V.P. & R.P.T.P. SCIENCE COLLEGE

VALLABH VIDYANAGAR

Reflections 2014-15

(Annual College Magazine)

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V. P. & R. P. T. P. SCIENCE COLLEGE

Vallabh Vidyanagar - 388 120
Re - Accredited " A " Grade by NAAC and KCG
Recognized By UGC As College With Potential For Excellence
(CPE Phase - II Upto 2019)
Managed By Charutar Vidya Mandal
Website: www.vpscience.org

The Editorial Board is not responsible for the accuracy or otherwise for the opinions expressed by the contributors.





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Message from Chairman



It is a matter of pride for me and the entire CVM family that the colleges of our trust are doing well not only in their academic pursuits, but also in undertaking activities that are required to shape the students In the fields of sports, arts and culture. The founders of CVM had cherished in their dreams to create smart and sensible future generation through such manifold activities in this rural area. I am glad your college is doing one such activity in the form of bringing out a college magazine displaying the write ups on varied areas of science and general interest. I am sure the editors of the magazine have taken meticulous care in selecting useful and meaningful articles, and editing them before sending them to print. Quality of our publication must not be judged only in its outer appearance. Meaningful content of any college bulletin is its heart. I am confident that you have taken care of this vital point. I congratulate all those who have contributed in bringing out this publication.

Dr. C. L. Patel Chairman, Charutar Vidya Mandal









Message from Hon. Secretary

V. P. & R. P. T. P. Science College is the premier institute on the campus established in 1946. Since then it continues to serve the society by rendering the science education to the needy students with very very low fees and it has proved to be great boon to the lower income group people to have higher education.

Alongwith education the college also undertakes varieties of co-academic and extra co-curricular activities and remains at the top. Similarly through publishing the Annual College Magazine. It helps the students bring out the imaginative skills, writing skills and putting the ideas in the more logical ways.

This will definitely help to add one more quality among the students.

I wish all the success to the organizers.

Prin. S. M. Patel Hon. Secretary

Charutar Vidya Mandal







Message from Hon. Incharge Secretary

One more batch of students is in and one is about to take an exit from this college. For the new corners when this magazine comes in their hands, it will be a moment of joy having it in such a beautiful format and appearance. For those who will be soon departing from this temple of learning, it will remind them of all good days they passed here during a very vital phase of their life. Both these classes of students will rejoice looking at their work in print. Well done, boys and girls, and the teachers for putting in your creativity to make the publication of this magazine possible. Keep up this activity through your life.

Dr. J. D. PatelHon. In-charge Secretary
Charutar Vidya Mandal







Message from Principal

It is indeed a proud moment to see one more edition of the college magazine for the academic year 2014-15 because the college is living up to its rich tradition of publishing magazines every year since its inception in 1947.

The year has been eventful for many reasons. The college was accredited 'A' in the Academic and Administrative Audit conducted by KCG, Gandhinagar. This is a matter of pride for stake holders of the institution who feel deeply for it. However, one must realize that we should not be complacent and rest on this milestone but strive harder to achieve greater heights, which the college is capable of.

I would like tell the students to use this platform to explore their writing talents to write on science topics. This will not only give you name but also develop a logical mind that is so important in writing. So we would hope to see more contributions from students in the coming year's. This practice will help you in the long run when you publish your research.

All the best for your forth coming exams: work hard and make your teachers and parents proud of you.

Dr. Bhavesh Patel

Principal





Editor's Note



Every year a large numbers of students are admitted in our college after completion of their higher secondary education. Most of the students continue their studies till post-graduation. Now a days, there is a very tough competition in every walk of life. Students have to appear in the various competitive examinations for finding a good job or a good institution for higher studies. But unfortunately, recent research conclusions shows that hardly 1 % of the students are aware about the career opportunities.

The mantra of success is no secret. Student should set a target as per their attitude and skills. Then start preparing regularly and seek guidance from teachers and seniors.

The students who wish to be competent for their career, must develop essential qualities like self confidence, creativity, expression power etc. during their college life. For overall development of the students, our college organizes various activities throughout the year under the umbrella of Fine Arts Club, Drama, Music, Sports Club, Magazine Club, etc. To increase knowledge of the various fields, we have knowledge club and debating club to enhance the expressions of the students. The Magazine club provides platform for creative writing. This year, large number of students submitted their articles, Poems etc. We heartily appreciate the contributors of the college magazine.

At last, on behalf of Magazine Committee, we thank Dr Bhavesh Patel, Principal of our college for constantly inspiring us to publish this Magazine. We thank Dr (Ms) Rekhaben S. Patel, Vice President of the Student Central Committee and we also appreciate the effort of General Secretary, Ms Vidya, Mr. Milan and their team. At this moment, we thank all the faculty members who directly or indirectly involved in the review process of the articles. We thank Nileshbhai and Mayurbhai, owners of Graphica Press for their beautiful design and printing of the magazine.

Dr. A. R. Jivani

Editor







Message from the Vice President

For students, college life is very important and different, once the student enter the college some become very serious about their career and the future life. Some become particular about academic career and side by side participate in most of the co curricular and extra-curricular activities. While some do not pay much attention in the classroom or some time they behave very indifferently. Friends, just ask yourself that in a country like INDIA, how many of us get the opportunity for higher education. We must thank God and also to our parents for taking care.

Swami Vivekananda said "Education is the manifestation of the perfection already in man". We want that education by which character is formed, strength of mind is increased, the intellect is expanded. It must be life building, man making by which one can stand on one's own feet.."

Academic development is very important. But holistic development is also equally important, apart from academic development. That enhances the different dimensions of an individual and makes an individual a dynamic person. The college provides all such platforms to inculcate these qualities by offering co-curricular & extra-curricular activities to students. These activities also play a significant role in the development of their personality, leadership qualities, self confidence, self esteem, team spirit, comradeship and social skills.

I am happy that this year also a good numbers of events have been organized by the Student Central Committee. Also they have participated in many events organized by different organizations. A project presentation competition was organized by Community Science Centre, Sardar Patel University, our student secured first position in that. In sports our students bagged overall championship, it is indeed a matter of pride that being science students, their performance in the field of sports was at the top. Students have shown their talent in other field also, like dance, drama, music etc. by achieving the various position in "UDAAN FEST 2015". I congratulate all of them and wish them success for their future endeavor.

College is the place where students get education for their degree and the opportunity to develop their above mentioned skills. For FYBSc students I am to say that apart from class room teaching, participate in all such activities including NCC, NSS and sports. You will see that at the end of the three years of graduation, you have develop leadership qualities, self confidence, discipline, a positive outlook, sportsmanship, comradeship etc. This will help you in future life and will make you a better citizen of future INDIA.

The magazine is also one of such activity. This provides platform to the students to come out with their creative talent. I am happy to see good contributions of our science student's creative writing in other fields apart from science.

My dear friends these three years are the golden period of your life, you have to come forward and explore your talents and grab such opportunities so that you can fit yourself in this rapid change global market and can stand on your own feet..". I convey my best wishes to all.

Dr. Rekha Suresh Patel





Message from General Secretary

It gives me immense pleasure to pen a few words as the General Secretary of V.P. & R.P.T.P. Science College. I also take this opportunity to express my appreciation to the whole College team and members of the Editorial Board who have contributed magnificently towards shaping up this e-magazine for the academic year 2014-15.

Education is the ability to meet life situations. With resistance and diligence laced with knowledge and intellect; one can soar to any extent one desires. The thrust of education at V.P. & R.P.T.P. Science College not only will give me a degree; but equip me to foray into the World with an all-round development of personality. I feel like I have willingly jumped into knowledge pool where education was missed with entertainment. I am really indebted to the College for all it has given me and I shall leave no stone unturned in serving this Institutions.

The college has developed and maintained the highest possible standards in student learning and given opportunities to the students to participate in a wide range of sporting and co-curricular pursuits and encouraged them to join community activities beyond the college. I am also grateful to our Principal Dr. Bhavesh Patel Sir, Dr. Rakha ma'm the Vice President of Students Central Committee, Professors, non-teaching staff and students who have given their whole-hearted support with enthusiasm during my tenure as College General Secretary.

I hope that all the "VPIANS" would definitely turnout to be the best citizens endowed with humanistic values and would open new horizons of development.

With best wishes, **Vidya Vijayaraghavan**General Secretary,

Students Central Committee







Words by Magazine Secretary

I was fortunate to work as a Magazine Secretary for V.P. & R.P.T.P. Science College.

The Magazine contains records of all academic, non-academic activities and various reports of our college. We also interested it in the form of an e-Magazine which one can get it on our college website.

I express my immense gratitude to respected Principal Dr. Bhavesh Patel Sir, Vice President Dr. R. S. Patel, all members of central committee, and my fellow students for their valuable contribution for this Magazine.

I would also like to thank Ex-Officio Dr. A. R. Jivani Sir, for guiding and helping me in my work, my fellow friends for sparing enough time for writing articles, poems etc.

It was a pleasure to work with all of them. I had a great experience working as a Magazine Secretary.

Milan Makwana

Magazine Secretary



68th Annual Report of the College -2014-2015

VP & RPTP Science College is one of the premier institutes run by Charutar Vidya Mandal (popularly known as CVM). This college is one of the prestigious Science Colleges of state of Gujarat, inaugurated by Sardar Vallabhbhai Patel in 1947 under the leadership of Shri R. P. Patel The college was adjudged the best science college three times the by state government. College has been Re-accreditated "A" by NAAC, Bengaluru and later by KCG, Gandhinagar.

The college is affiliated to Sardar Patel University and offers under-graduate courses in Pure and Applied Sciences. We also run vocational courses like Industrial Chemistry, Instrumentation. The college is a recognized research centre for Microbiology, Chemistry, Industrial Chemistry, Physics and Biology.

A total of 59 teaching faculties are working in different disciplines, out of this 32 have Ph.D. as highest qualification and 13 have MPhil as highest qualification.

The college is recognized for its well equipped laboratories, ICT enabled classrooms, library infrastructure, Canteen, hostels for boys and girls, play grounds, Gymnasium and above all an environment for overall growth and development of its students.

The academic year started on 24th June 2014. A total of 1693 students were enrolled which included 929 boys and 764 girls. On the very first day, an orientation was organized to make the students aware about the rules and regulations of College. They were also given detailed information about the college so that they understand the system and perform better from very beginning of the session. This was followed by a Counselling meeting with the students and their parents.

Result Analysis, Gold Medals or Awards Won:

The CBCS was introduced in the year 2010 and the results are very promising. The results of the examination held in 2014 are as follows:

In the BSc (IVth semester), 59.44% of the students passed and in the BSc (VIth semester) 71.84% cleared the examination. In BCA (IInd semester) 52% passed, while in the BCA (IVth semester) 68% and in the BCA (VIth semester) 88% have cleared the examination. All the results of college are above the University average result. We are committed for the better performance of students in future.

Achievements of the Students:

Four Gold medals of Sardar Patel University for scoring highest percentage in external theory examinations are received by our students. The gold medal winners are:

University Gold Medals:

[1] Mr. Ankurkumar J. Dabhi in Physics [2] Ms. Aesha D. Patel in Chemistry [3] Ms. Bhavika H. Thakkar in Mathematics [4] Ms. Jinal P. Patel in Botany.

COLLEGE GOLD MEDALS/Prizes:

- * Ms. SMRUTIBEN H. PARIKH received Gold Medal securing overall First in FY BSc Examination.
- * Ms. JIGNASABEN B. PATEL received Gold Medal securing overall First in SY BSc Examination.
- * Ms. KESHA K. CHAUHAN securing First in Electronics awarded Late Shri Himanshu Thakorbhai Patel Gold Medal.
- * Mr. ANKURKUMAR J. DABHI received Late Smt. Santaben Kalidas Patel Gold

Medal securing First in Physics.

Ms. AESHABEN D. PATEL stood First in Chemistry (External Theory) and she awarded Shri. C. P. Narayanan Gold Medal and Dr. B. N.

Mankad award (First with External & Internal marks of Theory at S. P. Uni.) and Shri. Mahendrabhai. J. Patel award (for First position at S.Y. & TY.BSc. aggregate External marks Theory in Chemistry).

- * Mr. HARDIKKUMAR R. MAVANI awarded M/S. Overseas Silk Mills Ltd.,Surat award (First in Ind. Chemistry at T.Y.BSc)
- * Mr. SOHAN D. KANSAGRA received Late Shri Hardik Harshadbhai Patel award (First in Microbiology at T.Y.BSc.)
- * Ms. HARSHA P. MORE awarded Meenakshi Ammal award [First in Comp.Science (External Theory) T.Y.BSc and Smt. Hasuben Mahendrabhai Patel award for First position at S.Y.& T.Y.BSc. aggregate External Theory marks.]
- * Ms. BHAVIKABEN H. THAKKAR won Shri. Prakash Jashbhai Patel award for being First in Mathematics at T.Y.BSc.
- * Ms. JINALBEN PARSHURAM PATEL was awarded Patel Naranbhai Govindbhai & Gordhanbhai Laljibhai Patel award (First in Botany at T.Y.BSc.)
- * Ms. URVI B. DAVE received Late Radhakant Vishwakarma award (First in Zoology at T.Y.BSc)
- * Ms. NIRALIBEN M. PATEL received T.Y.B.C.A. Golden Jub. Fund Award.
- * Mr. VIPULKUMAR I. CHAUDHARI (Golden Jub. Fund Award, First in Ind. Chemistry (Voc))
- * Mr. Bhaveshkumar K. Kachhadia (Golden Jub. Fund Award in INS (Voc))
- * Mr. Roshan I. Patel awarded Rameshbhai P. Patel, Rinchhol / Canada Cash for Highest Marks in Chemistry at S.Y.B.Sc. (SEM III & IV)

PhD completed

Congratulations to Ms. Mayuri Barot for completing her PhD under Dr. P. C. Minaxi Vinodkumar.

Research Projects undertaken by Faculty:

- * Dr. J. K. Baria has received financial support of Rs. 10, 13,300/- for the major research project of UGC, New Delhi.
- * Dr. M. V. Kumar has received financial support of Rs. 23, 96,000/- under the research project of DAE-BRNS.
- * Dr. H. M. Patel has a major research projects sanctioned in Chemistry worth of Rs. 3.19 lakhs for the period of 2012-2015, by UGC, New Delhi.
- * Dr. P. M. Patel (IC) has a major research project sanctioned in Industrial Chemistry worth Rs. 2.29 lakhs funded by UGC, New Delhi.
- * Dr. A. R. Jivani and Ms. S. P. Shukla have been awarded minor research projects sponsored by UGC.

Publications in National & International journals

During this year staff members published 56 research papers in National as well as International reputed journals.

Dr. J. K. Baria (3), Dr. A. R. Jivani (1), Dr. P. S. Vyas (1), Dr. M. V. Mehta (1), Dr. M.V. Kumar (8), Dr. J. P. Patel (2), Dr. N. B. Bhatt (3), Dr. B. C. Dixit (2), Dr. H. M. Patel (4), Dr. K. D. Patel (4), Dr. V. K. Sinha (5), P. M. Patel (IC) (9), Mr. Mandar Karve (6), Mr. Tirth Panchal (6), Mr. Amit Barot (1), Mr. Chirag Patel (1), Mr. Nisarg Prajapati (1), Mr. A. K. Patel (1), Dr. Vipul Kataria (1) and Ashish Joshi (2) research papers in National/International level Journals and books.

