on 13th February 2022. Starting with parade and followed by various sports activities conducted by the institute such as Kho-Kho, Badminton, Chess, Carom, Tug of war, Running, Table tennis, Shot put etc. There were more than 170 students took part in multiple sports and they played very enthusiastically. The Arena was full of excited spectators cheering on their team. The event was concluded by inspiring speech delivered by Authorities of President group of institutes.

Annual Day Celebration Rangam 2022

After two long years of COVID pandemic the students & faculties of President Science College along with President Nursing College & President Institute of Computer Application, have celebrated Annual Day Rangam -2022 on 7th April 2022 at Pandit Dindayal Auditorium on a grand level. The day had witnessed distinguished guests, dignitaries, extravagant performances, mesmerizing acts which made the audience spellbound.



The program started with Ganesh Vandana a beautiful classical dance performed by Ms. Esha Trivedi; it was followed by a duet dance on contemporary Bollywood mash up performed brilliantly by Zeal Paygode & Mahi Dalwadi. A tremendous blend of Indian classical & western dancing act loaded with expressions was given by Ms. Amisha Bhavsar. The fun element to the event was added up with a tickling act of Meme



culture following the current trend by the students of BSc. & BCA, made the entire

environment joyful. A beautiful medley of romantic indo-English songs was presented by Dinkal Hapani & Masum Patel. The Power Yoga dance act was presented gracefully by Semester-6 Microbiology girls. Funny dance act with a giggling depiction of ATKT, Bahubali & Pushpa was presented by the students. Last but not the least an excellent performance on different dance styles from Hiphop to contemporary was given by BSc. & BCA students. Rangam -2022 was finished without any interruptions because of the efforts of student volunteers who worked tirelessly during the event



SPOTLIGHT IN SCIENCE

Major Breakthrough in Biological Sciences

Developments in COVID 19 Vaccines: The fastest vaccine development-to- deployment.

The Pfizer and Moderna Covid-19 vaccines were rolled out for emergency use for adults in record time last December, followed by Johnson & Johnson's single-shot vaccine in February 2021.



The Covid-19 vaccine has now become available for children as young as five.

Malaria vaccine for kids

The World Health Organization (WHO) in October approved the world's first malaria vaccine for kids, which is also the first vaccine against any parasitic disease. The new vaccine fights the deadliest of five malaria pathogens and is delivered in a series of four injections. This science breakthrough could prevent around 5.3 million malaria cases every year.



CRISPR gene editing injected into blood treats a genetic disease for first time

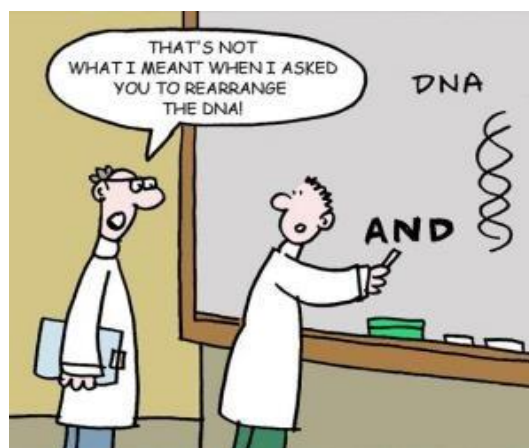
The concept of gene editing is rapidly taking strides and in June 2021, the CRISPR

Cas-9 gene editor was injected directly into the bloodstream of a patient with a rare inherited disease.

Usually, cells are extracted from a patient and CRISPR works on them in a lab setting before the edited genes are returned into the body.

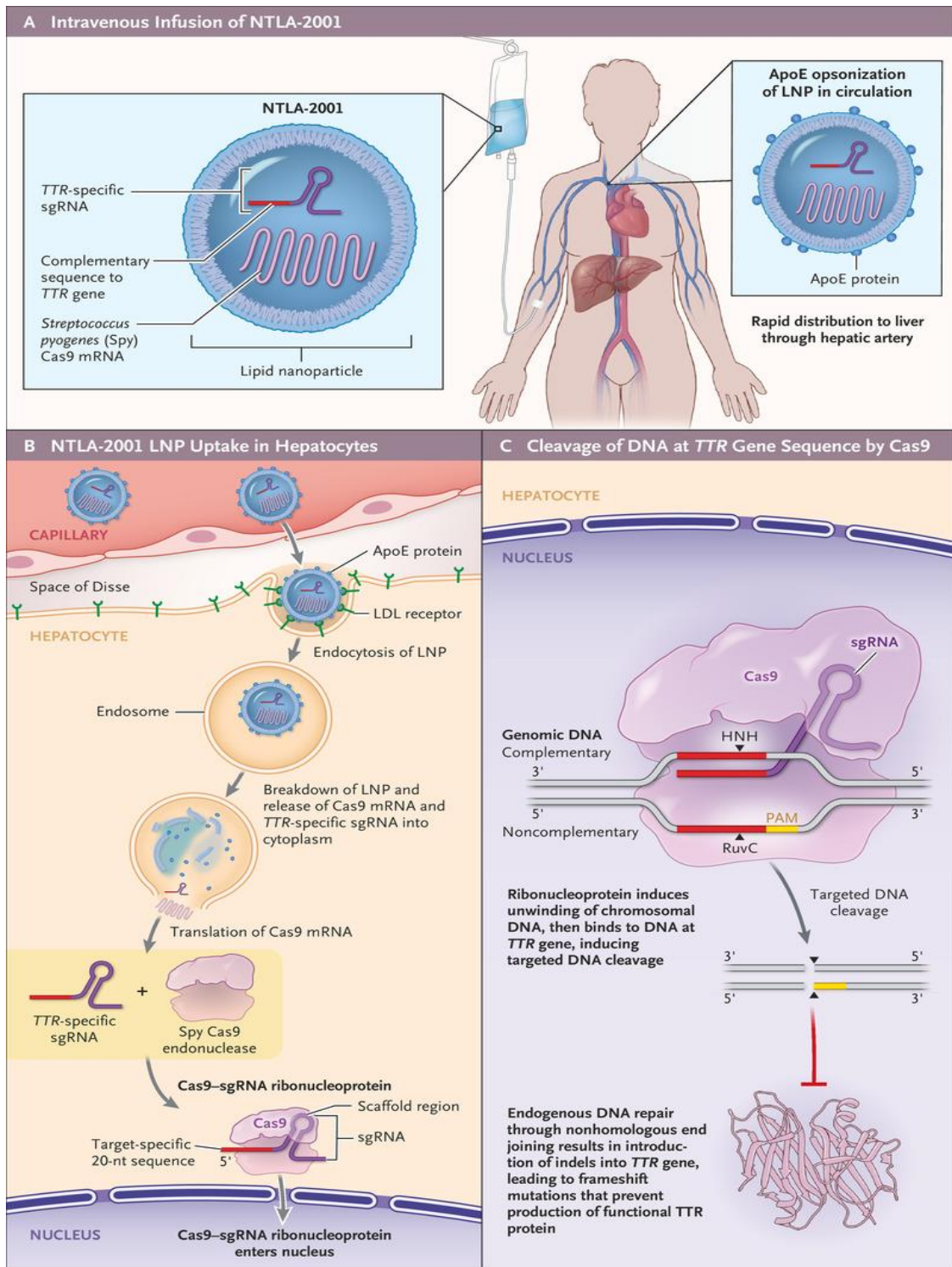
It is a time-consuming and expensive process and often, the patients often need to undergo chemotherapy afterwards.