Books/ chapters Published: Dr. J. P. Patel (1), Ms. Raxa H Solanki (1), Ms. Medha K. Patel (1), Dr. N. B. Bhatt (3 eBooks), Dr. K. D. Patel (1), Dr. B. C. Dixit (1), Dr. V. B. Kataria (1), Dr. T. H. Patel (1), Dr. P. S Vyas (6), Dr. Nikunj Bhatt (1), Dr. C.R. Gurjar (1).

Seminar/Conference Paper Presented.

* 36 staff members attended and presented research papers in State/National/International Level conferences:

Dr. P. M. Patel (1), Dr. J. K. Baria (2), Dr. P. S. Vyas(2), Dr. A. R. Jivani (2), Ms. S. P. Shukla (1), Dr. M. V. Kumar (10), Dr. B. C. Dixit (2), Dr. K. D. Patel (1), Dr. T. K. Darji (1), Dr. G. M. Patel (1), Dr. H. M. Patel (2), Mr. Tirth M. Panchal (2), Mr. Mandar Karve (1), Mr. Nisarg K. Prajapati (1), Mr. Amit A. Barot (2), Dr. C. R. Gurjar (3), Dr. Vipul Kataria (1) Mr. Chirag M. Patel (3) and Ashish Joshi (1).

* Dr. M. V. Kumar and Mr. Amit Barot received prizes for best research papers presentation.

Mr. J. K. Parmar & Mr. V. K. Pijwala attended one week English improvement Programme at CDC.

Invited as Chairperson/Invited Talks/Guest Faculty/Visiting Faculty

- * Dr. Bhavesh Patel worked as a Resource Person at various events like National/International Conference/Seminar etc. He was also invited to deliver Keynote address at a workshop on "Achieving Excellence".
- * Dr. H. N. Patel, Dr. Nikunj Bhatt, Dr. M. V. Kumar, Dr. V. K. Sinha, Dr. B. C. Dixit, Dr. R. H. Parab, Dr. G. M. Patel, Ms. P. B. Patel, Mr. A. A. Shukla, Dr. A. R. Jivani, Dr. A. K. Vishwakarma and Dr. C. R. Gurjar delivered expert lectures at various institutes.
- * Mr. H. B. Madhwani was appointed as visiting faculty to teach Biostatistics to M.Sc. Home Science students at SPU, VVNagar.
- * Mr. Mandar Karve was visiting Faculty at Food Processing Dept. ADIT, New Vidyanagar

Add On Courses

To increase the employability of the students, the college encouraged the depts. to conduct Add on Courses in areas of their specialization. The College conducted 10 add on courses by various dept. during the last year and 145 students participated in the said courses.

Events Organized:

- * Equal Opportunity Cell organized two Workshops.
- * IQAC cell organized two one day seminars.
- * Biology department organized One day seminar on 'Medicinal Plants'
- * Research Cell organized One day seminar on 'Impact & Relevance of Scientific Research'
- * English department conducted 5 Days programme on 'Communication Skills Training for Office Staff'.
- * English & CDC jointly conducted 7 Days workshop on 'Comm. Skills' for Faculty members'.
- * Computer science & BCA jointly organized One day Programme 'Compu Carnival'.
- * Chemistry department organized State level Chemistry Quiz Competition.
- * Mathematics & Statistics conducted 'Prof. A. R. Rao Mathematics Competition'.
- * Dr. A. R. Jivani Conducted NGPE-2015, a National Level Examination and Minaxi Lalit Science Award Test, a state level competition.

Educational Tours:

Biology, Ind. Chemistry, Physics, Chemistry and BCA departments organized study tours.

Guest Lectures Arranged

Physics department arranged two Guest lectures by: Dr. Hari Om Vats (PRL) and Shri D. Srinivasan (ISRO, Ahmedabad), respectively.

Chemistry department arranged three Guest lectures by : Dr. V. D. Bhatt, Dr. Anil Patel and Dr. Kaushal Patel, respectively.

Microbiology department arranged one Guest lecture by: Dr. R. N.

Chakraborty.

NAAC/AAA Visits by Faculty

- * Dr. Bhavesh Patel worked as Member of NAAC team four times and Chairman of AAA team three times and Member of AAA team one time.
- * Dr. Nikunj Bhatt worked as Coordinator of AAA team two times.
- * Dr. C. R. Gurjar worked as Coordinator as well as member of AAA team.

Appointments to Various Bodies

Dr. Minaxi Vinod Kumar was appointed as an Executive Committee member in Indian Society of Atomic and Molecular Physics (National Body) for 2 years

Mr. Nilesh Y. was Patel appointed as Chairman, Board of Studies, Mathematics, Sardar Patel University for 3 years.

Mr. H. B. Madhwani was appointed as Chairman, Board of Studies Statistics Sardar Patel University for 3 years.

Dr. A. R. Jivani was appointed as a member of Board of studies, Physics, Sardar Patel University for 3 years.

Reviewing of Research Papers

Dr. H. M. Patel, Dr. Minaxi Vinodkumar, Dr. Nikunj Bhatt and Dr. A. R. Jivani worked as reviewer of research papers published by well reputed International Physics Journal.

Other Activities

- * The college has an active counseling cell. The faculty members are zealous in helping the students not only with their academic work but also by looking after their overall development. The parent teachers meeting was held twice in a year.
- * As a part of looking after the overall development of our students a special package of personality development program is offered by CVM to them. Internet facility is available to students. The college now has WIFI connection. This is maintained by Mr. Ashish Joshi, Hitesh Ramrakhiani and Mr. Akshar Parekh.
- * The college has an active women cell which looks after the requirements of our girl students. With the aim to create social awareness about the problems of women and in particular regarding gender discrimination and nutrition in adolescent girls, a special programme was conducted by equal opportunity cell. A popular gynecologist of Anand district Dr. Jaynaben Bhrambhatt was invited. She discussed with the girls about the importance of nutritive value of the food stuff they take particularly at their stage, what are the different ways by which one can take nutritive but less expensive food items, balanced diet etc. She showed several data related to the topic and also advised the girls to take care of their health and avoid anemic conditions. A program was organized on "Beti bacho and Beti vadhao", Ms. Bhavna Chauhan delivered a lecture on this particular topic. A related poster competition was also organized.
- * The college publishes the student magazine where the literary skills of our students flourish. College published Annual e-Magazine 'Reflections' of Year 2014-2015.
- * The college published its first ever annual Newsletter highlighting the college activities.
- The college started VPM IAS Study Club for the preparation of the competitive examinations for administrative posts. Dr. A. R. Jivani looked after this activity. During the year the club organized various programmes to guide and inspire the students. Free coaching for IAS classes was started with the cooperation of CDC, Vallabh Vidyanagar.

Various Funds:

Financial support from CVM scholarship fund and Bhaikaka foundation scholarship fund is provided to the poor and needy

students.

Scholarship is also to be given to 26 SC(Rs 1,10,970), 96 ST (Rs 7,71,290) and 222 OBC(Rs 10,00000 expected) students. Rs 1780,223/- was distributed to these students.

Golden Jubilee Fund Function:

This year Golden jubilee fund organized the 'Vir Vithalbhai Patel Memorial lecture' on 27th September. Eminent scholar and Vice Chancellor of Gujarat Vidyapith, Ahmedabad, Dr. Sudarshan Iyenger was the Chief Guest.

Library: The college library has a total of around 50,000 books. Ten computers with NET connections have been installed in the Reading Room. We subscribe to 50 periodicals and magazines and 5 news papers. The library is enriched with INFLIBNET N-LIST facility providing access to 75,000 e-books and 3000. e-journals to faculties, research scholars and students. The library is fully computerized with INFLIBNET SOUL 2.0 Software. All the books are circulated with barcode system. This year many books for competitive examination such as: IPS, IAS, Defense, GPSC, L.I.C., Banking, Railways etc were purchased. A Vivekananda Corner has been started in the library that houses spiritual and religious literature.

NSS

More than 200 Students enrolled in NSS and apart from One Day camps a Special One Week Camp was also organized at Pariaj, near Tarapur.

Future Plans

- 1) We plan to add more class rooms above the Library Block to meet our classroom requirement. A letter has already been sent to UGC for Financial grant to meet the expense.
- 2) We are planning an auditorium in the college. We have received grants from the CPE for the same.
- 3) We would like to improve the acoustics of the Central Hall of the college for which the Chairman has given his sanction.
- 4) We would like to start a few PG Programmes for which the CVM has given its approval.
- 5) We are also planning to start UGC approved Vocational Courses and more Add on Courses.

I express my heartfelt thanks to the chairman, Dr. C. L. Patel for his support and guidance. I also thank the Honorary Secretaries, Vice Chancellor of Sardar Patel University, Registrar of the University, Heads of the Postgraduate Departments and the Principal of sister institutions for their valued support and suggestions.

The success of this college is due to the selfless, dedicated and devoted staff members. I thank them all whole heartedly. I also thank the Vice President, General Secretary, Ex-officio, secretaries and representatives of the students' central committee, conveners and members of various other committees for their cooperation and support in making this function a grand success.

Dr. Bhavesh Patel

Principal





Report of Students' Central Committee-2014-15

Education aims the holistic development of an individual. For an individual apart from academic achievements, the co-curricular and extra-curricular activities also play an important role in the development of an individual. It is a platform that provides students to participate in various activities to nurture and develop the necessary qualities that are required in their future life. Not only this, but it develops leadership qualities, self confidence, discipline, punctuality, sincerity, sportsmanship, selfless service to the Nation etc. They also learn to accept the order and develop the qualities of handling the responsibilities. Learn to have a positive attitude and how to take the work in a group. In nutshell, it prepares for their future life to become a good administrator, organizer, manager and a good citizen of future India too.

The central committee comprises of various clubs like Science Association Club, debate and elocution, music, dance, Theater, fine arts, Magazine, Discipline, Yoga and Sports Club, etc.

Let me highlight the activities and the achievements of our students:

1. KNOWLEDGE AND SCIENCE ASSOCIATION:

Ex officio: Dr. V. K. Sinha

Student Secretary: Jay Godhasara

The members are Dr. J P Patel, Ms. Pragna B Patel, Dr. K D Patel and Dr. P S Vyas. The Science day was celebrated by organizing a Science Exhibition with 45 projects with 180 participants and models from various depts. On the same day a Power Point presentation competition with 27 participants, poster making competition with 22 participants and a Mega Science Quiz competition with 42 participants were held.

On the occasion of India's Chandrayan success, Dr. K N Joshipura, Hon Director, Community Science Centre, SP University was invited to deliver a guest talk.

A group of students participated in the Annual Science Competition at Community Science Centre, SP University with a project on IR Remote Control System and won the first prize. The project, therefore, was selected for the exhibition at Science City, Gandhinagar during Science day celebration. Participants were: Ahmedabbas Parbadiya, Abidhusain Surpura and Subhan Vohra.

2. DEBATE and ELOCUTION

Ex officio: Mr. R. P. Solanki

Student Secretary: Ms Disha Barot

An extempore speech competition was organised by the debating society of our college, 15 participants were there. The Winners are: First: Shrishti Biswas Second: Devanshi Joshi and Third: Rajshree Liya

Apart from organizing local competitions the students were encouraged and prepared for participation in similar competitions organised by other institutions.

MUSIC:

Ex officio: Mr. Kamlesh Raval

Student Secretary: Mr. Shreyansh Gilder

Independence day was celebrated in the college, after the flag hoisting a cultural program was organized. In that patriotic song, group songs were presented by our students.

- * 24 students participated in Antakshari competition organized by the club. The team of Mr. Rupesh Makhecha and Piyush Solanki secured First position and the team of Ms. Bhakti Hirani and Niyati Trivedi became 1st runner up
- * Ms. Khushboo Zalawadiya secured first position in classical solo instrumental (non percussion) in UDAAN FEST 2015
- * Mr. Shreyansh Gilder secured second position in light vocal solo.

4. DANCE:

Ex officio: Dr Minal H. Patel

Student Secretary: Mr. Rupesh Makhecha

- * On Independence Day, a group dance was presented by our students.
- Ratri before NAVRATRI was celebrated.
- * Our students participated in a large number in this traditional dance festival. For best action, : FIRST POSITION was secured by Mr. Het Patel [boys] and Ms. Paijan Mistry (girls.) SECOND POSITION: Mr. Mehul Machhi (boys) and Ms Kerul Patel (girls)
- * BEST dress competitions: Ms. Ayushi Suthar won the best dress prize amongst the girls and amongst the boys Mr. Drshit Bhayani won the best dress prize.
- * Ms. Diksha Joshi secured first position in classical solo dance in "UDAAN" youth festival 2015.

5. DRAMA:

Ex officio: Dr. Minaxi V. Kumar

Student Secretary: Ms Devanshi Joshi

The drama club undertakes the cultural activities that include the one act play, mime, mimicry and skit etc. In UDAAN youth fest 11 students participated in different activities like skit, mime mono-acting, mimicry and improvisation.

Ms. Devanshi Joshi secured third position in mono-acting.

6. Fine Arts:

Ex-officio: Mr. L. K. Chauhan

Student Secretary: Mr. Sapan Shah

- * Poster competition jointly organized with the Chief Election Commissioner, Gujarat on the celebration of "NATIONAL VOTER'S DAY". Nine students participated in this. Best three selected posters were sent to the collector office- Anand. The winners are: First: Miss Rajeshree Liya Second: Mr. Avinash A Goswami
- * Seven Students participated in UDAAN YOUTH FEST 2015. They participated in spot painting, collage making, poster making, clay modeling, rangoli, spot photography and installation.
- * Seventeen students participated in state level drawing competition on "MAHATMA GANDHI AND SAFAI". Ms Ritu Gandharv stood First and Ms

Inshiya Mansuri stood second in the competition.

Inter class poster competition was jointly organized with women cell of our college on the topic "BETI BACHAO BETI VADHAVO". 42

students participated in that. Ms. Rajeshree Liya stood First, Ms Pankti Shah stood Second and Ms Vaishali Solanki stood Third at the college level.

* RANGOTSAV 2015 was organized and following competitions were organized and the winners of the events are

* Creative Painting Competition:

First: Ms Rutu D Gandharv Second: Ms Sandhya M Patel

* Mahendi Competition:

First: Ms Krishna B. Khavas Second: Ms Shiuvangi N Patel

* College Logo Preparation Competition:

First: Mr. Hitesh R. Thakor Second: Ms Palak N Patel

* Rangoli Competition:

First: Ms Palak N Patel Second: Ms Nirali P Fadke

7. NATURE CLUB:

Ex officio: Dr. Mehul Mehta

Student Secretary: Mr. Agasth Bhadja

Under the umbrella of Nature club and Biology department, an MoU has been signed with VNC (volunteers for nature conservence) for the promotion of nature awareness.

8. MAGAZINE CLUB:

Ex officio: Dr. A.R. Jivani

Student Secretary: Mr. Milan Makwana

The club organized article writing competition in which about 15 students participated. The selected articles will be published in the college magazine. The club also keeps a record of the photographs of various activities of the college. The club is in the process of bringing out the college e-magazine.