This case concerning the previously untreatable condition of transthyretin amyloidosis was quick and successful, and the treatment even saw a decline in the destructive proteins that build up in the tissues and organs of someone with this disease.



New species of early humans

Neanderthals palaeontologists from Madrid who created 3D-models of the ear structures of Neanderthals claimed that they possibly had the capacity to speak and hear just like Homo sapiens, the modern human species. Researchers from China analysed the skill using uranium series



dating X-ray fluorescence and declared it a new species of early humans. The skull had a large cranium which can hold a big brain, a thick brow and almost square eye sockets these differentiate it from the other Homo species.



Homo longi or 'dragon man', as this new species has been named, was earlier suggested to be a later Pleistocene human, joining Homo sapiens and Neanderthals.

Humans are affecting animal evolution

A study in Trends in Ecology and Evolution found that bats have been growing bigger wings and rabbits growing longer ears both of these are likely to dissipate more heat into the surrounding air.

Science Advances published more evidence on these lines. Most likely as a result of rising temperatures and changes in rainfall patterns, 77 species of birds from a remote patch in the Amazon rainforest were observed to weight lesser and have longer wings over a period of 40 years.

Artificial titanium heart developed

Scientists have been trying to build an artificial heart for over 50 years now. Cardiovascular diseases (CVDs) take an estimated 17.9 million lives around the

world each year and are the leading causes of deaths globally.

An Australian research team has created BiVACOR, a titanium heart that utilises spinning disc technology.

It doesn't work exactly like a human heart but tries to surpass evolution with a better mechanism to pump blood around the human body. It has a circular pump suspended between magnets in an artificial heart made of titanium.

A full human trial is yet to be conducted.

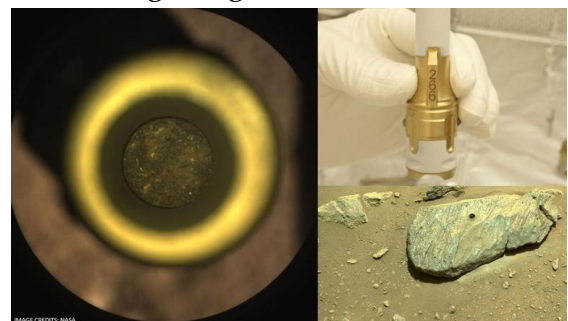
Till now, it has been tested only temporarily on heart transplant patients and has undergone animal trials.



Major Breakthrough in Physical Sciences

HUMANITY COLLECTS ROCK SAMPLE FROM MARS

The NASA Perseverance Rover, which touched down on the surface of Mars in February. Roaming the Jezero Crater, an ancient dried-out lake bed on the Red Planet, the rover has discovered signs that an **abundance of water** once flowed across the surface of the planet. Not only this, but Perseverance has sent back some stunning images of the surface of Mars and **launched the Ingenuity helicopter**, the first human-designed craft to fly over the surface of an alien world. Perhaps most significantly, in July the rover made history when it **drilled and collected a rock core** from a Martian boulder. This marked the first time that humanity had ever collected such a sample from another world.



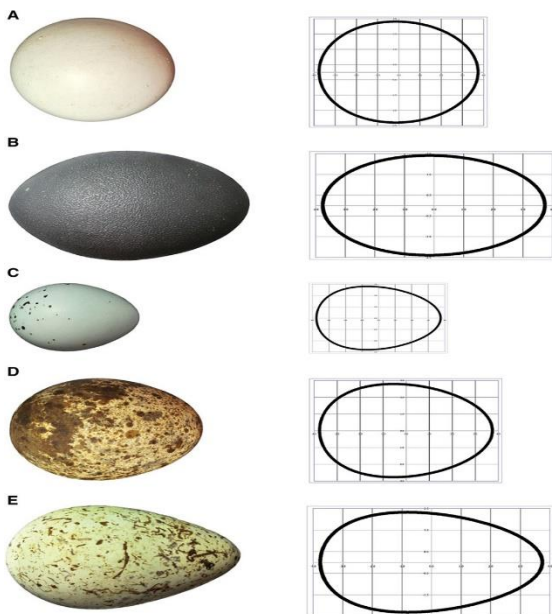
Major Breakthrough in Mathematical Science

A universal equation for the shape of an egg

Researchers from the University of Kent, the research institute for environment treatment and Vita-market Ltd have discovered a universal mathematical formula that can describe any bird's egg existing in the nature, a feat which has been unsuccessful till now.

This new universal mathematical formula for egg shape is based on four parameters: egg length, maximum breadth, shift of the vertical axis, and the diameter at one quarter of the egg length.

$$y = \pm \frac{B}{2} \sqrt{\frac{L^2 - 4x^2}{L^2 + 8wx + 4w^2}} \cdot p(x)$$



Competent scientific description of a biological object. Now that an egg can be described via mathematical formula, work in fields of biological systematics,

optimization of technological parameters, egg incubation and selection of poultry will be greatly simplified.

Machine learning helps mathematicians make new connections

For the first time mathematicians have partnered with Artificial Intelligence to suggest and prove new mathematical theorems. The work was done in collaboration between the University of Oxford, The University of Sydney in Australia and DeepMind, Google's artificial intelligence sister company.

A paper, published in Nature, describes how DeepMind was set the task of discerning patterns and connections in the fields of knot theory and representation theory. To the surprise of the mathematicians, new connections were suggested; the mathematicians were then able to examine these connections and prove the conjecture suggested by the AI.

These results suggest that machine learning can complement mathematical research, guiding intuition about a problem.

Using the patterns identified by machine learning, mathematicians from the University of Oxford discovered a



surprising connection between algebraic and geometric invariants of knots, establishing a completely new theorem in the field. The University of Sydney, meanwhile, used the connections made by the AI to bring them close to proving an old conjecture about Kazhdan-Lusztig

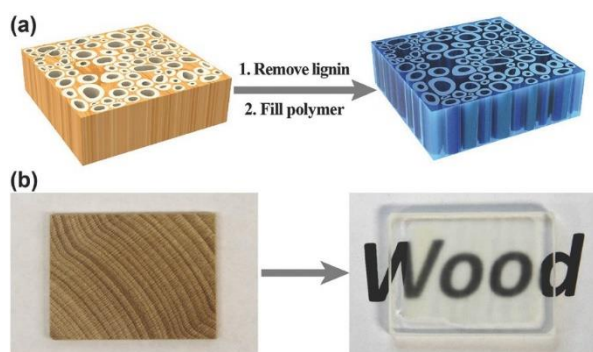
polynomials, which has been unsolved for 40 years.

Major Breakthrough in Chemical Science

Transparent wood

Researchers at the University of Maryland have discovered a new technique to make wood transparent. In the past, attempts had been made to make wood transparent by using specialised chemicals to remove lignin. However, the main drawback was that this weakened the wood.

The new method uses an alteration of the lignin. At the beginning of the process, the molecules responsible for giving the wood its colour are removed. Then, a special hydrogen peroxide agent is applied to its surface which is then exposed to UV light (or natural sunlight). After these treatments, the wood takes on a white colour. The wood is then soaked in ethanol for a more thorough cleaning. Finally, the pores are filled with colourless epoxy to make the material smooth and almost perfectly transparent. This gives the wood the qualities of being able to transmit up to 90% of light and the material is 50 times stronger than conventionally rendered transparent material. It is also lighter and,



above all, stronger than glass and provides better insulation.

INK FOR DIGITAL PRINTING ON PORCELAIN

Ceramic manufacturing methods are distinguished by a long tradition. However, with the development of technology, the time has come for change here too. The digital colouring of ceramic tiles, which may replace the classic glazing method, is to become a breakthrough for this industry. Patterns will be applied with a high-resolution printing method, because of this it will be possible to obtain not only various colours, but also various textures, which may be likened to those of fabrics or wood.

The solution has been developed by Italian company Metco, which has created a special, sustainable ink called ECO-INK for digital ceramics. The proposed ink is aqueous, so it does not contain organic solvents, which contributes to reducing both the toxicity and carbon footprint of the product. Additionally, the paint can penetrate the surface of the ceramic tile, thereby eliminating the need for an additional protective layer. This results in a more efficient and sustainable process. Moreover, the surface of the tiles becomes more durable after the application of ECO-INK.

A graphic featuring a central map of the United States in a light purple color. Surrounding the map are numerous stylized hands in blue and yellow, reaching out towards the center. The hands are arranged in a circular pattern, creating a sense of unity and community. The background is white, and the entire graphic is framed by a solid purple border at the top and bottom.

COMMUNITY OUTREACH

President Science College truly believes that the community and youth can work for betterment of each other. Every tiny effort by a small group of thoughtful and committed people can make a difference and youth can bring that difference. Whereas, on the other hand community participation helps youth become empathetic citizens who could potentially continue similar work when they become adults. Additionally, youth who give back to their communities develop leadership skills, learn the importance of helping, and gain work experience.

Every year, The PSC organizing various activities under the roof of the NSS and the WDC in order to involve students for the betterment of society

ACTIVITIES OF NSS DURING THE PREVIOUS ACADEMIC YEAR

Organ Donation Oath Taking Ceremony



On September 17, 2021, NSS committee, The President Science College, conducted an awareness session on organ donation for the students and faculty members. Ms Ami Patel, Principal, President Nursing College was the resource person. She explained the basic concepts of organ donation, the need for it in today's time when many people are suffering from end-stage organ failure, laws and legal

processes involved in organ donation and also explained concept of brain death. Post these total 108



members including students and staff took Oath of Organ donation.

Four Days Training Program on Civil Defense

PSC NSS committee has organized a workshop "Four days training program on Civil Defense" from 21st December to 24th December 2021.



In this workshop the delegates who delivered their speeches were Shri Harshadbhi Nayak who is deputy chief warden and Parade commander of Ahmedabad district, Prof. Nitinbhai Trivedi divisional warden in civil defense of Ahmedabad District, Jyeshbhai Vegda Civil Defense instructor Ahmedabad division, Shree Priyavadan shah Civil engineer by profession and one of the well-known faces, Shree Manoj Raval Radiographer in Shardaben hospital, Ahmedabad.

The topics covered by them were the introduction of civil defense and its structure, First Aid, CPR, Emergency Methods of Rescue,



Disaster Management, Fire safety, bomb Safety Snake bite etc. These sessions had theoretical insights as

well as practical demonstration which engaged the audience enthusiastically.



The entire workshop had approximately hundred number of attendees including staff members. The technical sessions were concluded by vote of thanks by Dr. Shivangi Manthur (I/C Principal, President Science College). At the end of the session written examination was conducted by Defense staff members of Ahmedabad district.



Community service by NSS volunteers, President Science College, Ahmedabad for Municipal Corporation Vaccination Camps

NSS student volunteers of President Science College started service from 21st February, 2022 at different Medical Vaccination Camps organized by Ahmedabad Municipal Corporation.



Swain Saloni Rani B., Mewada Ami, Acharya Mitali, Gupta Nisharth, Desai Dev, Bhavsar Prachi, Solanki Sumitkumar, Patil Kaushul, Namdev Diksha, Balasara Sakshi Yadav Bharti, Om Patel were selected for the Vaccination Camp Services.

Students were trained for the same on 21st Feb, 2022 at V.S. Hospital, Ellis Bridge, Ahmedabad. From 22nd Feb, 2022 trained students were allotted duties at different



vaccination camps e.g., AMC Schools, L.G. Hospital, V.S. Hospital for vaccination registration duties.

07 Days NSS Camp at Jetalpur.

NSS committee, President Science College organized seven days NSS camp at Jetalpur from 21st to 27th March, 2022. Total 33 students (24



Boys and 9 girls) including 6 faculty have participated in this camp.

This camp has been proven a lifelong experience for all as everyone had worked in team and participated in each activity including staying in a school, Shreemati Shantaben Chinubhai Shah Primary School,



Jetalpur Gam, Daskroi Taluka, Ahmedabad District (Gramya).

All students have been divided in three teams named Satya, Prem and Karuna. Faculty members have planned all activities very well starting from the early morning

Prabhatferi and Prayer to visiting different areas of village to collection of various data. Students have gathered data like Vyasana data (Addiction data), COVID vaccination data and also did survey on Milk production and Kuposhan - Bal swasthya (malnutrition and child health). Besides these, they also tried to spread awareness about education, tricks for de-addiction and also about importance of yoga for health. They also get involved with traditional games and organised a small cultural event on the last day of camp.

ACTIVITIES OF WDC

Collegiate Women's Development Cell Inauguration Ceremony

President Science college established a committee called "Collegiate women's development cell" to empower female students in all aspects. CWDC inaugural ceremony organized by college on 19th February 2022. President Science College "CWDC" has been inaugurated by Guest of Honour Dr. Archana Mankad, the Chairperson - WDC, Gujarat University, and Guest Speaker Adv. Vrunda C. Shah,

Assistant Govt. Pleader, Gujarat High Court. Dr. Archana Mankad ma'am gave an encouraging speech during an event to motivate our female students and Faculty members. Adv. Vrunda C. Shah discussed the legal rights of women during the event and spoke about the importance of social, legal, and constitutional rights for females. More than 90 female participants attended the event.

WOMEN'S DAY CELEBRATION

PSC's Collegiate Women's Development Cell celebrated international women's day on 8th march, 2022 with a fun celebration. The purpose of celebrating Women's Day is to raise awareness among students about the status and dignity of women.



The event was graced by the presence of Mrs. Urvashi Patel mam, Dr. Shivangi Mathur mam,



Dr. Prashanti Kothari mam and Ms. Ami Patel mam. Urvashi Patel mam, a women leader of BAPS and also one of the College trustees, delivered a powerful speech that motivated students about careers and education. A celebration of fun accomplished by dance, drama, speech, and singing.



“
We do not need
magic to transform
our world. We
carry all of the
power we need inside
ourselves already.