9. DISCIPLINE:

Ex officio:Dr. K. D. Patel

Student Secretary: Mr. Robin Roy, Ms Suhani Patel

The members of the committee are Aruna Chaudhary, Heena Patel, Vaishakhi Dave, Ayushi Suthar, Krima Patel, Matin Saiyad, Krunal Patel, Akshay Chauhan, Amit Verma, Piyush Solanki, Rahul Chaudhari and Rahul Chaudhari

This committee takes care of the discipline part of all the activities. They play an important role in maintaining the overall discipline of the college throughout the year.

10. YOGA AND SPORTS CLUB

Ex officio:Dr. J. K. Chauhan

Student Secretary: Mr., Shubham Patel, Ms. Prakruti Karia Faculty members are: Mr. H. B. Madhwani, Mr. Ashish Joshi

The members are: Karan Solanki, Dhaval Barot, Nishtha K. Solanki

Our College participated in various Competitions organized in Group or

Progressive colleges, Gujarat State Level Tournaments, various Open Tournaments & national level tournaments. Our college Players Represented College in following Tournaments & Events like Gujarat State Excellency Kho-Kho Scheme, Senior National Open Tournament, West Zone Inter University Tournaments, Gujarat Khel Maha Kumbh Competitions, Gujarat Gramin Olympic Open Tournaments, Group of progressive Inter College Tournaments, Anand District Open Tournaments.

Sports Achievements 2014 - 15

- * First Position in inter college March-past of group of progressive colleges.
- * Champion in inter-college Badminton Tournament (Girls), Basketball Tournament (Boys), Kho-Kho Tournament (Boys), Lawn Tennis Tournament (Boys) and Kabbaddi Tournament (Boys) of group of progressive colleges.
- * Runners up in inter-college Table Tennis Tournament (Girls), Lawn Tennis Tournament (Girls), Table Tennis Tournament (Boys), Volleyball tournament (Girls and Boys) and Kho-Kho Tournament (Girls) of group of progressive colleges.
- * General Champion in inter-college (Boys and Girls) Athletics Meet in group of progressive colleges.
- * Our College students participated in various games in west zone inter university tournaments, State level Tournaments, District level Tournaments, in Khel Mahakumbh District level Tournaments (stood First & Second Prizes), Khel Mahakumbh State level Tournaments (First Prize), Gujarat Senior Open Tournaments, Gujarat Gramin Olympics Open Tournaments (got first position), Senior National Open Tournaments.
- * 3-Boys were selected in Gujarat Excellency Kho-Kho Scheme and Government of Gujarat will provide Rs. 4500 every month and Full Sports Kit.

During Udaan cultural event, four young enthusiastic faculty members, Mr. Akshar Parekh & Ms. Farheen Ansari, Mr. Chirag Patel and Amit Barot, extended their helping hand. I on behalf of all the central committee members and on my personal behalf thank them. And hope in future they will be extending their helping hands in the same manner.

11 NSS:

- * Programme officers: Mr. Atul. K. Patel, Dr Rajiv Bhatti, Ms Kritika Thakker
- * Inauguration function:.Our principal Dr. Bhavesh Patel inaugurated N.S.S. activities on. 23/08/2014. Mr. Atul K. Patel gave details about NSS. 400 students have joined in NSS.
- * Organised various activities like Eye Check Up Camp, Thelessemiya Check Up Camp, Blood Donation Camp etc.
- * Students participated national level (Ms. Jigna Patel, Ms. Lopa Patel and Mr. Sahil Patel at Gauhati, Assam), state level (8 students), district level (15 students) and one day (organized at Aklawdi village, 60 students participated) training camps.
- * JANDHAN YOJANA: More than 40 students and Programm Officers Mr. Atul Patel and Dr. Rajeev Bhatti organized Jandhan Yojana Abhiyan at Aklawadi village with the help of state Bank of India, Vasad branch. More than 400 villagers opened their New Bank accounts. All are given accidental insurance of Rs. 2,00,000.
- * TREE PLANTATION: NSS unit organized tree plantation program at our college campus. More than 100 trees were planted by our volunteers and they

took oath to take care of them.

NSS SPECIAL CAMP: 46 students took part in the camp organized at forest camp at Pariaj village. Various activities were organized

during the camp like Bird watching, Forest cleaning, Removing plastic waste from wet land, Village cleaning, Slogan writing, Prabhat Pheri, Some experts lectures, Crocodile counting, camp fire, Yoga training, Vyasan nabuti abhiyan (Anti addiction drive) etc.

NCC 12

91 boys and 26 girls enrolled their names in NCC at the beginning of the year. During the academic year of 2014–2015 NCC cadets have attended various camps at Kheri Kalan (Dehradun), Chhabanpur (Godhara), Baroda, Vadtal, Rampura, Thamna, Kapurthala (Punjab), New Delhi, Maihar (Madhya Pradesh). During the camps, NCC cadets exhibited outstanding talent by the cadets of our college in various events. SUO Suchit Verma, CDT Akash Parekh, LCPL Parth Parekh, SGT Jignesh Prajapati, UO Vikas Paswan, UO Prashant Sawant, SGT Darshan Patel SGT Ravi Chauhan, CPL Hardik Sanghani, CPL Sandeep Makwana, CDL Jatin Hirani, SGT Darshan Patel, Sgt Vishalpuri Gonsai, SUO Avani Virola, CDT Ritika Negi, CDT Nishtha Solanki, UO Pooja Yadav, SGT Devangi Kothari, CDT Shraddha Mochi performed well in the camps.

SUO Avani Virola, SGT Devangi Kothari and UO Pooja Yadav represented NCC Directorate of Gujarat in Thal Sainik Camp At New Delhi (19 - 30 September, 2014).

NCC cadets alongwith NCC officer Capt. Dr. M. M. MOREKAR celebrated Independence Day at our college and Republic Day at Shastri Maidan, Vallabh Vidyanagar. NCC cadets alongwith the NCC officer Capt. Dr. M. M. MOREKAR participated in the Guard of Honour Parade in the honour of GOVERNER of GUJARAT on 15 DECEMBER, 2014 at S.P.UNIVERSITY, VALLABH VIDYANAGAR. CAPT. Dr. M. M. MOREKAR was PARADE COMMANDER of GUARD OF HONOUR PARADE.

SUO Suchit Verma was awarded as Best NCC Cadet (Boys) and SUO Avani Virola awarded as Best NCC Cadet (Girls) of college.

Dr. MOREKAR attended various camps at Vallabh Vidyanagar and also delivered few lectures.

Last but not least let me congratulate all the winners and participants of various activities. It will not be right on my part if I do not thank the president of the student's central committee and the principal of our college Dr. Bhavesh Patel for giving me this opportunity and also for the constant motivation, support and guidance throughout the year. Thanks are also due to all my ex-officios, G.S. Vidya, student's secretaries, all other faculty members, for their support and valuable suggestions. How can I forget office staff and peon brothers for all round help throughout the year. I cannot forget my all dear students for their constant cooperation in each and every activities.

Dr. R. S. Patel

Vice President Student Cental Committee





Report of Activities of VPM IAS STUDY CLUB

For success in any type of competitive examinations conducted by UPSC, GPSC, Banking etc is not easy task. It is important to set goals in the starting years of graduation and start work accordingly. The preparation of such types of examinations will be faster if a group of students prepare together. VPM IAS STUDY CLUB (Now it is known as Coaching for Entry Level Services) is formed for the benefit of student of our college to aware about such types of examinations. Various activities are organized throughout the year by the club.

20 students of our college attended an orientation programme held at Town Hall on Civil Services Examinations conducted by UPSC, GPSC, etc.

16 students of our college attended an orientation programme held at SPIPA, Ahmedabad during 7-8-2014 and 8-8-2014.

Free Coaching Classes for selected students:

With the coordination of the Career Development Center, Vallabh Vidyanagar started Coaching Classes for selected students. MCQs Test was held for the selection by the club. 35 students out of 102 students selected for free coaching classes.

Orientation Programme

An orientation programme was organized on 5-9-2014 by the club for the benefit of the students of our college. Mr. Abhishek Chauhan [An alumnus of our college] had successfully cracked the UPSC Civil Service Examination with 29 AIR and hence he guided and inspired the students about the preparation of an examination to become IAS officer. Considering the revised syllabus and the new pattern of the IAS preliminary examination he gave useful tips to crack the IAS examination. About 80 students attended this lecture.

Essay & Article writing Competition by students: To increase writing skills on various topics were organized as a part of the preparation of the competition examinations by the club. Topics were selected related to current affairs to enhance the knowledge of the students.

The club organized various activities for the preparation of competitive examinations after graduation. Due to more weightage on the General Studies in UPSC examinations, the club organized periodically practice test on different themes like General Science, Geography, and History etc.

As per the latest format of most of the competitive examination, reasoning questions incorporated in the paper. The club also organized reasoning test frequently. There were various types of questions (Verbal, nonverbal, logical etc.) asked in the test.

Navonmesh-2015:

To provide information and guidance of the competitive examinations after graduation, an orientation programme was organized by the CDC. About seven speakers delivered the lectures. More than 30 students took part in the programme.

Dr A. R. Jivani, Coordinator, **Dr A. Vishvkarma,** Co-coordinator VPM IAS Study Club, [Coaching for entry level Examinations]



V.P. & R.P.T.P. Science College • Magazine 2014-15



Industrial Tour 2014-15

Students of Chemistry have direct relationship with chemicals, pharmaceuticals, as well as Polymers based industries. Thus, at the level of graduation we wanted the students to have an overview of applications of Chemistry at industry level. Keeping in mind the importance as well as enthusiasm of T.Y. B.Sc. Chemistry students and as a part of co-curriculer activity an industrial visit was arranged on 12 September 2014.

In this visit 58 students of third year Chemistry participated. The visit was coordinated by Dr. K. D. Patel, Dr. D. M. Patel and Dr. T. K. Darji as well as by student volunteers Jay Godhasara, Ankur Thummar, Arzoo Trambadiya.

Industrial tour was organized to three different Industrial units. Namely ABS Plastics India LTD, C.E.T.P. Plants Nandesari, N.E.C.L. where students observed various departments like R & D, Production, Material handling Department, Quality Control Department as well as Safety Department. At C.E.T.P. and N.E.C.L. students collected information regarding effluent treatment method as well as visualized various waste treatment methods like plasma, electrode oxidation and purification techniques.

At the end of the tiring day of the visit, students were also taken to Ajwa fun world for refreshment. Students found the visit to be fruitful and informative. Thus, the aim of industrial visit was fulfilled.

Dr. K. D. Patel

In-Charge Teacher

Dr. B.C. Dixit

HOD Chemistry Department



The most selfish one letter word 'I' Avoid it.

The most satisfying two letter word..... 'We' Use it.

The most poisonous three letter word..... 'Ego' kill it.

The most used four letter word..... 'Love' value it.

The most pleasing five letter word 'Smile' keep it.

The most fastest spreading six letter word 'Rumor' Ignore it.

The most hardest working seven letter word 'Success' Achieve it.

The most enviable eight letter word..... 'Jealousy' Distance it.

The most powerful nine letter word 'Knowledge' Acquire it.

The most essential ten letter word 'Confidence' Trust it.

Palak N. Patel T.Y.B.Sc.

Teenagers' Ideology

Here today, went tomorrow. The age between 13-19 years can be categorized as 'TEEN' age and ones which belong to this group is the 'TEENAGERS'...The most versatile and active group. As the title reads; teenagers ideology, it is unique and practical enough. These are those who can spend their entire energy on the work which they want to do and love to do. They can make all possible and impossible things come true and add value to them.

In our surroundings we have many well reputed personalities who began their career as a teenager-Sachin Tendulkar, Saina Nehwal etc. A group of today's teenagers can be tomorrows intelligent professors, capable military officers, beautiful designers etc. Their ideology should be nurtured in a proper direction or else it can cause bad results.

Ideologies can be here and gone tomorrow if not gripped in one motive. Teenagers are highly influenced by means of television, internet, magazines, movies etc. Their influence should remain correct, their ideologies should in no way be neglected.

Teenagers should always chase their dreams. They should never feel inferior due to any reason. Every teenager's ideology helps them to shine like a star ahead of their life's journey. Teenagers may have a bag full of worries, problems etc but above all these; their way of viewing every problem is completely different from the rest. They can never run RAT RACE; going on now a day, the innovative ones will always conduct their own path and travel on it.

THE BELIEFS OF TEENAGERS CAN NOT BE DISPLAYED OUT, BUT SURELY CAN BE IMPLEMENTED.

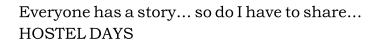
Zeal Vadodaria

F.Y.B.Sc.





Hostel Days



A turning point in my life had began, that morning of June, 2012; brought a lot thoughts into my mind. That morning after greeting my parents and grandparents. I set off for total a new beginning.

That day, my neighbor's and my relatives were there to see me off. I was on the verge of crying, but I controlled. I remained strong, but I am not that strong from inside.

The first day at school, that day woke up early, routine work. Having some time I covered my books. After breakfast, all the students had assembled in the assembly hall and we were shown a documentary film about our school.

The teachers who teach us are very good in nature. I kept a thought in my mind that I wish to make my career and I will. That day we needed to talk to our families. I missed everyone... but no pains, No gains.

After coming far from home. I realized the value of family.

How can forget my first Birthday celebrated at hostel. I had completed 16 years... how quick these years passed...I really missed my family... Every year I used to be along my family, I used to begin my day with bowing down to my parents, Grandparents and receive blessings from them. I used to visit the temple, get gifts and have dinner with my family. Hostel mates gifted me a beautiful card and a bracelet. When my mom-dad rang me up. I thought now my day was over.

Days have passed...

So have years..

But I always miss those days..

With my silent tears!

Friendship, Trust, Fun, Unity are the words we learn from hostel days.

Zalak Varia

F.Y.B.Sc.







Know Your Value

A well-known speaker started off his seminar by holding up a Rupee 500 note.

In the room of 200, he asked, "Who would like this Rupee 500 note?"

Hands started going up. He said, "I am going to give this note to one of you. But first let me do this." He proceeded to crumple the note up.

He then asked, "Who still wants it?"

Still the hands were in the air.

"Well", he replied, "What if I do this?" And he dropped it on the ground and Started to grind it into the floor with his shoe. He picked it up, now all crumpled and dirty.

"Now who still wants it?"

Still the hands went into the air. "My friends, you have all learned from this very valuable lesson.

No matter what I did to the money, you still wished to because it did not decrease its value. It was still worth Rupees 500/-.

Many times in our lives, we are dropped, crumpled, and ground into the dirt by the decisions we make and the circumstances that come our way. We do not think we are worthless. But no matter what has happened or what will happen, you will never lose your value.

Moral of the short story:

Once you know your worth, no one can make you worthless. You are special. Don't ever forget it! Never let yesterday's disappointments overshadow tomorrow's dreams. Always remember,

"VALUE HAS A VALUE ONLY IF ITS VALUE IS VALUED"

Divyeshkumar A. Sharma

S.Y.B.C.A.