J.K. Rowling

DEPARTMENTAL SPOTLIGHT

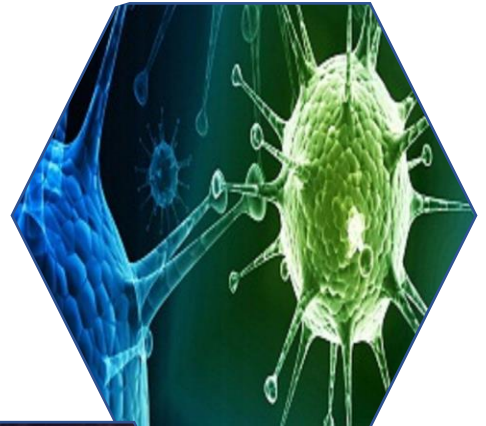
BIOTECHNOLOGY



CHEMISTRY



MICROBIOLOGY



BOTANY



ZOOLOGY

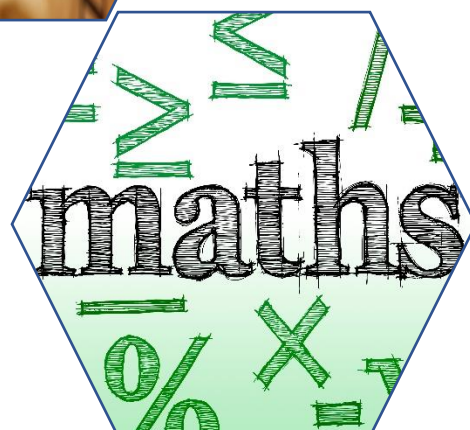
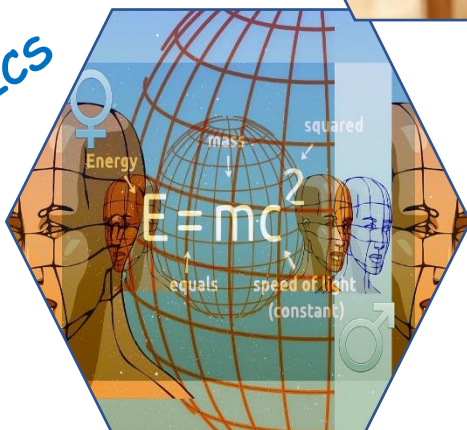


ENGLISH



MATHEMATICS

PHYSICS



BIOTECHNOLOGY

TEAM BIOTECHNOLOGY



Name: Dr. Shivangi Mathur (Assistant Professor)
Educational Qualification: M.Sc. (Biotechnology), P.G.D.B.I., Ph.D. RSLET
Teaching Experience: 11 Years



Name: Dr. Urja Joshi (Assistant Professor)
Educational Qualification: M.Sc. (Biochemistry), Ph.D. (Biochemistry)
Teaching Experience: 5 years



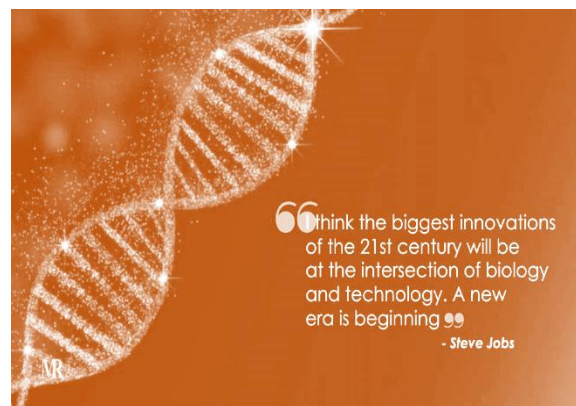
Name: Dr. Stuti Patel (Assistant Professor)
Educational Qualification: M.Sc. (Biotechnology); Ph.D. (Microbiology)
Teaching Experience: 5 years



Name: Ms. Dharmisha (Lab Assistant)
Educational Qualification: M.Sc.
Laboratory Experience: Fresher

VISION

India has become a hub for research and thus is home to some excellent MSc programs such as JNU, DU, IISc, TIFR, IITs etc. With an MSc degree, most students tend to work in research labs and industries as research assistants. Since the past few years, the Indian government took several steps/initiatives to set up numerous research institutions and laboratories of national repute conducting high end research in Stem Cells, Cancer Biology, Biomedical Sciences, Genetic Engineering, Plant tissue culture etc. Gujarat has set up a special agency, the Gujarat State Biotechnology



“I think the biggest innovations of the 21st century will be at the intersection of biology and technology. A new era is beginning.”
- Steve Jobs

Mission (GSBTM) to push the state into the frontiers of biotechnology in a systematic way. It is a state nodal agency of DST (Govt. of India) which intends to promote biotechnology sector by encouraging entrepreneurship, building appropriate image, strengthening student's knowledge by giving them training and forecasting business partnerships and funding projects of state's colleges/Universities.

Department has well equipped laboratories which have all subject related instruments like, Laminar Air Flow, Autoclave, Hot air oven, Incubator, Waterbath, Centrifuge, Microfuge, Analytical Balance, Gel Electrophoresis unit, Transilluminator, UV-Vis Spectrophotometer, pH Meter, Rotary Shakers, BOD incubator etc. Excellent teaching (in well-equipped classrooms) and course-oriented training is provided by the college,

which is accompanied by short industrial/institutional visits related to the subject during the course.

DEPARTMENTAL ACTIVITIES

Visit at Aquatic and robotic galleries at Science City

On 17th August 2021, Sem 5 students visited Aquatic and robotic galleries at Science City, Ahmedabad.

Visit at Science Exhibition held at Gujarat University

S. Y. B.Sc. students registered for the visit to Science Exhibition held at Gujarat University for 22 - 28



February, 2022. Students visited the exhibition in groups on 23, February, 2022, along with several individual student visitors as well during the exhibition dates. There was total 13 exhibition halls explaining various scientific theories from different subjects

Attended webinar on industry orientation and career guidance at PSC.



T. Y. B.Sc. students attended webinar on industry orientation and career guidance at President Science college in association with Pharma Knowledge Centre on 22nd March 2022 at 11.00am. Founder and managing director of Pharma Knowledge Centre, Dr. Nishodh Saxena, delivered a talk on medical coding and revenue cycle management industry orientation and career guidance.

Attended and Participated in SCIENCE MANTHAN-2022

T. Y. B.Sc. students attended SCIENCE MANTHAN-2022, organized by P. D. Patel Institute of Applied Sciences, CHAROTAR University of Science and Technology (CHARUSAT), Changa on 26th of March 2022. Seven students actively participated in different competition.

CHEMISTRY

TEAM CHEMISTRY



Name: Dr. Khyati N. Patel (Assistant Professor)
Educational Qualification: M.Sc. (Inorganic Chemistry), Ph.D
Teaching Experience: 9 Years



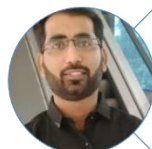
Name: Dr. Jaivik V. Shah (Assistant Professor)
Educational Qualification: M.Sc. (Analytical Chemistry), M.Phil., Ph.D.
Teaching Experience: 5 years



Name: Dr. Upendrasingh Hamirji Jadeja (Assistant Professor)
Educational Qualification: M.Sc. (Physical Chemistry), Ph.D.
Teaching Experience: 4 years



Name: Dr. Kiran Rajpara (Assistant Professor)
Educational Qualification: M.Sc., Ph.D.
Teaching Experience: 7 years



Name: Mr. Vikas Gurbani (Assistant Professor)
Educational Qualification: M.Sc. (Inorganic Chemistry), B.Ed.
Teaching Experience: 1 Year



Name: Mr. Jay Patel (Lab Assistant)
Educational Qualification: M.Sc., B.Ed.
Laboratory Experience: 3 years



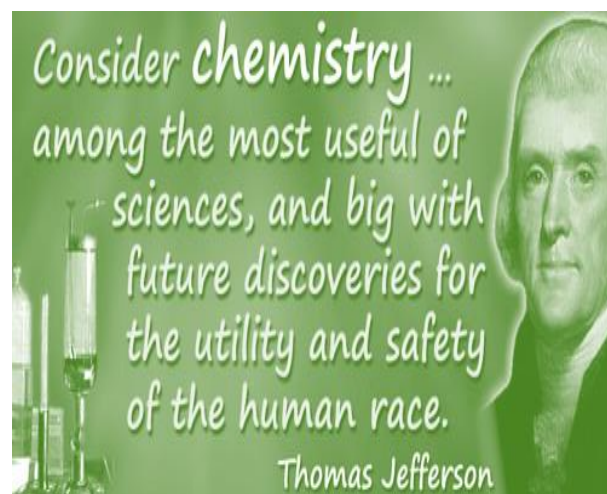
Name: Ms. Diksha Patel (Lab Assistant)
Educational Qualification: M.Sc., B.Ed.
Laboratory Experience: 2 years

VISION

One of our key objectives is to create good quality human resource. The Department offers core courses in chemistry for undergraduate B.Sc. students. The Chemistry is widest branch of science, which provides a strong background in all major areas of chemistry: physical chemistry, inorganic chemistry, organic chemistry, biochemistry, analytical chemistry and industrial chemistry. Students may concentrate in one or more of the above areas by taking advanced courses in areas of specific interest. The department is adequately equipped with state-of-

art analytical facilities to carry out modern day chemistry.

Chemistry majors are prepared to pursue many different careers after graduation, including graduate study in chemistry and related areas, employment in government or industry, professional school (e.g., medicine, dentistry, pharmacy, law,



library science), or secondary school teaching. Other employment opportunities are available to Chemistry majors, including those in water pollution, forensic chemistry, environmental chemistry, molecular biology, research and development, quality assurance and genetic engineering.

DEPARTMENTAL ACTIVITIES

Alumni lecture

Alumni lecture was arranged for last year chemistry students on 12th July, 2021 from 12.00 PM to 1.00 PM. Main aim of the lecture were; to give information regarding after B.Sc. courses. There are 64 students to attend alumni lecture.

Visit to Science City

On 17th August 2021, Students of B.Sc. Sem 5 visited Aquatic and robotic galleries at Science City, Ahmedabad.

Visit to Bakor

Organized one day picnic of Bakor on 27/12/2021 for B.Sc. students of President Science College. Total 61 students and 4 faculty members of Chemistry Department (Dr. Jaivik, Dr. Kiran, Mr. Jay and Ms. Dixia) visited this Natural as well as Heritage place. Under the threat of Corona parents of students gave their best support to us. In addition,

Students has dedicatedly followed all the guidelines or instructions given to them by faculty members.

Chemistry Students have participated and presented a poster in Two days National level e-Conference on "Recent Advances and Future Trends in Biological, Chemical and Physical sciences 2021 (RAFTBCPS - 2021) organized by President Science College, Ahmedabad.



MICROBIOLOGY

TEAM MICROBIOLOGY



Name: Dr. Aarti Thakkar (Assistant Professor)
Educational Qualification: M.Sc., M.Phil., Ph.D. (Microbiology)
Teaching Experience: 11 years



Name: Dr. Richa Dubey (Assistant Professor)
Educational Qualification: M.Sc., Ph.D. (Microbiology)
Teaching Experience: 8 years



Name: Dr. Darshna Patel (Assistant Professor)
Educational Qualification: M.Sc., M.Phil., Ph. D. (Microbiology)
Teaching Experience: 6 years



Name: Dr. Rachana Shukla (Assistant Professor)
Educational Qualification: M.Sc., Ph.D. (Microbiology)
Teaching Experience: 5 years



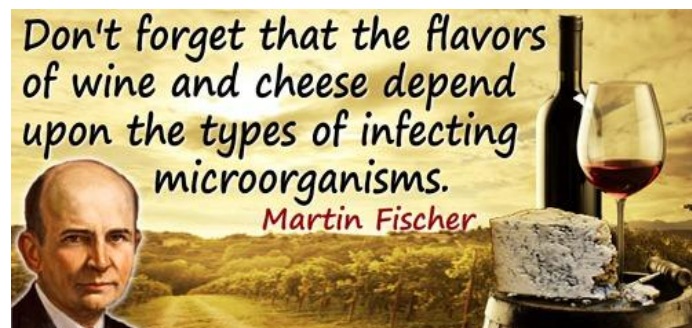
Name: Ms. Asma Shaikh (Assistant Professor)
Educational Qualification: M.Sc., M.Phil. (Microbiology)
Teaching Experience: 9 years



Name: Ms. Sangeeta (Lab Assistant)
Educational Qualification: M.Sc.
Laboratory Experience: 2 years

OVERVIEW

Microbiology has generated a lot of buzz from the past few years leading to a rush in the number of students who are looking to pursue this field as a carrier. Microbiologists are scientists who study



field of microbiology due to the advancement in the field of science and technology. The scope in this field is immense due to the involvement of microbiology in many fields like medicine, pharmacy, dairy, industry, clinical research, water industry, agriculture, chemical technology, nanotechnology, food, pharmacy, agrochemistry biotechnology, biorefinery, environment, pollution control and bioremediation. There is an increase in demand for microbiologists in India and globally. Hybrid careers include patent law, public policy, science writing, education, infectious disease medicines, and business analysis.

DEPARTMENTAL ACTIVITIES

Participation In Science Manthan

41 students of B.Sc. attended SCIENCE MANTHAN - 2022, organized by P. D. Patel Institute of



Technology (CHARUSAT), Changa on 26th of March, 2022. Seven students actively participated in different competitions.



Workshop on career guidance and industry orientation

A workshop on industry orientation and career guidance organized by the Department of Microbiology for T.Y. B.Sc. students in association with Pharma Knowledge Centre on 22nd March 2022. Founder and managing director of Pharma Knowledge Center, Dr. Nishodh Saxena, delivered a talk on medical coding and revenue cycle management industry orientation and career guidance. More than 100 students from different divisions of T.Y. B.Sc. attended the workshop. Pharma knowledge centre provided e-certificates to all attendees at the end of the workshop.