Opportunity is at your Door

Wail not for the precious chances passed away,
Weep not for the golden ages on the wane.
Each night, I burn the records of the day;
At sunrise every soul is born again.
They do me wrong who say I come no more,
When once I knock and fail to find you in;
For everyday I stand outside your door,
And bid you wake, and rise to fight and win.

Patel Avruti H.

T.Y.B.Sc.





Childhood Labour-A Black Mark On India's Face

Children are the most valuable resources for any country to develop. As William Wordsworth says "Child is the father of man". It conveys the message that childhood period is the golden period where the character of man is shaped. Our whole society, our future depends on the development of children of our country.

But, unfortunately our country India is the country having world's highest child labour. According to census of 1991, we have 11.9 millions child labourers. They are mostly engaged in agriculture sector, and some informal sectors like eatery helpers, servants, cleaners, etc.

The main cause for this is poverty. Parents force their children's to work so, that they get money for their survival.

The Indian government is actively working on this issue and problem since 1986. According to article 24 of the Constitution, the employment of the children below the age of 14 years in any factory, mines or other hazardous activities like construction work or railways is prohibited. Child Prohibition Act 1986 is the most important law prohibiting the child labour activities.

According to child rehabilitation Act 1996, the person has to pay Rs. 20,000 fine if he is involved in encouraging child labour activities.

In 2005, State and National Commission for Protection of Children's Right was also established. Free and compulsory primary education for the children up to the age of 14 years is the major step towards reduction of children's involvement in employment. At International level **UNISCEF** is also working actively on this issue.

In spite of this, can we say today that the children are of India has a wonderful childhood? Let us all support this campaign and erase the black mark on India. Because without awareness we will kill our future.

Shah Krishna

F.Y.B.Sc.





Put The Glass Down

The Professor began his class by holding up a glass with some water in it. He held it up for all to see and asked the students "How much do you think this glass weighs?"

'50gm!'.....'100gm!'.....'125 gm'...the students answered.

"I really don't know unless I weigh it" said the professor, "but, my question is: What would happen if I held it up like this for a few minutes?"....
'Nothing'the students said.

'Ok what would happen if I held it up like this for an hour?' the professor asked. 'Your arm would begin to ache' said one of the students.

"You're right, now what would happen if I held it for a day?"

"Your arm could go numb; you might have severe muscle stress and paralysis and have to go to hospital for sure!" Ventured another student and all the students laughed

"Very good. But during all this, did the weight of the glass change?" Asked the professor.

'No'.... was the answer.

"Then what caused the arm ache and the muscle stress?"

The students were puzzled. "What should I do now to come out of pain?" asked professor again. "Put the glass down!" said one of the students.

"Exactly!" said the professor. Life's problems are something like this.

Hold it for a few minutes in your head and they seem OK. Think of them for a long time and they begin to ache.

Hold it even longer and they begin to paralyze you. You will not be able to do anything.

It's important to think of the challenges or problems in your life, But EVEN MORE IMPORTANT is to 'PUT THEM DOWN' at the end of every day before you go to sleep...

That way, you are not stressed, you wake up every day fresh and strong and can handle any issue, any challenge that comes your way!

Moral of the story: So, when you start your day today, remember friend to 'PUT THE GLASS DOWN'.

Divyeshkumar A. Sharma, S.Y. B.C.A.



Never give up

The expression "Never give up" means to keep trying and never stop working for your goals. In our life, we faced many complex problems in education, career, etc. Therefore, if you always keep going on your way and never abandon your targets, it will lead you to success.

Behind every success, person who attempted more than one to reach his or her goal, that the mean of "never give up". If you believe in these three words, you can turn the impossible to possible. In my consideration, this statement is efficient in change the life of any person.

Never give up and always give you self a second chance. We may fail sometimes but it absolutely does not mean that we will fail every time. Thomas Edison, one of the most famous inventors in the 20th century, tried more than one thousand times before he found out that tungsten was the right material for the electric bulb, and Edison is not the only one who failed 1000 times, Colonel Hartland Sanders founder of Kentucky Fried Chicken, popularly known as KFC try to sell his recipe and got 1009 NO's before he got his first Yes. It's not likely to achieve a great success by the first try. The real success is always based on a great deal of failure.

Psychologists tell us that the influence of what we strongly hold in mind is so important to our career. First, we have to make sure that our goal is achievable and practical then just go for it no matter how difficult it is and we will never lose our passion and will always turn back. However, they kept going because they were holding on to something- "never give up" is always the secret to success.

Besides, keeping "never give up" spirit in my mind is a way to seize opportunities and keep luck by my side. I strongly think that other chances and great ideas never show up if it is given up. In your life, you have a goal, but for any reason, if you abandoned it, you would lose a chance to experience and acquire achievement in that area. This means you would lack knowledge in certain situation that helps you grow up. In addition, giving up your job is certainly synonymous with the fact you will not be confident and have no passion in the next time.

And I think, in our life there is one thing that can make us keep trying and never stop working for our goals and "never give up" is the regrets that could come if we would give up easy. Life is good and we should enjoy every minute of it. Working hard for our goals will bring us joy, happiness and satisfaction in the end. If we give up that the rest of our lives we will live with regrets saying "that maybe it would have happened if we would have, never

give up". Living a life of regrets is not fun so I prefer to keep working for my goals and you know when you put enough work into something, sooner or later you will benefit from it.

Another quote says "everything is possible if you believe". I really believe that we could make a great motto for our lives and combine these two expressions by saying "never give up because everything is possible if you believe".

Finally, surrender is just the character of the people who don't believe in their self and ability. If they lose their confidence, they will lose everything. Giving up mean that they don't work hard to attain to their target. For instance, how the player wants to be talent and famous from first time, it's impossible to reach his target just from one trying.

To sum up, from what I have been discussing above, I totally believe that failure is success' mother. A defeated person should try again and again to succeed in his or her goals. If you believe that you can fly then you will, don't let the door of the despair breaks your dream. Sometimes, God close one door to open other, just keep patient and don't give up. Nevertheless, a person should compare his goal and his compatibility before doing it.

So friends, I just want to say "keep trying and never give up".

Divyeshkumar A. Sharma

S.Y.B.C.A.



- Live life like a pair of walking legs. The foot forward has no pride, and behind has no shame. Because both know their situation will change.
- We can't reach one step above if our hands stick in yesterday's door.
- We are the architects of our life, make a garden or garbage.
- No one can change our self, only we can ..
- In life, doesn't get better by chance, it gets better by change.
- Stop worrying about what you have to lose because this is point where you achieve new life.
- ${}^{\tiny \textcircled{$\sigma$}} \quad \text{Stop blaming others. Take responsibility own.}$
- Don't judge life by only one mistake.

Ankita D. Patel

T.Y.B.Sc





An Afternoon in the Park

There was a little boy who wanted to meet God. He knew it was a long trip to where God lived, so he packed his suitcase with popcorn and a sixpack Pepsi and started his journey. When he had gone about three blocks, he met an old woman. She was sitting in the park just staring at some pigeons. The boy sat down next to her and opened his suitcase. He was about to take a sip from his Pepsi when he noticed that the old woman looked hungry, so he offered her some popcorn. She gratefully accepted it and smiled at him. Her smile was so pretty that the boy wanted to see it again, so he offered her a Pepsi. Once again, she smiled at him. The boy was delighted!

They sat there all afternoon eating and smiling, but never said a word.

As it began to grow dark, the boy realized how tired he was and he got up to leave. He turned to the old woman and gave her a hug. She gave him her biggest smile ever.

When the boy opened the door to his own house a short time later, his mother was surprised by the look of joy on his face.

She asked him, "What did you do today that made you so happy?" He replied, "I had lunch with God. You know what? She's got the most beautiful smile I have ever seen!"

Meanwhile the old woman also radiant with joy, returned to her home.

Her son was stunned by the look of peace on her face and he asked, "Mother, what did you do today that made you so happy?"

She replied, "I ate popcorn in the park with God. You know, He's much younger than I expected."

Too often we underestimate the power of a touch, a smile, a kind word, a listening ear, an honest compliment or the smallest act of caring, all of which have the potential to turn a life around. People come into our lives for a reason, a season, or a lifetime. Embrace all equally!

Palak N. Patel, T.Y.B.Sc.





One Stormy Night

One Stormy night many years ago, an elderly man and his wife entered the lobby of a small hotel in Philadelphia. Trying to get out of the rain, the couple approached the front desk hoping to get some shelter for the night. 'Could you possibly give us a room here??' the husband asked.

The clerk, a friendly man with a winning smile, looked at the couple and explained that there were three conventions in town."All of our rooms are taken, "the clerk said. But I can't send a nice couple like you out into the stormy rain at one o'clock in the morning. Would you perhaps be willing to sleep in my room?? It's not exactly a suite but it will be good enough to make you folks comfortable for the night...!!

When the couple declined, the young man pressed on, 'don't worry about me I'll make out just fine' the clerk told them. So, the couple agreed. As he paid his bill the next morning, the elderly man said to the clerk, 'You are the kind of manager who should be the boss of the best hotel in the United States. Maybe someday I'll build one for you.

The clerk looked at them and smiled. The three of them had a good laugh. As they drove away, the elderly couple agreed that the helpful clerk was indeed exceptional, as finding people who are both friendly and helpful isn't easy.

Two years passed. The clerk had almost forgotten the incident when he received a letter from the old man. It recalled the stormy night and enclosed a round-trip ticket to New York, asking the young man to pay them a visit. The old man met him in New York, and led him to the corner of 5th Avenue and 34th street. He then pointed to a great new building there, a palace of reddish stone with turrets and watchtowers thrusting up to the sky. That said the old man, is the hotel I have just built for you to manage. 'you must be joking'-the young man said. 'I can assure you I am not,' said the older man, and a sly smile playing around his lips. The older man's name was "William Waldorf Astor", and the magnificent structure was the original "Waldorf-Astoria Hotel".

The young clerk never foreshow the turn of events that would lead him to become the manager of one of the world's most glamorous hotels.

And the lesson is.....

"Treat everyone with love, grace and respect, and you cannot fail...!!"

Patel Arvind A., T.Y.B.Sc.



Puppies for Sale

A farmer had some puppies. He needed to sell. He painted a sign advertising the pups and set about nailing it to a post on the edge of his yard. As he was driving the last nail in to the post, he felt a tug on his overalls. He looked down into eyes of a little boy.

"Mister", he said "I want to buy one of your puppies". "Well, said the farmer, as he rubbed the sweat of the back of his neck, these puppies come from fine parents and cost a good deal of money".

The boy dropped his head for a moment. Then reaching deep into his pocket, he pulled out a handful of change and held it up to the farmer, "I've got twenty rupees. Is that enough to take a look?" "Sure" said the farmer. And with that he let out a whistle." "Here, Dolly! He called. Out from the dog house and down the ramp run Dolly followed for little balls of fur.

A little boy pressed his face against the chain link fence. His eyes danced with delight. As the dog made their way to the fence, the little boy noticed something else stirring inside to the dog house. Slowly another little ball appeared this one noticeably smaller. Down the ramp it said. Then in a somewhat awkward manner the little pup begin hobbling toward the others, doing this best to catch up.......

"I want that one", the little boy said pointing to the runt. The farmer knelt down at the boy's side and said "so you don't want that puppy. He will never be able to run and play with you like these other dogs would."

With that the little boy stepped back from the fence, reached down and began rolling up one leg of his trousers.

In doing so he revealed a steel brace running down both sides of his leg attaching itself to a specially made shoe, looking back up at the farmer, he said," you see sir, I don't run to well myself and he will need someone who want to understands."

THOUGHT FOR THE DAY:

Work like you don't need money, Love like you have never been hurt, And dance like no one's watching.

Dharti S. Patel

T.Y.B.Sc.





The Lipstick

The Year: 1925

Dr .Franklin Blake, the famous chemist of Kansas, was listening to the news on the radio. He was shocked to hear that headaches had claimed the lives of more than forty people. He thought, "What if".An idea slowly formed in his mind and he rushed down to his laboratory in the basement.

He rummaged about in his lab, muttering to himself, "I must invent a perfect cure for this deadly headache, maybe if I mix this and that....., and he started mixing some solutions in a cauldron. The solution bubbled and hissed. He kept on working for the whole day without meals and water. He stopped only when the clock chimed 12, midnight. He said to himself, 'Oh..!! I must go to sleep.' He took one last look at his solution, which was acid green." First thing in the morning, I will make tablets out of this portion, he thought and he went to bed.

In the morning, at 6 o'clock, he came to the lab to find the solution blood red. He tried to figure out what had happened and concluded that it was a natural reaction. 'Well..!Since this potion is red in color, why not make lipstick out of it??' He put his potion into moulds and within a few hours, his creation was ready. He took the lipsticks to his shop and kept them in a display case. Just then, Callie Shaw-the most beautiful girl in the Kansas, entered the shop and complained of having a severe headache. This was the right time for Dr. Franklin Blake to try out his new invention. He immediately gave the lipstick to Callie and explained to her how to use it.

Callie Shaw took her lipstick home and tried it on. Within a few seconds, her headache disappeared. She was thrilled and she recommended this to all her friends and everyone else in Kansas. Dr. Franklin Blake's shop started doing a roaring business in these lipsticks. Callie Shaw started using the lipstick all time everyone was happy and thrilled about this perfect magical cure but no one knew that this medicine had a dreadful side effect.

Hercule Poirot came to investigate this case and traced the lipsticks back to Dr. Franklin Blake. He found out that in his sleep he had added the dangerous chemical N09 to the concoction and this was how the potion had become red. When Dr. Franklin Blake realized what effect his lipsticks had, he worked night and day and found an antidote and went about injecting it into all the affected people. He came last to Callie Shaw's house and was just about to inject the antidote into her when she turned into a devil. She bit him on the shoulder but, somehow he managed to inject the antidote into her and she turned back to Callie Shaw.

At night, the most horrible thing happened to Callie, she turned green. As she had the most dosage, the effect was terrible. She developed crocodile skin, which was very dry and had scales and cracks. Her nails, eyes and lips became as blood red as the lipstick. She had poisonous, inch-long teeth. She

had live snakes for hair. This was the dreadful effect of the lipstick.

Soon this lipstick took its toll on others who had used it. These people were perfect in the morning but became devils at night. Total pandemonium broke out in the country. These devils roamed around in the night and destroyed everything.

At home, he was reading about the side effects when he came to know that if the devil bit a person he would also become a devil. Franklin Blake looked at his shoulder. It had become purple. He started searching for the antidote but couldn't find it. He rang up all the Chemists and they told him that it wasn't available.

Only then did he realize that he had rid the country of horror but his horror was just beginning. The only words which came out of his mouth were "Oh...GOD..!!!!!"

Patel Bansi M.

T.Y.B.Sc.



Golden Jubilee Fund

Vitthalbhai Patel Mahavidyalaya (VPM)— A Premier college was established in 1946. Year 1971 — 72 was the year of Silver Jubilee for the college. The Principal and the staff of the college collected a fund from the Alumni of this college to celebrate the Silver Jubilee year. Funds collected were named as Silver Jubilee Fund. In the Year 1996 — 97, Executive Committee of VPM Silver Jubilee Fund resolved the Silver Jubilee Fund to be renamed as Golden Jubilee Fund with a view of the fact that the year 1996 — 97 was the Golden Jubilee year and appeal the Silver Jubilee Fund donors to enhance their donations. Later on various other donors have also contributed to this fund.