Science Exhibition

In order to inculcate scientific concepts to our students PSC registered for the visit to Science Exhibition held at Gujarat University during 22 - 28 February, 2022. Students visited the exhibition in

groups on 23, February, 2022, along with Dr Darshna Patel (Assistant Professor, Department of Microbiology) and Dr Stuti Patel (Assistant Professor, Department of Biotechnology)

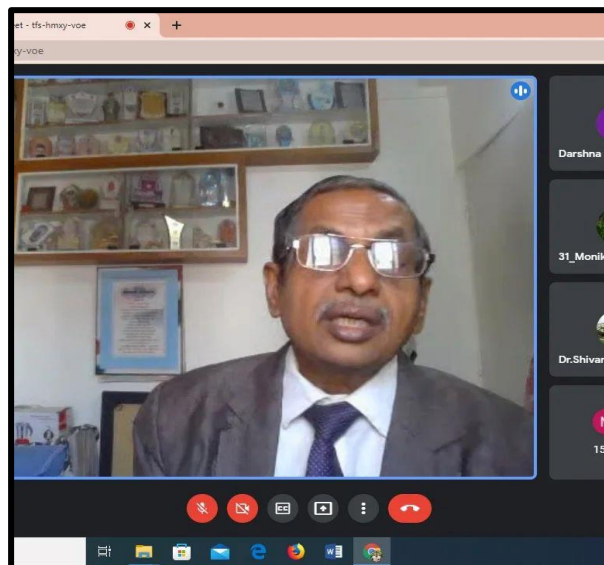


Virtual MSI inaugural ceremony

On 29th January 2022, Department of Microbiology at President Science College, Ahmedabad organized virtual MSI student unit inaugural ceremony in the auspicious presence of Chief guest, Prof. A M Deshmukh, Key note speaker, Prof. S R Dave and Guest of honor, Dr. Shilpa Jani. The ceremony was benefited to over 170



MSI student members along with several researchers and faculty members. Two best student of the



year 2020-21, one from microbiology and one from biotechnology were felicitated with MSI Best Student Award.

ALUMNI LECTURE

Alumni Lecture organized on “Scopes of Microbiology in Foreign Countries and Migration Procedures”. Delivered by Miss Jenish Patel on 10th July, 2021 on ZOOM platform.

WIN AT GibioN:

On 27th Feb 2022, B.Sc. third year (Microbiology) student, Purvaraj Sinh Zala won 3rd prize in article writing competition in 32nd GibioN competition (State level inter

collegiate Competition, where all Science colleges of Gujarat participate every year).

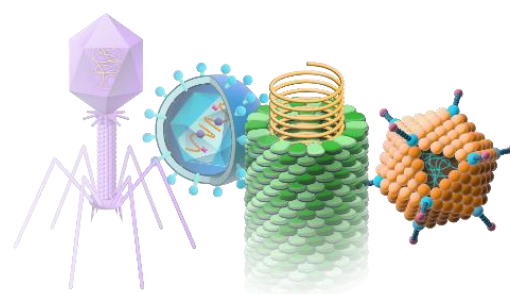


were the coordinators for the visit. Around 100 students took part in the visit.



VISIT TO INDRASHEEL UNIVERSITY

In April 2022 semester 6 students of President science College have visited to Indrasheel University. It was an excellent learning experience for the students for their future endeavours. Dr. Aarti Thakkar, Dr. Richa Dubey and Dr. Pragnesh Patel



BOTANY

TEAM BOTANY



Name: Dr. Urvi Gupta (Assistant Professor)
Educational Qualification: M.Sc., M.Phil., Ph.D.
Teaching Experience: 6 Years



Name: Dr. Dhruv Pandya (Assistant Professor)
Educational Qualification: M.Sc. M.Phil., Ph.D.
Teaching Experience: 3 years



Name: Ms. Megha Lodha (Lab Assistant)
Educational Qualification: M.Sc., B.Ed.
Laboratory Experience: 2 years

OVERVIEW

Biology can broadly be divided into two major sciences, i.e. Botany (Plant science) and Zoology (Animal science). Botany covers all organisms that are autotrophs. Some branches like Mycology, Lichenology, Bacteriology, Virology etc. include organisms that are not autotrophic in nature yet covered under introductory botany courses. As with other life forms in biology, plant life can also be studied from different perspectives, like molecular, genetic and biochemical level through organelles, cells, tissues, organs, individuals, plant populations, and communities of plants. At each of these levels, a botanist might be majorly concerned with the classification (Taxonomy),

structure (Anatomy and Morphology), or function (Physiology) of plant life. Along with these, branches like Palaeobotany and Ecology bring us the knowledge of vegetation of past, present and future, Ethnobotany, Economic Botany, and Pharmacognosy enrich us with the knowledge of plants being used in past and present and evolution in the usage pattern of plant resources.

Plants are a fundamental part of life on the Earth, which generates the oxygen, food, fibres, fuel and medicine that allow humans and other life forms to exist. Hence, study of botany is vital to understand fundamental life processes, to ensure food security to feed an expanding population, check the effects of global warming and climate change, to maintain biogeochemical cycles, new drug discoveries etc.

Departmental Activities

BBEC-2021 3day's Online Competitions and lecture:

Department has organized **BBRC (Budding Botanists for Environmental Conservation-2021) under which 3 days (3rd to 5th June) online competitions were organized**

by the Department. The competitions were Essay, Elocution, Painting, Sketch, best from waste, Poem on Environment and Quiz on the theme of **Environment and its conservation**.

Workshop Scientific Pot Culture- only for TY Botany Students.

Hands-on training or workshop for scientific pot culture on 10th March, 2021. Main aim of the training or



workshop was; to aware the plant science students regarding scientific pot culture and the components and its implementation in specific amount for the pot culture.

Alumni Lecture Series

❖ Bio enzyme

Lecture on “Bio-enzyme/Bio-fertilizer from kitchen waste” organized on 14th June, 2021. Total

100 students have participated in this lecture. The technical session was conducted by Miss Ameer Patoliya on “Bio-enzyme/Bio-fertilizer from kitchen waste.”

❖ Scopes in Biological Science

Lecture on “Scopes in Biological Sciences” on 17th July, 2021 Saturday. More than 40 participants actively participated in the lecture. Miss Shivangi Maurya beautifully explained about scopes in biological sciences.

KNOW YOUR KITCHEN virtual exhibition

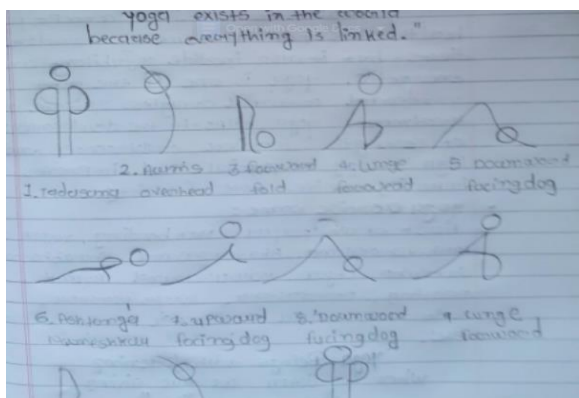
India is known also for its naturopathic treatment and herbal drugs since decays. During this Corona pandemic people became aware about home remedies and its great potential. To aware people and to explore medicinal plant's



significance, one Virtual exhibition of medicinal plants named “KNOW YOUR KITCHEN” has been created.

An Essay Competition on International Yoga Day:

Department of Botany and Microbiology organized an Essay Competition on 21st June, 2021 on Yoga theme. Three languages options were given to the students with 250 words limit. Total fifteen



students had actively participated from both the departments

Participation in national level quiz competition

T.Y students and four students of S.Y actively participated in National level Online Quiz on General Botany organized by Post Graduation Department, Mahatma Gandhi Govt. Arts College, Mahe on 28th June, 2021. Total 12 students received appreciation certificate for achieving more than 40% score.

One Day Training on Scientific Pot Culture:

Department has organized one day hands on training programme on scientific pot culture on Saturday 23rd October, 2021. Dr. Dhruv

Pandya has explained the different important steps for pot culture along with scientific reason of each component. Not only students, but faculty members from all the departments have been participated actively in the training program.

Botanical excursion day at



Riverfront Park:

Field study is an essential part of botany as plants are best studied in their natural habitat. As a part of B.Sc. Curriculum, one day trip was organized to Riverfront Park on 6th



August, 2021 for semester V students. The major objective was to familiarize the students with the wild and cultivated flora and ecology of the region. A group of 12 students were accompanied by Dr. Urvi Gupta, Dr. Dhruv Pandya and Ms. Megha Lodha.

ZOOLOGY

TEAM ZOOLOGY



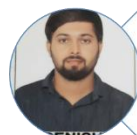
Name: Mr. Dashrathsinh Barad (Assistant Professor)
Educational Qualification: M.Sc. (Zoology), B.Ed., M.Phil. (Zoology)
Teaching Experience: 6 Years



Name: Dr. Pragnesh B. Pate (Assistant Professor)
Educational Qualification: M.Sc. M.Phil., Ph.D.
Teaching Experience: 5 years



Name: Dr. Dhara Jani (Assistant Professor)
Educational Qualification: M.Sc. M.Phil., Ph.D.
Teaching Experience: 5 years



Name: Mr. Denish (Lab Assistant)
Educational Qualification: M.Sc.
Laboratory Experience: Fresher

OUTLINE

Science of Zoology exposes students to fascinating scientific innovations such as mapping of genes, advances in immunology, drug designing, drug targets, stem cell applications, identification of genes for longer life span, pathogen biology, cancer biology, bio diversity and environmental conservation, creation of eco-friendly and smart cities. Study of Zoology also brings about sensitization of students regarding human health, environment conservation and resource optimization. Knowledge of Zoology also opens the path for



unconventional avenues like bio-design and bio-entrepreneurship. As a Zoologist, you will have the opportunity to play a part in understanding how organisms play a part in various ecosystems, and how we as humans can try and avoid damaging the wildlife of the world.

Because modern zoology is interdisciplinary, we believe that you need to be aware of the breadth of animal biology, from the molecular to the ecological. After graduation in Zoology, the students can opt for various post-graduate programs in the field of Zoology, Life sciences, Biosciences, Forensic science, Biomedical technology, Human Genetics, Environmental Science, Food and Nutrition sciences, MLT (Medical Laboratory Technology), etc.

Departmental Activities

STUDY TOUR - MARINE NATIONAL PARK



Department has organized a three days study tour at Marine National Park, Okha (Beyt Dwarka), Fisheries landing station, Okha and Turtle Hatchery Centre, Okha Madhi, Dwarka from 21/12/21 to 23/12/21.



Students of Semester-1, 3 and 5 have joined the study tour which was aimed to learn the Zoology subject with the practical approach. Students got the opportunity to observe and study various marine organisms in their natural habitat. During this tour students learned the diversity of animals in Marine



National Park, their current status and necessity for their conservation. During this tour students were educated through knowledge-based activities as well as through direct observation of variety of marine fauna



PHYSICS

TEAM PHYSICS



Name: Ms. Bindiya Babariya (Assistant Professor)
Educational Qualification: M.Sc., M.Phil., (Physics), Ph.D. (Pursuing), NET(LS)
Teaching Experience: 5 Years



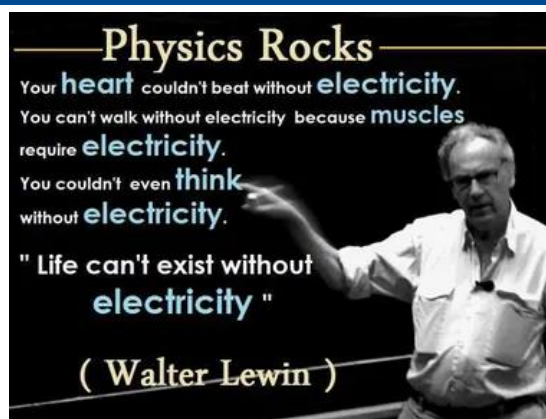
Name: Dr. Adwait D. Mevada (Assistant Professor)
Educational Qualification: M.Sc., Ph.D. (Physics)
Teaching Experience: 8.4 years



Name: Ms. Nisha (Lab Assistant)
Educational Qualification: M.Sc.
Laboratory Experience: Fresher

OUTLINE

“Physics is the king of Science” and Physics is the natural science that involves the study of matter and its motion and behavior through space and time, along with related concepts such as energy and force. It is the most fundamental of all science and underpins all the major technological advances in our society, which means that graduates of physics are highly sought after in many areas of industry. Physics also makes significant contributions through advances in new technologies that arise from theoretical breakthroughs. For example, advances in the understanding of electromagnetism or nuclear physics. The course study



educates the participants with various aspects of matter, motion, energy, time, and so on. The course offers adequate scope with regard to higher education as well as career.

Departmental Activities

Participation in national e-conference

PSC organized two days national e-conference on “Recent advances and Future Trends in Biological, Chemical and Physical Sciences – 2021”, in which our group of student took part in poster presentation in Under Graduate category. Out of which 2 students were awarded as Best Poster Award.

Visit at Aquatic and robotic galleries at Science City

On 17th August 2021, Sem 5 students visited Aquatic and robotic galleries at Science City, Ahmedabad

MATHEMATICS

TEAM MATHEMATICS



Name: Ms. Juhi Yadav (Assistant Professor)
Educational Qualification: M.Sc. (Mathematics)
Teaching Experience: 5 Years

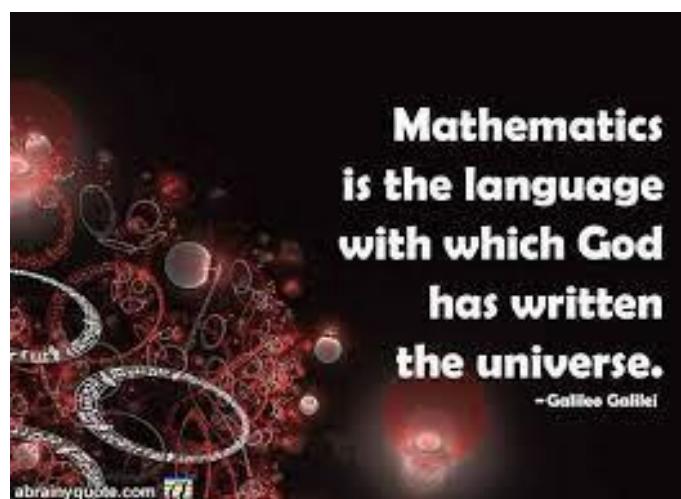


Name: Ms. Krisha Shah (Assistant Professor)
Educational Qualification: M.Sc. (Mathematics), Ph.D. (Pursuing)
Teaching Experience: 6 years

OUTLINE

Mathematics has countless applications in every possible aspect of life. Without mathematics our civilisation would be little more advanced than the ancient Egyptians: we wouldn't have governments funded by a tax system, no phones, no television, no computers, no internet and no satellite navigation. The cultural value and the monetary economic value of mathematics are too large to measure.