The following activities are carried out every year from the earned incurred from the Golden Jubilee Fund.

- [1] A lecture is organised under the Vir Vitthalbhai Memorial Lecture Series on 27th September, on the Birth Anniversary of Shri Vitthalbhai Patel, the eminent freedom fighter and the first Indian Speaker of the Central Legislative Assembly during British Regime and after whom this college is named. This Year's Lecture of the said series was delivered by Sudarshan lyengar, Vice Chancellor, Gujarat Vidyapith, Ahmedabad.
- [2] Prizes (Gold Medals and Certificates) are awarded to academically meritorious students of each subjects of our college.

Dr. H. N. Patel



Tree Is Not Leaving Me

There was a village named Premnagar. According to the name, everyone living over there was very happy and had great love and affection towards each other. Everyone living over there was very in their life.

But there was an old lady who was a widow and had a son. She had single handed brought up her son and had done all the necessary things for him and tried the best upbringing of him. Everything is ok in him but he had a bad habit of gambling. Everyone was fed up of his habit.

Everyone tried a lot to improve his habit but was not successful. The guy himself wanted to leave his habit but was unable to do that. He tried a lot but failed and lastly said that he wanted to leave his habit but gambling had grabbed him so he is unable to come out of it. After a great try of everyone to make him leave his habit, they decided that the boy should now get married so that after marriage, responsibilities will come on his shoulder and will automatically his habit will leave him.

So, as they had decided the man was married off. After marriage for few days everything was going good and quite well but again he came in his original color. He started playing. Now this time his wife was also worried a lot and she tried many tricks to leave that habit but did not succeed.

One day in the village there came a great saint and he was very famous among the villagers for solving their problems. The lady had heard a lot about that saint and at last she decided to meet him as she wanted to get rid of her husband's habit at any cost.

So, the next day she along with her husband went to meet that saint and told the whole problem. The saint understood and told them to come next day. The next day when they visited the ashram they saw something which was very unusual and they were very surprised to see that. The saint was standing grabbing the tree. Saint told the couple to come next day. The couple came next day and saw the saint again in the same situation and he again told them to come next day. This continued for a week.

The man was very impatient and now he had no more capacity to be quiet and again to listen that you come tomorrow. So, being much exited he told the saint that why are you not living the tree and you have grabbed the tree. Then saint told "No my child I want to leave this tree but tree have grabbed me and not leaving me. I want to get out of this." The moment saint told this man replied immediately that no tree had not grabbed you; you don't want to leave this tree.

The moment man told this sentence the saint left the tree and came in front of him and said," My child that is what was I trying to make you understand from these many days you understood or not." The habit is not much strong that it can empower us and make us do what they want but it is

our will that what we have to do and what is good for us.

There is not a single habit or thing in the world which we want to do and are not able to do. The gambling habit had not grabbed you but you did not want to leave that. If you wish to leave if you will immediately leave it.

So, it is our willpower which has capacity to do anything and everything in the world. The strongest things in the world is our will power and have the power of wining whole world and so make your willpower very much strong so that you can reach your destination. No matter how difficult it is. You will surely succeed.

Anusha Singh

T.Y.B.Sc. (Zoology)



Result of Article Writing Competition

MAGAZINE COMMITTEE

The college publishes the College Magazine where the literary skills of our students flourish. College published Annual e-Magazine 'Reflections' of Year 2014-2015. This year we plan to have an e-magazine. 80 articles on various topics were submitted by the students. Congratulations to all the contributors.

The College Magazine Club organized an Article Writing Competition. The results of the competition:

Sr	Title of the	Name of the	Class	Position
No.	Article	Student		
1	Role of Physics	Bansi M. Patel	TYBSc	First
	in our daily life		(Physics)	
2	Lets know	Bharvi Aghera	SYBSc	First
	EBOLA Virus		(Microbiology)	
3	Insectivorous	Parmar Khyati D	TYBSc	First
	Plants		(Botany)	
4	Biography of	Sanskriti Lochan Sahai	SYBSc	Second
	late Prof. Birbal		(Botany)	
	Sahni -Father			
	of India			
	Paleobotany			
5	Why do we study	Jay Godhasara	TYBSc	First
	Chemistry?		(Chemistry)	
6	Facts of liquid	Paramar Priyanka	SYBSc	Second
	Nitrogen		(Chemistry)	

Congratulations to all the participants and Winners!

Dr A. R. Jivani

Editor and Ex-Officio, Magazine Club



V.P. & R.P.T.P. Science College • Magazine 2014-15



SRIMAD BHAGAVAD-GITA The Hidden Treasure of the Sweet Absolute

"The glory of Indian wisdom belongs to the oldest traditions in History. When people talk about the sources of philosophy, they make Reference not only to the Orient at all, but especially towards India."

-Georg Wilhelm Friedrich Hegel

"The wonderful thing about the Bhagavad-Gita is that, in it, an Unscholared, experienced wisdom is revealed as helping goodness. This beautiful revelation, this wisdom of life, this philosophy, Blossomed to religion, is what we are looking for and what we need"

-Hermann Hesse

"It is the most rewarding and elevating reading possible: it has been the comfort of my life and it will be the one of my death."

-Arthur Schopenhauer

"How much more impressing than all the ruins of the Orient is the Bhagavad-Gita"

-Henry David Thoreau

"It is possibly the deepest and most elevating thing the world offers."

-Wilhelm von Humboldt

"The Gita has always been a source of consolation to me. When there is no light approaching me, I open the Gita and a verse, accidently found, gives me back my smile."

-Mahatma Gandhi

"The Bhagavad-Gita is a rich message, directed toward the human being, showing him the path for his actions, in order to establish a divine society on earth."

-Roger Garaudy

"The Gita is one of the most concise and richest summaries of the philosophy preening there is. Therefore it has permanent value, not only for the Indians, but for the whole of mankind."

-Aldous Huxley

Jay Godhasara

T.Y.B.Sc. (Chemistry)



V.P. & R.P.T.P. Science College • Magazine 2014-15



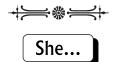
Burning Desire is the Secret of Success

A young man asked Socrates about the secret of success. Socrates told the young man to meet him near the river the next morning. They met next day. Socrates asked the young man to walk with him towards the river. When the water rise to their neck, Socrates took the young man by surprise and ducked him into the water. The boy struggled to get out but Socrates was strong and kept him there until the boy started turning blue. Socrates pulled his head out of the water and the first thing the young man did was to gasp and take a deep breath of air. Socrates asked, 'What did you want the most when you were there?" The boy replied, "Air." Socrates said, "That is the secret to success. When you want success as badly as you wanted the air, then you will get it." There is no other secret.

Moral of the short story: Just like a small fire cannot give much heat, a weak desire cannot produce great results. A burning desire is the starting point of all accomplishments.

Divyeshkumar A. Sharma

S.Y. B.C.A.



She always cares for us, She always protects us, She always knows what we are going to do, She always tells us what to do, She always gives up for us, She always knows what we are going to tell her, She always tells what you have to do, She knows what is our future, She always sacrifices for us, She always gives what we need, She will never let you know what she has sacrificed for us, She will never tell you what she needed for her self, She will never tell you what she has lost to get a better life for us, She is the one who loves you, that never ends forever and ever in life, SHE IS NOT A DROP IN OCEAN BUT SHE IS OCEAN IN A DROP..... She is the one and only one forever in my life that is my Mom.......

Vaishali Solanki

S.Y.B.Sc.





A Lady



The one who can never be understood OR One who reacts more than needed. The one who is more emotional, less practical OR Mysterious From ages the myths regarding women are considered facts. It is a belief that one who can never be understood is a lady. People keep talking or discussing about their behavior.

YES, women are different in behavior. They are over-possessive, emotional, not practical, jealous, and talkative. These all never conclude the actual behavior of a Lady. Considering the above said behavior can also be seen from different point of view.

If a lady is over-possessive then it should not justify her behavior. Her behavior can be justified that she needs to secure an individual more with love and care. Rather than saying her over-possessiveness negative, it can also be considered as love and care.

A woman thinks from heart not from mind. So, they frequently get emotional. And when there is emotion than there is less space for practical thinking.

A lady is talkative too. Why? They believe in sharing their thoughts, opinions, ideas and feelings. Talking keeps her mind diverted and gives a vent to their deep thoughts. Remaining silent can make them depressed. So, they prefer talking more.

Basically, women tend to listen everyone, but at times they also needs someone who listens to them calmly without giving advice. All she needs is attention, care, love, respect and most importantly understanding.

Therefore, rather than sticking to old myths and considering it as facts, the more convenient options are either you try to understand her or if it doesn't work than don't try to judge her without understanding.

There is one most remarkable line by Kamla Das;
"The tragedy of woman is not Death but Growth"

Kinjal Tailor

English Department



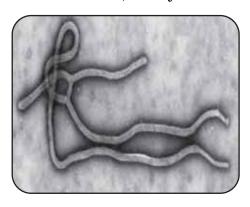




Let's Know...Ebola Virus

Man is nothing against nature. Now a days Ebola virus is spreading very fast in Africa. Ebola virus first spreading in Guinea and then it spread in Sierra, Liberia, Nigeria etc.

The first outbreak occurred on 26th August, 1976 in Yambuka. The first recorded case was Mabola Lokela, a 44-year-old schoolteacher.

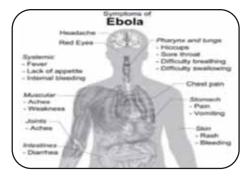


What is it?

The Ebola virus disease (EVD), formerly known as Ebola hemorrhagic fever is a severe condition caused by a virus from the Filoviridae family. Known to be a condition that is transmitted from animals to humans. This virus spreads through direct contact with the bodily fluids of an infected person or animal.

Symptoms:-

Ebola virus disease (EVD) or Ebola hemorrhagic fever (EHF) is a disease of humans and other primitives caused by an Ebola virus. Symptoms start two days to three weeks after contracting the virus, with a fever, sore throat, muscle pain and headaches. Typically, vomiting, diarrhea and rash follow, along with decreased functioning of the liver and kidneys. Around this time, affected people may begin to bleed both within the body and externally.



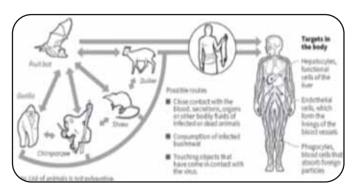
How can it be prevented?

There aren't any vaccinations available as of now, so basic hygiene is of importance and is a must to be followed in order to prevent the onset of the condition. Simple activities like washing your hands well, drinking water from a clean source, maintaining general hygiene and cooking your meat well, can all serve as precautionary measures, Apart from that people should

avoid crowded places or those that are known to have an outbreak. It is also important that if they notice any early symptoms, they should visit a doctor immediately.

How does Ebola virus spread?

The WHO says it is believed that fruit bats may be the natural host of the Ebola virus in Africa, passing on the virus to other animals. Humans contract Ebola through contact with the bodily fluids of infected animals or the bodily fluids of infected humans



"This is not an airborne transmission." said director of CDC'S Division of global migration and quarantine. "There needs to be direct contact frequently with body fluids or blood."

Ebola virus 2014, in West Africa:-

As of 2014, an epidemic of Ebola virus disease (EVD) is ongoing in West Africa. The outbreak began in guinea in December 2013 after which it spread to Liberia, sierra, Nigeria and Senegal. The outbreak is caused by Ebola virus [EBOV]. It is the most severe outbreak of Ebola in terms of the number of human cases and deaths since the discovery of the virus in 1976, with the number of cases from the current outbreak now outnumbering the combing cases from all known previous outbreaks. Another outbreak in the Democratic Republic of the Congo, which has 62 possible and confirmed cases and 35 deaths as of 9 September 2014, is believed to be unrelated to the West African outbreak



As of 10 September 2014, the world Health organization (WHO) and the centres for disease control (CDS) reported a total of 4,846 suspected cases and 2,375 deaths

Bharvi A. Aghera

S.Y.B.Sc. (Microbiology)





Why do we study Chemistry?

Chemistry is the central science and impacts on all facets of our lives. An understanding of Chemistry is necessary to all other branch of sciences from Astronomy to Zoology. All of the materials used by engineers and technologists are made by chemical reactions and we all experience chemical reactions continuously, whether it be breathing or baking a cake, driving a car or listening to a battery driven mini disk player. Chemistry is concerned with all aspects of molecules, their physical and chemical properties, their composition and structure, their synthesis and use in the 21st century.

A Chemistry-based degrees give you an excellent qualification for a wide career choice within science, industry or commerce. A Chemistry graduate is numerate, analytical, and practical and has good problem solving, presentation and communication skills. Jobs are to be found in small, medium and multinational chemical companies as well as in business, banking, accountancy, marketing, advertising, teaching, and the IT sector. Of course, you may decide to continue studying Chemistry and many of our graduates opt to do research for a higher degree.

Chemistry is fundamental to understanding why an autumn leaf turns red, or why a diamond is hard, or why soap gets us clean. To design a synthetic fiber, a life-saving drug, or a space capsule requires knowledge of chemistry. The behavior of atoms, molecules, and ions determines the sort of world we have to live in, our shapes and sizes, and even how we feel on a given day. So chemistry is worth studying, first of all, just because it is such a good antidote for ignorance.

Chemistry is a worthwhile discipline too because it prepares us for the real world. A college graduate with a degree in chemistry is in a good position to choose a useful and interesting career. Food chemistry, polymer chemistry, dyestuff chemistry, chemical oceanography, chemical information, and chemical sales-the list of career possibilities is long and varied. Even in times when unemployment rates are generally high, the chemist remains the scientist most in demand.

Chemists are very much involved in tackling the problems faced by our modern society. On a given day, a chemist may be studying the mechanism of the recombination of DNA, measuring the amount of insecticide in drinking water, comparing the protein content of meats, developing a new antibiotic, or analyzing a moon rock. Participation in important and interesting projects,

as a competent chemical scientist begins, of course, with a study of introductory Chemistry as an undergraduate.

Chemistry is a challenging subject. The undergraduate curriculum is demanding both intellectually and in terms of time. There are no "easy courses" to be found in it. One studies inorganic chemistry, organic chemistry, physical chemistry and analytical chemistry, examining the most basic qualities of matter, mastering strategies of chemical synthesis, solving chemical mysteries in the laboratory, and learning to communicate facts and theories about chemistry to others. Elective courses may include biochemistry and chemical oceanography, or one may choose to delve more deeply into one of the other sub disciplines of chemistry. Research with a member of the chemistry faculty in the junior or senior year can provide valuable experience at the frontiers of the science.

Whether your goal is to become a surgeon or a research scientist, a teacher or an information specialist, you should examine chemistry as a major field. It isn't for everyone; but those students who do choose chemistry usually find it as interesting as it is challenging, and they always take great pride in the degree they earn as undergraduates.

Jay Godhasara

T.Y.B.Sc.



- * Earth teaches me Quiet
- * Earth teaches me Suffering
- * Earth teaches me Humility
- * Earth teaches me Caring
- * Earth teaches me Courage
- * Earth teaches me Limitation
- * Earth teaches me Freedom
- * Earth teaches me Acceptance
- * Earth teaches me renewal
- * Earth teaches me Forget myself
- * Earth teaches me to remember kindness

- as the grasses are still with new light.
- as old stones suffer with memory.
- as blossoms are humble with beginning.
- as mothers nature their young.
- as the tree stands alone.
- as the ants that crawls on the ground.
- as the eagle that soars in the sky.
- as the leaves that die each fall.
- as the seed that rises in the spring.
- as melted snow forgets its life,
- as dry fields weep with rain.

Kerul N. Ka. Patel

T.Y.B.Sc.







Biography Of Late Prof. Birbal Sahni (1891-1949) Father Of Indian Paleobotany

Dr. Birbal Sahni was born on 14th November 1891, at Behra, a small town of Punjab. He received his education at Lahore, first at the Mission and Central Model Schools, then at the Government College, where his father was Professor of Chemistry. He graduated from Lahore in 1911. He went to Cambridge the same year and joined the Emmanuel College. In 1914 he graduated from the University of Cambridge and settled down to research. It was under the inspiring leadership and guidance of the famous Prof. of Botany – Professor A. C. Seward that Birbal Sahni did his Botanical researches. His knowledge of Indian plants was recognized early, for when a student at Cambridge he was asked to revise Lawson's widely used 'Text book of Botany'. Professor Sahni has a distinguished record at Cambridge. He was a founder scholar, exhibitioner, and winner of the Sudbury Hardyman Prize.

Working under Prof. Seward, he was awarded the Doctorate in Science of the London University in 1919, for his researches on fossil plants. On his return to India in the same year, he held the position of Chair of Botany at Universities of Banaras and Punjab for one academic session.

In 1921, Prof. Sahni took charge of the newly opened Botany Dept. of the University of Lucknow, as its first Professor and in 1933, was elected the Dean of the Science Faculty. Both these offices he held at the time of his death. In 1943 when the University opened classes of Geology, he became a Professor of Geology as well.

The University of Cambridge recognized his researches by the award of the degree of Sc. D. in 1929, perhaps the first to be awarded to an Indian Scientist up to the time. In 1936, Prof. Sahni was elected a Fellow of the Royal Society, the fifth Indian at that to time be honored.

He was honored by the Fellowship of most of the Indian learn Societies and was the Honorary Professor of Botany at the Banaras Hindu University. He was elected Vice-President of Paleobotany Section, in the 5th and 6th of the International Botanical Congress, 1930 and 1935 and President, National Academy of Science, 1937-39 and 1943-44, respectively. At the Indian Science Congress held in 1921 and at the Silver Jubilee session held in 1938 he presided over the Section of Botany and in 1926 he was President of the Section of Geology. He was President of the Indian Botanical Society, and Vice-President of the Indian Academy and the National Institute of Sciences of India.

Another high honor which came to him was his election as President of International Botanical Congress held in 1950. The Royal Asiatic Society of Bengal awarded him the Barclay Medal for outstanding researches in Biological Sciences, and he was the recipient of Sir C.R. Reddy National Prize

for 1947 in Natural sciences. He was conferred the honorary D.Sc. by the Universities of Patna and Allahabad., U.K. and U.S.A.

Towards the end of 1947 he was deputed by the Govt. of India to visit the research laboratories in Europe, U.K. and U.S.A. in order to observe their working.

Though primarily a palaeobotanist, much of Prof. Sahni's earlier work was concerned with living plants. Between 1915 and 1936 came out many important contributions on the morphology and evolutionary trends of Pteridophyta and Gymnosperms e.g. Neohrolepis, Tmesipteris, Acmopyle, Taxus, Cephalotaxus, Dacrydium, Fitzroya, Ginkgo. Several of these papers dealt with questions of great theoretical significance as is shown by the titles, observations on the Evolution of Branching in Filicales (1917), 'Modem Psilotaceae and Archaic Terrestrial plants' (1923), and the 'The ontogeny of Vascular plants and Theory of Recapitulation' (1925).

The study of fossil plants in India in the present century owes its progress entirely to Prof. Sahni. It is impossible here to give anything but the barest outline of his vast and invaluable contribution. In 1918, he published the first of the series of his notable researches of the Zygopterideae. About this time he had also begun, in collaboration with Prof. Seward, the important task of revising the Indian Gondwana plants and made exhaustive work on the Indian fossil conifers.

Between 1918 and 1949, Prof. Sahni had published a large number of papers dealing with nearly every respect of fossil botany. Besides describing a large quantity of fossil material from India and other countries he contributed important observations on the related paleographical and geological problems.

Prof. Sahni's personal qualities won for him universal esteem. He was loved and respected not only as a Scientist of outstanding merit but also as a great patriot. His life was devoted to Science. During his last six or seven years Prof. Sahni's energies were focused on the creation of the Institute of Paleobotany at Lucknow. The Institute personified his life's ambition, the culmination of his scientific activity for nearly three decades.

To the sorrow of the entire Nation, he had a severe heart attack on the evening of 8th April 1949, only a week after the foundation stone ceremony of the Institute's new building.

By his passing Science has lost one of its greatest votaries. To paleobotany in India his loss is an irreparable one. But he has left behind, a great and worthy example and the highest traditions

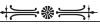
Sanskriti Lochan Sahai, S.Y.B.Sc.



The Nanocrystal -"Quantum Dot"

- A quantum dot is a nanocrystal made of semiconductor materials that are small enough to exhibit quantum mechanical properties.
- A quantum dot is a semiconductor nanostructure that confines the motion of conduction bond electrons, valence band holes, or excitons in all three spatial directions.
- → The confinement can be due to electrostatic potentials, the presence of interface between different semiconductor materials, the presence of the semiconductor surface, or a combination of these.
- A Quantum dot has a discrete quantized energy spectrum. The corresponding wave functions are spatially localized within the quantum dot, but extend over many periods of the crystal lattice.
- → A Quantum Dot contain a small finite number (of the order of 1-100) of conduction band electrons, valence band holes, or excitions, i.e., a finite number of elementary electric changes.
- → Quantum dots defined by lithographically patterned gate electrodes or by etching on two dimensional electron gasses in semiconductor heterostructures can have lateral dimensions exceeding 100nm.
- → Quantum dots were discovered in a glass matrix by Alexey Ekimov in 1981 and in colloidal solutions by Louis E. Brus in 1985 .The term
- → "Quantum Dot" was coined by Mark Reed.
- There are many applications for quantum dots in transistors, solar cells, LEDs, and diode lasers. Quantum dots are also useful as agents for medicals imaging and as possible qubits in quantum computing.
- → Environmental impact of bulk manufacturing and consumption of quantum dots is currently undergoing studies in both private and public labs.
- → Being zero-dimensional quantum dots have sharper density states than higher-dimensional structures. As a result, they have superior transport and optical properties so used in diode lasers, amplifiers, and biological sensors. They are also used as biconjugates for ultrasensitive Nonisotopic detection.

Krishna R. Sindha, T.Y.B.Sc.



Few Interdisciplinary Subjects of Chemistry

[1] BIOCHEMISTRY:

Biochemistry sometimes called "Biological Chemistry" is the study of chemical processes within and relating to living organisms.

Controlling information flows through biological signaling and the flow of chemical energy through metabolism, biochemical process give rise to the complexity of life.

Biochemistry is used in almost all the area of life science from Botany to medicine are engaged in biochemical research. The study of the molecular mechanisms by which genetics information encoded in DNA is able to result in the processes of life. Molecular Biology can be thought of as a branch of Biochemistry.

Biochemistry is the science dealing with the chemical composition and chemical reaction happening within and between the living cells of all organisms.

Application of Biochemistry:

Ames test: it is used to determine whether a substance will affect the structure of DNA.

Prenatal genetic testing: it is used to test the foetus for potential genetic defects.

Genetic engineering: it nvolves taking a gene from one organism and placing it into another.

Branches of Biochemistry:

Animal Biochemistry, Plant Biochemistry, Molecular Biology, Cell Biology, Metabolism, Immunology, Genetics, Enzymology.

Biocompound are carbohydrates, lipids, nucleic-acid, proteins, all the compounds are used in Biochemistry. Molecular bond, molecular charge, hydrolysis are all the chemical properties. Hence, we can say that Chemistry is not enough in studying chemical substance but it is used in chemical reaction by Biology.

Vishruti L. Vadaliya

S.Y.B.Sc.



[2] Material Chemistry : What is Material Chemistry :

The study of the characteristic uses of the various materials such as metals, ceramic, plastic that are employ in science and technology.

From the early to mid 20th century, synthetic polymer began to revolutionize the science and technology of material development that continues today as one of the main areas of research that can be included under the Material Chemistry umbrella.

In our consumptive world it is easy to take for granted the macro, micro, and nanoscopic building blocks that comprise any item ever produced. We are spoiled by the technology that adds convenience to our lives, such as microwave ovens, laptop computers, digital cell phones and improved modes of transported. we rarely take time to think about and appreciate the material that constitute this modern engineering feats.

Material Chemistry began and largely continues today, to be inextricably associated with preparing, processing, and utilizing "material" both nature and synthetic. and use developing cement and concrete for construction.

Application of Material Chemistry:

Microstructure and mechanical property of metals. Condensed Matter Physics and material research. New and artificial structure electronic and magnetic material. Advanced ceramic Organic polymer

In the other development of material chemistry that field we now recognized as Material Chemistry has grown increasing complex in its event.

Chemical route are increasingly being used to synthesize extended structures either in the form of discrete (zero dimensional) cluster such as dendrimers and tailored metal organic cluster or in selectively modified semiconductor or metal (two dimensional) surfaces by attaching electroactive molecule.

The entire field of nanoscience developed over the last decade depends on chemical design and control (nanotubes, functionalized metal, semiconductor etc....)

Property of material chemistry:

Atomic properties Acoustical properties
Chemical properties Electrical properties

The Material Chemistry is especially impressive because it has risen from nearly zero in just a short period of time. and very easily make our life that way material chemistry is one part of the science.

[3] Astrochemistry:

Astrochemistry is the study of abundance and reaction of chemical element and molecules in the universe, and their interaction with radiation. The discipline is an overlap of Astronomy and Chemistry. The word "Astrochemistry" may be applied to both the solar system and interstellar medium. The study of abundance of elements and isotopes ratios in solar system objects such as meteorites is also called cosmochemistry, while the study of interstellar atoms and molecules and their interaction with radiation is sometimes called Molecular Astrophysics.

The formation, atomic and chemical composition, evolution and fate of molecules gas clouds is of special interest, because it is from these clouds that solar system form.

One particularly important experiment tool in Astrochemistry is spectroscopy, the use of telescopes to measure the absorption and emission of light from molecules and atoms in various environments. By comparing astronomical observation with laboratory measurements, astrochemists can infer the elemental abundances, chemical composition, and temperatures of stars and interstellar clouds. This is possible because ions, atoms and molecules have characteristic spectra: that is, the absorption and emission of certain wavelength of light, often boot visible to the human eye. However, these measurements have limitations with various types of radiation able to detect only certain types of species, depending on the chemical properties of the molecules. Interstellar formaldehyde was the first organic molecules detected in the interstellar medium.

The most powerful technique for detection in individual chemical species is radio astronomy, which has resulted in the detection of over a hundred interstellar species, including radicals and ions and organic compounds, such as alcohol, acids, aldehydes, and ketenes. The observation of greatest human interest is the claim of interstellar glycine, the simplest amino acid, but with considerable accompanying controversy.

Thus, Astrochemistry is bridge between Astronomy and Chemistry. Hence, I can say that Chemistry is everywhere in universe. So, I want to say that,

"The world is wonderful creation of god, And Chemistry is wonderful blessing of nature."

Krishna R. Sindha

T.Y.B.Sc.





Insectivorous Plants

- Insectivorous plants trap insects and Arachnids and digest them for nutrients; an unusual behaviour for a plant.
- Species of insectivorous plants include the 'venus flytrap' some varieties of 'pitcher plants', butterworts, and sundews.
- These insectivorous plants often grow in areas where there is little nitrogen in the soil, compensating through the consumption of insects.
- The venus flytrap (Fig. 1) is the best known among insectivorous plants, recognized far and wide for its unique appearance and teeth like spikes.
- A venus flytrap, which got its name from the seductive Greek goddess of love, lures insects into its jaws with a sweet nectar.
- This nectar is a variant of the same nectar that many other plants use to lure bees for assisting in pollination.
- When the hapless insect makes its way into the jaws of the flytrap, it stimulates delicate hairs, causing the trap to close in less than 100 milliseconds.
- The venus flytrap is a rare member of the class of plants with the ability to move rapidly.
- Its natural habitat is the bogs around the carolinas, extremely wet, insect infested areas.
- Less familiar insectivorous plants include the pitcher plant (Fig.2), a plant with pitcher-shaped leaves.
- The pitcher plant uses sweet aromas to attract insects, which then slip into the pitcher.
- The inside of the pitcher has hairs pointing downwards, making it impossible for insects to climb back out.
- At the bottom of the pitcher plant is a of water which serves to drown captured insects.
- The insect is then converted into soluble nutrients through a process of natural decay and the digestive action of enzymes.
- A third species of insectivorous plants are the butterworts (Fig.3); star shaped succulent plants that trap insects with mucus.
- This is the most common species of CARNIVOROUS plant, being found in Asia, Europe, and North America.
- Individual leaves have the capability of wrapping around trapped prey, suffocating it and speeding the digestive process.
- The plant continuously excretes mucus beads over its surface, ensuring that any insect unfortunate enough to wander onto it will be trapped.

Khyati D. Parmar, T.Y.B.Sc. (Botany)







Fig.1

Fig.2 Fig.3

Fig.4

V.P. & R.P.T.P. Science College • Magazine 2014-15

Facts of Liquid Nitrogen

❖ Liquid nitrogen is nitrogen that is cold enough to exist in liquid form. It is used for cooling and has many cryogenic applications. Here are some liquid nitrogen facts and information about handling liquid nitrogen safely.

Liquid Nitrogen Facts

- ❖ Liquid nitrogen is the liquefied form of the element nitrogen that is commercially produced by fractional distillation of liquid air.
- ❖ Sometimes liquid nitrogen is denoted as LN2, LN, or LIN.
- ❖ Liquid nitrogen has the UN number 1977.
- ❖ At normal pressure, liquid nitrogen boils at 77 K (−195.8°C or −320.4°F).
- ❖ The liquid to gas expansion ratio of nitrogen is 1:694, which means liquid nitrogen boils to fill a volume with nitrogen gas very quickly.
- ❖ Nitrogen is non-toxic, odourless, and colorless. It is relatively inert and not inflammable.
- ❖ Nitrogen gas is slightly lighter than air once it reaches room temperature. It is slightly soluble in water.