Mathematics is also the language of the universe, from the electrochemical signals in our brain to the equations of General Relativity which govern the motion of stars and



It is one of humanity's most noble endeavours to understand the universe we live in, and that would not be possible without mathematics.

Departmental Activities

- We assigned different Maths topics/problems to the students during the semester where they give presentation and its explanation/solution which helped us to evaluate student's basic understanding and problem-solving skill of the subject. With the purpose of their intellectual learning in the subject.

We conducted **NET/SET problem solving classes** for our final year Maths students (i.e. in Sem 5 and sem6), in which we discussed problems asked in previous year papers.

ENGLISH

TEAM ENGLISH



Name: Mr. Piyush Menon (Assistant Professor)
Educational Qualification: M.A. in English Literature, Ph.D. Pursuing
Teaching Experience: 7 Years



Name: Dr. Trusha sureshbhai vyas (Assistant Professor)
Educational Qualification: M.A., B.Ed., PhD
Teaching Experience: 9 years

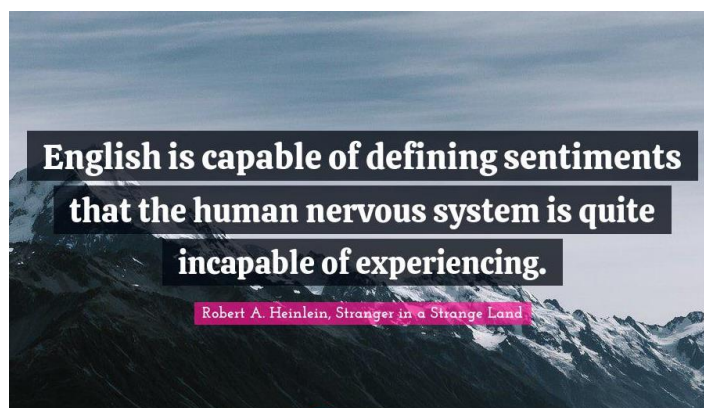


Name: Ms. Tanvi sevak (Assistant Professor)
Educational Qualification: B.A., M.A.
Teaching Experience: 1 year

OUTLINE

English is considered as a Global and Link Language. Scientific inventions that take place around the world can reach our country India only through the help of English Language. Therefore, we at President Science College ensure that our students get the best of English Education in the right and WINNOVATIVE manner. The methodology of teaching and imparting English here at President Science College is purely focused on the holistic and cognitive development of the student.

The prescribed syllabus of English by Gujarat University is delivered



and taught with key focus given on areas like Grammar, Punctuation, Psychological Impact of the topic on the student etc. Each topic, be it Prose, Poem or Grammar is imparted with illustrious examples and explanations and at the same time ensuring maximum student participation whilst lectures. English sessions are concluded with an interactive session.

Departmental Activities

Activities conducted during the year 2021-2022:

Conducted **Class Debates and Group Discussions** on scholarly topics. The debates were conducted in such a way that the discussions are somehow develop them holistically.

Organized **Class Presentations** on topics related to their syllabus.

A new approach to Comprehension was adopted by the department:

i) **Watching Comprehension** was given as a task where students were given **videos/short films/films related to both academic and non-academic**. The students were to watch the videos and later attempt to answer the questionnaire.

ii) **Script Writing** was another activity conducted by the department wherein students are supposed to write a prequel or sequel to a film.

A Major Venture taken by the department is to guide students

in helping them to crack IELTS exam.

As a part of this venture, **Soft Skills**, and **Spoken English** too has been incorporated which has always been the prime vision of the English Department.

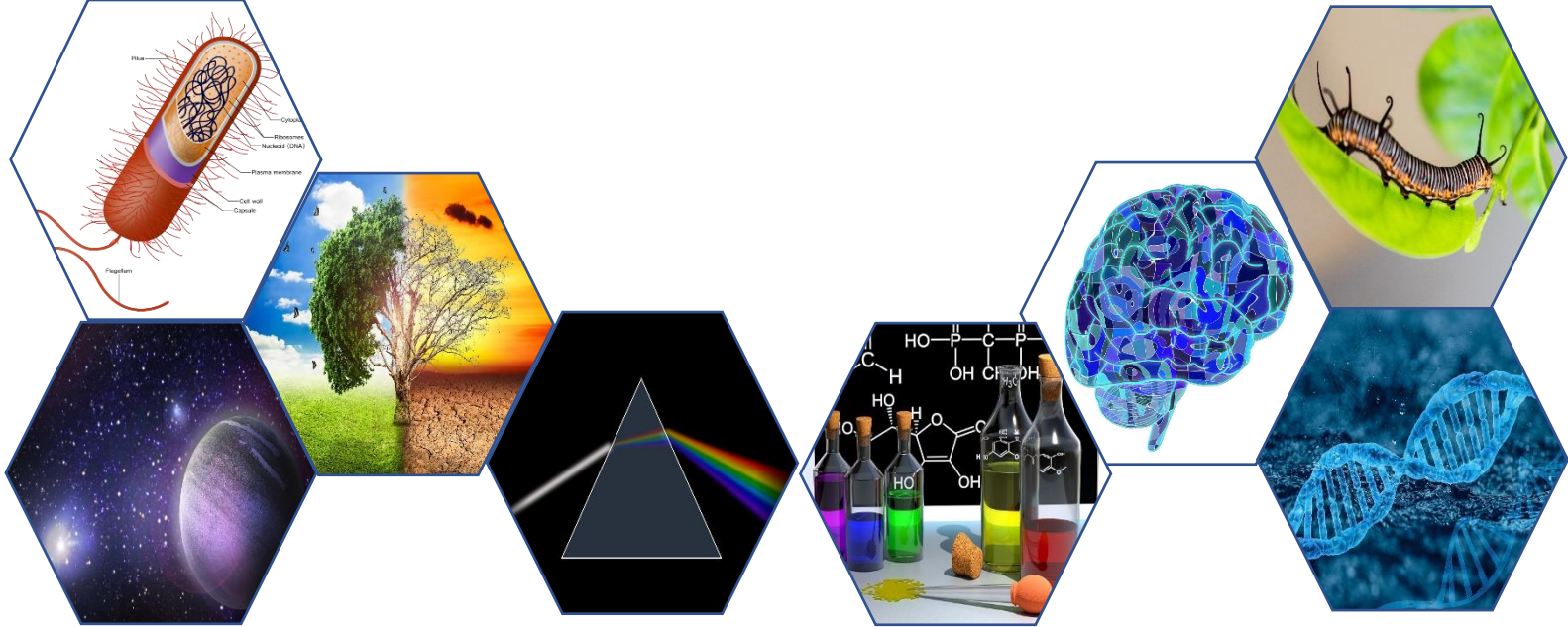
Another initiative taken by PSC was the **signing of MoU with IELTS IDP**. A Seminar was arranged by the Department along with IELTS IDP wherein experts gave a lecture on the procedures of IELTS starting from Application to Migration for various countries



MoU – President Science College and IELTS IDP



Seminar organized by the Department of English regarding IELTS IDP



“Science knows no country, because knowledge belongs to humanity, and is the torch which illuminates the world.” – Louis Pasteur