Liquid Nitrogen Safety

- ❖ Liquid nitrogen is cold enough to cause severe frostbite upon contact with living tissue. Wear proper safety gear when handling liquid nitrogen to prevent contact or inhalation of extremely cold vapor. Make sure exposed skin surfaces are covered and preferably insulated.
- ❖ Because it boils so rapidly, the phase transition from liquid to gas can generate a lot of pressure very quickly. Do not enclose liquid nitrogen in a sealed container, as this may result in bursting or an explosion.
- Adding a lot of nitrogen to the air reduces the relative amount of oxygen. This can result in an asphyxiation risk. Cold nitrogen gas is heavier than air, so the risk is greatest near the ground. Use liquid nitrogen in a well-ventilated area.
- ❖ Liquid nitrogen containers may accumulate oxygen which is condensed from the air. As the nitrogen evaporates, there is a risk of violent oxidation of organic matter.

Liquid Nitrogen Uses

- Freezing and transport of food products.
- Cryopreservation of biological samples.
- ❖ Coolant for superconductors, vacuum pumps, and other materials and equipment.
- Cryotherapy to remove skin abnormalities.
- ❖ Shielding materials from oxygen exposure.
- Cooling materials for easier machining or fracturing.
- Homemade Liquid Nitrogen
- ❖ You can make your own homemade liquid nitrogen using readily available materials. It's not really liquid nitrogen, however, but cryogenic-

temperature alcohol. The chilled alcohol can be used for many liquid nitrogen projects, such as freezing flowers or other

materials. It is not suitable for ice cream or anything edible. Also, although this "poor man's liquid nitrogen" is very cold, it doesn't vaporize off your skin like true liquid nitrogen, meaning it can give you frostbite very easily. Avoid skin contact and use all the safety precautions you would use with nitrogen.

- ❖ 99% rubbing alcohol or methanol (lower percentage will work but you'll get a gelatinous cryofluid)
- ❖ Plastic container (don't use glass because extreme temperature changes may cause it to shatter)

Parmar Priyanka

S.Y.B.Sc.

The Quest Of Self

In this epicure world, He is bounded by the illusionary delight;

And rushes behind the quest of obscure destiny.

More often His mind oscillates between,

The self and the Supreme And for him the need of life is still unclear.

He tries to explore his inner conscience

To get the answers of those, Mysterious questions.

About birth, death, salvation and spirituality

In this interior of the shell; lies and immortal pearl (soul), Which is a beautiful horizon Between the God and His-self. After this philosophical renunciation,

He feels the reverence;
To live and to serve,
God in whichever way, God comes
to him.

Sanskriti Lochan Sahai

S.Y.B.Sc.



"The adventure of life is to learn"

The purpose of life is to grow
The nature of life is to change
The challenge of life is to overcome
The essence of life is to serve
The secret of life is to dare
The spice of life is to be friend
The beauty of life is to give

Life is the most difficult exam; many people fail because they try to copy others Not realizing that everyone has different question paper!

Sonali R. Mishra

S.Y.B.Sc.



The Tree

I am the food of the hungry, And comfort of the weary. Nothing is as green as me, And I am happy, full of glee. I give birds home to rest, They sleep in me and this Gives me satisfaction, As I am a Tree..

Patel Avruti H.

T.Y.B.Sc.





A Molecular Gps In The World Of Chemical Science..

Hey friends...Are you aware of GPS!!!!!!

In today's technological world where the mobile has become essential part of life, everyone must be aware of GPS. THE GLOBAL POSITIONING SYSTEM. Which is used to determine the momentary location of one place to the desired destination?

Similarly, scientists from the institute of physical and theoretical chemistry of the university of Bonn have now developed THE MOLECULAR GPS with which where about of metal ion in an enzyme can be reliably determined. Such ions play an important role in all corners of metabolism and synthesis for biological product.

As we know, there would be no life on our planet without enzyme. This enzyme controls and enables biochemical reaction ranging from digestion to the duplication of genetic material, which is present in numerous amount in our body which is a highly complex structure having an active centre which is having one or more metal ion which is used for breakdown of many chemical structure for example, no. of enzymes continuously present in our stomach which perform the action of breakdown of larger particles in to smaller particles which our body can easily absorb.

Where the actual action takes place!!!

Scientists are examining how such essential enzymes work. To do this they must precisely know how the individual atom is arranged in these biomolecules. When we know where about of the metal ion in an enzyme, we can better understand exactly how the reactions proceed. scientist and his working group has now determined the position of active centre in an enzyme using a novel method which is reminiscent in principle of the global positioning system (GPS) with which automobile navigation system works.

Like the maze of traffic during rush hours.....

The structure of enzyme is frequently, at first glance, just as a confusing as the maze of traffic during rush hours.

Similarly to how an individual car is nearly impossible to make out in a large amount of traffic, the metal ion "hides" in the numerous coils and folds of the enzyme. Nonetheless, the position of vehicle...and also that of the metal ion...can be reliably determined with GPS.

An amino acid cysteine as a satellite....

As the "GPS system" detects the location with the help of the satellite here, the "spin labelled amino acid cysteine acts as the satellite called molecular satellite".

These small organic molecules have an unpaired electron. These unpaired electrons are stable. The scientist has distributed six of these molecular satellite in their enzyme model "AZURINE" A blue protein with a copper ion in the centre.

Using computer program the scientist first tracked the "orbits" of the tiny satellites in the coil of the enzyme. They, then determine the distance between the satellites and the metal ion using a spectroscopic method, namely PELDOR which used to act like a ruler on a molecular level, "similar to the GPS, we were able to precisely determine the position of the active centre in the enzyme from this MOLECULAR GPS".

Dixita Kachhadiya

S.Y.B.Sc.



Botnical Name: Mimosa Pudica. (CHUI-MUI)

Why do the leaves of touch me not plant close when they are touched?

Due to the action of motor cells at the base of the petiole and leaflets. The motor cells are activated by touch of the sensitive hairs present on the surface of touch-me-not plant. Like a number of other plant species it undergoes changes in leaf orientation termed "Sleep" or nyctinastic movement. The foliage closes during darkness and repones in light. The leaves also close under various other stimuli such as touching, waring, blowing, or shaking. These types of movement occurs when specific regions of cells lose turgor pressure, which is the force that is applied onto the cells' wall by water within the cell vacuoles and other cell contents. When the plant is disturbed, specific regions on the stems are stimulated to release chemicals which force water out of the cell vacoules and the water diffuses out of the cells, producing a loss of cell pressure and cell collapse, this differential turgidity between different regions of cells results in the closing of the leaflets and the collapse of the leaf petiole.

This plant has a tendency to bring down swellings and vata pain in the joints. The thick paste obtained from grinding the whole plant is taken in a piece of cloth and placed over the painful joint swellings and tied with a piece of cloth to hold it in place. This is done a couple of times. This relieves pain and reduces the swelling. Similarly the paste can be used to treat delayed wound healing. The paste is applied over the wound to help in rapid healing.

Minakshi V. Rathwa

T.Y.B.Sc.

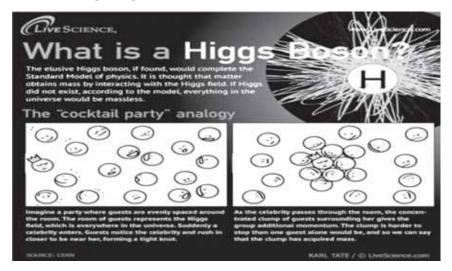




God Particle

In March, this year the world's largest and fastest particle accelerator, the Large Harden Collider (LAH) at CERN laboratory in Geneva, will get ready once again to smash protons together. Scientists hope that this experiment will help find exclusive and exotic particles apart from the "God Particle"-which are believed to be responsible for existence of all matter.

What is not so well known is the pivotal role of an Ahmedabad born physicist in the certain and functioning of a vital component to the collider-the superconducting magnets that make such high-energy particle collisions possible. Piyush Joshi, a physicist at Brookhaven's National Laboratory in the US, is a member of the team that helped design and install the super-conducting magnets in the collider.



Two and Half years ago, high energy collision experiments were carried out in this 17-mile-long collider, in an effort to find the Higgs Boson-the "God Particle".

So let's know about the history of Higgs Boson....! Lederman gave the nick name "God Particle" of the Higgs Boson...

This boson is so central to the state of physics today, so crucial to our final understanding of the structure of matter, yet so exclusive, that I have given it a nickname: The GOD PARTICLE. Why god particle...??? There are two reasons, One..The publisher wouldn't let us call it the Goodman particle, though that might be a more appropriate title, given its villainous nature and the expense it is causing. And the second...There is a connection of sorts to another book, a much older one....

As we show earlier that the God particle is also known as the Higgs Boson.. It is an elementary particle in the particle physics. It's main relevance is that it is the smallest possible excitation of the Higgs field. This field that unlike the more familiar electromagnetic field cannot be "turned off", but instead takes a constant value almost everywhere.

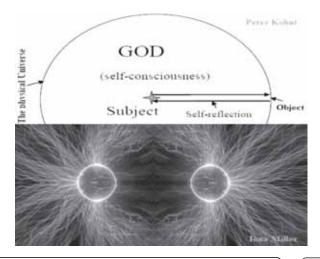
Despite being present everywhere the existence of the Higgs Field has been very hard to confirm, because it is extremely hard to create excitations. This exclusive particle has taken more than 40 years and led to the construction of one of the world's most expensive and complex.

On 4th July 2012, it was announced that a previously unknown particle with a mass between 134.2 and 136.3 amu had been detected. The Higgs Boson particles had been proven to behave, interact and decay in many of the ways predicated by the standard model and was also tentatively confirmed to have positive parity and zero spin, two fundamental attributes of a Higgs Boson. This appears to be the first elementary scalar particle discovered in nature.

The Higgs Boson is named after Peter Higgs, one of six physicists, who in 1964 proposed mechanics that suggested the existence of such particle of such particle. Although Higgs's name has come to be associated with this theory, several researchers between about 1960 to 1972 each independently developed different parts. In mainstream media the Higgs Boson has often been called the "GOD PARTICLE".

Piyush Joshi, a physicist at Brookhavens National Laboratory in the US, working on the superconducting magnets. This time these magnets have to accelerate protons to near the speed of light and collide them with nearly double the energy than last time. This experiment is crucial as scientists hope to find evidence of the exclusive particle that has never been detected before. Joshi has been working with BNL for more than 25 years now.

"The collider creates it's proton collision by hurling two beams of highly energized protons at each other. It is when these particles splits that we are able to see what is inside them." said Joshi. The existence of Higgs Boson or God Particle was theoretical till it's existence was proved by the LAH accelerator two-and-half year ago, said Joshi. Now, in March this year, the high-energy collision experiment will try to get a peek into the quark-gluon-plasma (QGP) or "Quark soup". It would be August before scientists reach a conclusion.





In the standard model, the Higgs Particle is a boson with no spin, electric charge or color charge. It is also very unstable. It is a quantum excitation of one of the four components of the Higgs field.

The latter constitutes a scalar field with two neutral and two electrically charged components, and forms a complex doublet of the weak isospin. The field has a "Mexican hat" shaped potential with non-zero strength everywhere, in which its vacuum state breaks the weak isospin symmetry of the electroweak interaction.

The remaining electrically neutral component separately couple to other particles known as fermions causing these to acquire mass as well. Some version of the theory predicts more than one kind of Higgs fields and bosons.

Alternatively,"Higgsless" models would have been considered if the Higgs boson not discovered.

Patel Arvind A.

T.Y.B.Sc.



Fact Files

- Few Epithets.....
- 1. Island of pearls-Bahrain
- 2. Windy city-Chicago
- 3. Venice of the east-Cochin
- 4. Land of thousand lakes-Finland
- 5. City of dreaming spires-Oxford
- 6. Land of cakes-Scotland
- © Largest, Biggest......
- 1. Largest diamond-The Cullinan-[over 11/2 LB]
- 2. Biggest library-National Kiev library- Moscow
- 3. Biggest Museum-British Museum
- 4. Biggest Palace-Vatican –Rome
- 5. Coldest Place-Verkhoyansk, Russia

- 6. Hottest Place-Azizia, Libya
- 7. Tallest Dog-Irish Wolf Hound
- 8. Largest Temple-Angkor Vat
- 9. Largest Democracy-INDIA
- Persons and Places......
- 1. Rajghat-Mahatma Gandhi
- 2. Mecca-Prophet Mohammed
- 3. Corsica-Napoleon Bonaparte
- 4. Shantivan Jawaharlal Nehru
- 5. Vijayghat -Lal Bahadur Shastri
- 6. Bethlehem-Jesus Christ
- 7. Macedonia-Alexander
- 8. Lumbini-Lord Buddha
- 9. Shakti Sthala Indira Gandhi
- 10. Vir Bhumi-Rajiv Gandhi

Zeal Vadodaria

F.Y.B.Sc.





Role of Physics in Our Daily Life

"Any sort of technology which we use in our daily life is related to Physics."

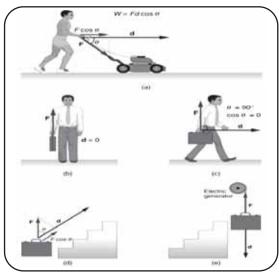
Physics plays an important role in our daily life from morning when we get up till we go to the bed at night. Physics is a subject without which we can't live. It is a science based on experimental, observation and quantitative measurement. So now the question raised how the Physics is useful in our daily life...????

It is very easy to answer that Physics is useful for doing mechanical work, physical work as well as mental work...It is useful for sitting, standing, playing, running, moving, jumping, eating etc. Physics plays very important role in health, economical development, education, energy and the environment. Modern world is much more interconnected than in previous historical times. These days we travel far, communicate easily and quickly, and conduct business around the world effortlessly. In fact almost no place on the earth has been excluded from the modern interconnected world.

Physics is all around us. We can find Physics as the backbone for any daily life example such as electrical light electricity. The working of our vehicle, wristwatch, cell phone, CD player, T.V set, computer and the list goes on.....

Physics is basic preparators and other are users. Basically, Physics is a study of nature and various elements and matter are related to each others. Here are, some examples that shows that Physics is very useful in our daily life..

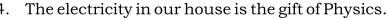
1. We walk, walk fast, run, jog, jump etc...All this or any type of motion is associated with the law of classical mechanics.



2. When we eat food, the chemical energy of the food is being converted into the mechanical energy which we use to do different type of work. Here,

there is conversion of forms of energy.

3. When we talk, our vocal cords vibrate and producing sound.





- 5. In our house the refrigerator works on the principles of thermodynamics.
- 6. Pressure cookers, washing machines, music system, computers all are work on the principle of Physics.
- 7. Rain, snowfall, lightening, thunder, wind, sea breeze etc..all are based on the law of Physics.
- 8. Your mobile phone works on microwave also uses Physics to connect people from different parts of the world.



- 9. While you are reading this article the working of your eye is similar to the working of a camera which again belongs to the Physics.
- 10. Automobiles, trains, aircrafts all are working on the concept of the Physics.
- 11. Seasons and atmospheric events are the yield of Physical Science.

All these inventions are used daily and without which the earth would be medieval and unindustrialized.

Physics as well as other sciences allows us to understand how the world works and the causes of natural disasters as well as inspire us to constantly invent new things and improve the quality of the life for human beings. It also had allowed us to invent devices to communicate with each other quickly and easily. Physics however does not work alone, chemistry, biology and many other sciences are also involved in understanding the universe and inventing things to improve the quality of life...

Physics is a magical word.....Physics is everywhere. We can also say that Physics is the BREATH of the daily work.

Patel Bansi M.

T.Y.BSc





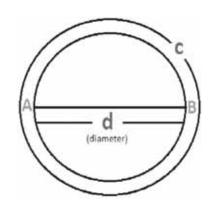


The Number π

Definition:-

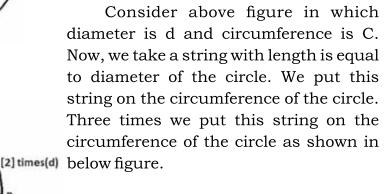
 π is commonly defined as the ratio of a circle's circumference C to its diameter d. So, π = C/d. The ration C/d is constant, regardless of the

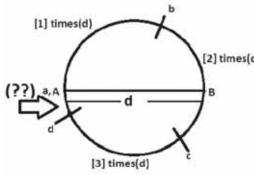
circle's size.



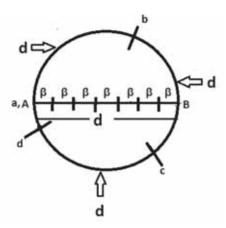
Now, we can write other definition of π . The circumference of a circle is slightly more than three times as long as its diameter.

How Can We Prove Above Definition?





As shown in above fig. we get an extra part (ad) when we put the string on the circle. Now if we take new string which length is equal to part ad. Then we put this part on the diameter of circle. So, we get one seventh parts of the diameter, show below figure.



So, we can write that, circumference = $d+d+d+\beta$ = d+d+d+d/7 = (22/7) d circumference/d = $22/7 = \pi$ So, $\pi = 22/7$

Mitesh Khunt S.Y.B.Sc.





Some Useful Maths Tricks

1. SQUARE NUMBER ENDING IN 5. Example-1

85x85=7225 Short trick of this example is as below:

Step-1: Multiply the first digit by the first digit plus One: 8x(8+1) = 72

Step-2: Write the number 25 next to the number from the first step: 7225

Example-2

105x105=?

Step-1: Multiply the first digit by the first digit plus one:

10x(10+1)=110

Step-2: Write the number 25 next to the number from the first step: 11025

2.DIVIDE BY 5,50,500,5000,...... **ETC**

Example-1

is as below:

Step-1: Multiply number being divided by two: 52x2=104

Step-2: Shift the number from step 1 by one decimal point: 10.4

Example-2

85/500=?

Step-1: Multiply number being divided by two:85x2=170

Step-2: Shift the number from step-1 by three decimal point: 0.170

Remark: (for dividing 50 Shift by two decimal Point)

3. MULTIPLY EVEN NUMBER BY 5. Example-1

242x5= 1210 Short trick of this example is as below:

Step-1: Divide the even number by

two: 242/2= 121

Step-2: Put a 0 at the end of the step 1 result: 1210

Example-2

1024x5 = ?

Step-1: Divide the even number by

two: 1024/2=512

Step-2: Put a 0 at the end of the step 1 result: 5120

4. MULTIPLY BY 9,99,999,9999,...... **ETC**

Example-1

56x99 = 5544 Short trick of this example is as below:

Step-1: Place a zero at the end for each 9:5600

Step-2: Subtract the original number from step 1:

5600-56= 5544

Example-2

7x999 = ?

Step-2: Subtract the original number from step 1: 7000-7=6993

52/5=10.4 Short trick of this example **5. MULTIPLY TWO DIGIT NUMBER**

HAVING SAME TENS DIGIT AND ONES DIGIT ADD UP TO 10.

Example-1

68x62 = 4216 Short trick of this example is as below:

Step-1: Multiply the first digit by the first digit plus one: 6x(6+1)=42

Step-2: Multiply the rightmost digits(if the result is a single digit put a 0 in front of it): 8x2 = 16

Step-3: Put the result from step 2 next to the result from step 1: 4216

Example-2

94x96=?

Step-1: Multiply the first digit by the first digit plus one: 9x(9+1)=90

Step-2: Multiply the rightmost digits(if the result is a single digit put a 0 in front of it): 4x6 = 24

Step-3: Put the result from step 2 next to the result from step 1:9024

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કેરીયર પસંદગી માટે મહત્વની તમારી ખુબીઓ અને ખામીઓ

સુરેશ, રાકેશ અને સ્વસ્તિક ત્રણ મિત્રો હતા. ત્રણેય એક જ ધોરણમાં ભણતા હતા. ત્રણેય મિત્રોએ ધોરણ- ૧૨ ની પરીક્ષા સાથે આપી. સુરેશે ધોરણ-૧૨ આર્ટસની પરીક્ષા આપી. રાકેશ અને સ્વસ્તિકે ધોરણ-૧૨ સાયન્સની પરીક્ષા આપી. પરિણામ આવ્યું. સુરેશના ધોરણ-૧૨ માં ૮૨%, રાકેશના ૬૫% અને સ્વસ્તિકના ૭૨% આવ્યા. ત્રણેય મિત્રોએ પરીક્ષા પછીના લાંબા વેકેશનમાં ખૂબ આનંદ કર્યો. પણ પરિણામ આવ્યા પછી તેમના માટે મહત્વનો પ્રશ્ન એ હતો કે ઉચ્ચ અભ્યાસ માટે કયું ક્ષેત્ર પસંદ કરવું ? સુરેશ, રાકેશ અને સ્વસ્તિક પોતાના મિત્રો, પડોશીઓ, કુટુંબીજનો, શિક્ષકોને પૂછ્યું કે અમારે ઉચ્ચ અભ્યાસ માટે કયુ ક્ષેત્ર પસંદ કરવું જોઈએ? ત્રણેય મિત્રોને પોતાનો જવાબ મળી ગયો.

સુરેશને બી.એ. કરવું હતું તો તેને લોકોએ એવી સલાહ આપી કે બી.એ. (ઇંગ્લિશ) કરો. ખૂબ જ માંગ છે અને નોકરી તો તરત જ મળી જશે. રાકેશને બી.એસ.સી. કરવું હતું તો તેને લોકોએ એવી સલાહ આપી કે બી.એસ.સી. (કેમેસ્ટ્રી) કરો. તેની ખૂબ જ માંગ છે. નોકરી તો તરત જ મળી જશે. સ્વસ્તિકને એન્જીનિચરીંગમાં જવું હતું. તો તેને લોકોએ એવી સલાહ આપી કે એન્જિનીચરીંગમાં મિકેનીકલ એન્જીનિચરીંગ નંબર વન અને એવરગ્રીન લાઇન છે. નોકરી તો મળી જ જશે. ત્રણેય મિત્રોએ વિચાર્યું શું આ લોકો સાચું કહેતા હશે ? તમે પણ વિચારો શું સુરેશ, રાકેશ અને સ્વસ્તિકે લોકોએ કહેલું ક્ષેત્ર પસંદ કરવું જોઇએ?

સુરેશના ધોરણ-૧૨ આર્ટસમાં ૮૨% આવ્યા. તેને બી.એ. કરવું હતું. તેને લોકોએ એવી સલાહ આપી કે બી.એ. (ઇંગ્લિશ) કરો. પણ સુરેશ જ જાણતો હતો કે તનું અંગ્રેજી કેટલું કાચું હતું. તેનું વ્યાકરણ તો ખૂબ જ કાચું હતું. પરીક્ષામાં સૌથી ઓછા ગુણ પણ અંગ્રેજીમાં જ આવ્યા હતા. તેણે વિચાર્યું કે બી.એ. (ઇંગ્લિશ) મારાથી શકય નથી. હું નહી કરી શકું. મને સમાજશાસ્ત્ર ખૂબ જ સારૂ ફાવે છે. તો તેમાં જ આગળ વધીશ અને બી.એ. પણ તેમાં જ કરીશ. તેણે વિચાર્યું મને સમાજશાસ્ત્રમાં રસ પણ છે.

રાકેશના ધોરણ-૧૨ સાયન્સમાં ૬૫% આવ્યા. રાકેશને બી.એસ.સી. કરવું હતું. તેને લોકોએ એવી સલાહ આપી કે બી.એસ.સી. (કેમેસ્ટ્રી) કરો. પણ ફકત રાકેશ જ જાણતો હતો કે તેને કેમેસ્ટ્રી ઓછું ફાવતુ હતું. તેણે વિચાર્યું કે બી.એસ.સી (કેમેસ્ટ્રી) કર્યા પછી નોકરીના ક્ષેત્રમાં જો ઔધોગિક કંપની હોય તો તંદુરસ્તી પર પ્રતિફૂળ અસર થાય છે. તેને ભૌતિક વિજ્ઞાન ખૂબ જ સારૂ ફાવતું હતું અને તેમાં તેને રસ પણ હતો. રાકેશે બી.એસ.સી. ભૌતિક વિજ્ઞાનમાં અભ્યાસ કરવાનું નકકી કર્યું.

સ્વસ્તિકના ધોરણ-૧૨ સાયન્સમાં ૭૨% આવ્યા હતા. તેને લોકોએ એવી સલાહ આપી કે મિકેનીકલ એન્જિનીચરીંગમાં જાઓ. સ્વસ્તિકે પોતાના ખાસ મિત્ર કે જે પોતે મિકેનિકલ એન્જિનીચર છે તેમને પૂછ્યું કે આ ક્ષેત્ર માટે કઈ કુશળતાઓ જોઈએ ? તો તેમણે કહ્યું કે ડ્રોઈંગ અને ગાણિતીક ક્ષમતા (દાખલાઓ) આવડવા જ જોઈએ. સ્વસ્તિકે મિકેનિકલ એન્જિનીચરીંગના પુસ્તકોનો ટૂંકમાં અભ્યાસ કર્યો. સ્વસ્તિકે વિચાર્યું કે તેની ડ્રોઈંગ અને ગાણિતિક ક્ષમતા ઓછી છે તેને દાખલાઓ ઓછા ફાવે છે. તેને રસ ઈલેકટ્રોનિકસમાં હતો અને તેને સારૂ ફાવતું હતું. સ્વસ્તિકે એન્જિનીચરીંગમાં ઈલેકટ્રોનિકસ અને કોમ્પ્યુનિકેશન એન્જિનીચરીંગ પસંદ કર્યું.

પોતાની ખૂબીઓ અને ખામીઓ માણસ પોતે સારી રીતે જાણે જ છે. તેથી નિર્ણય તમારે જાતે જ કરવો જોઈએ. કારણ કે કાર્ચ પણ તમારે પોતે જ કરવાનું છે. ઉપરની ત્રણેય વ્યકિતઓ પોતાની ખૂબીઓ અને ખામીઓ સારી રીતે જાણતી હતી. તેથી નિર્ણય પોતે જ કર્યો અને જીવનમાં ખુબ સફળ થયા.

જીફ્રોશ વાદ્યેલા

ટી.વાચ.બી.એસ.સી.





પ્રાકૃતિક સુંદરતા

વહેલી સવારે પર્વતની ટોચ પર ડોકિચું કરતો સૂર્ચ, મંદ મંદ વહેતો પવન, મધુર કંઠે ગીતો ગાતા પક્ષીઓ, ઝરણાનું ખળખળ વહેતું પાણી મન ને પ્રકુલ્લિત બનાવી દઇ એક નવું જોમ ઉત્પન્ન કરે છે. ધીમે ધીમે ગિત કરતો પરંતુ મધ્યાહનને ધીખેલો સુર્ચ સંધ્યાકાળે કેવો કોમલ બની જઇ દિવસભરનો થાક ઉતારી જાય છે. શિયાળાની ગુલાબી ઠંડીમાં આનંદ આપનારો આ જ સૂર્ચ ઉનાળાની ભરબપોરે અંગારા વરસાવતો બની જાય છે. રાત્રી દરમ્યાન તમરાનું ત્રમ-ત્રમ સંગીત અને બીજા કીટકોનો સુમધુર અવાજ રાત્રીની સુંદરતામાં અનેરો વધારો કરે છે એકમથી અમાસ સુધી સતત ઘટતો અને પડવાથી પૂનમ સુધી સતત વધતો ચંદ્ર કેવો રળિયામણો લાગે છે. પૂનમની રાત્રે સોળે કળાએ ખીલી ઉઠતો ચંદ્ર કેવી શીતળતા અર્પે છે. અમાસની રાતે ખુલ્લા આકાશમાં આકાશગંગા, સપ્તર્ષિમંડળ, મૃગર્ષી જેવા નક્ષત્રો, ખરતા તારા અને ટમટમતા તારોની રમત પણ જોવા જેવી હોય છે. પરંતુ અંધકારથી ડરતા ઓ માનવી આ સૌન્દર્ચ તારા નસીબમાં ક્યાથી ?

વસંતઋતુમાં નવી કુંપણો ધારણ કરેલી હોય, તે વૃક્ષો પર રંગબેરંગી અને ભાતભાતના પુષ્પો હોય, આ પુષ્પોની આસપાસ અનેક રંગોવાળા મૃદૃ પતંગિયા ઉડાઉડ કરતા હોય, આંબા મોરથી લચી પડ્યા હોય, તેની વચ્ચેથી કોયલ સુમધુર ગીતો સંભળાવતી હોય, …આહાહાહાહા…. આ દૃશ્ય તો માનવીએ કલ્પેલા સ્વર્ગ કરતા પણ સુંદર હોય છે. શું આ દૃશ્યોને માણવા માટે આજનો માનવીએ કલ્પેલા સ્વર્ગ કરતા પણ સુંદર હોય છે. શું આ દૃશ્યોને માણવા માટે આજનો માનવીએ કલ્પેલા સ્વર્ગ કરતા પણ સુંદર હોય છે. શું આ દૃશ્યોને માણવા માટે આજનો માનવી સમય ફાળવવા તૈયાર છે ? આજે માનવી માત્ર પોતાની ભૌતિક જરૂરીયાતો સંતોષી અને તેને જ સુખમય જીવન માનીને આ પ્રકૃતિ સાથેનો સુમેળભર્યો સંબંધ વિકસાવવામાં નિષ્ફળ સાબિત થયો છે.

વર્ષાત્રમ્તુમાં આકાશ કાળા ડિબાંગ વાદળોથી ઘેરાચેલું હોય, ઝરમર ઝરમર વરસાદ અમી છાંટણા કરતો હોય, મેધગર્જના અને વિજળી ઝબકારા-લબકારા લેતી હોય, મોરલો કળા કરીને કુદરતને પાગલ કરતો હોય, એવામાં વાદળોથી ઘેરાચેલ સૂર્ચનારાચણ ઘીમે રહી ડોકીચું કરે અને બીજી જ ક્ષણે વિશાળ આકાશમાં મેઘધનુષ રચાય… આ દૃશ્ય જેને માણવાનું મળે એ માનવીની તો ભગવાન ને ય ઈર્ષ્યા થાય.

પણ પ્રકૃતિ ની સુંદરતા માણવાનો હકદાર કોણ ? જે ઝરણાનું ગીત સાંભળી શકે જે પક્ષીનું ગીત ગાઇ શકે, જે ખીલતા પુષ્પ હાસ્ય જોઇ શકે, જે વાંસના ઝુંડમાંથી પસાર થતા પવન કનૈયાની વાંસળીનો સુમધુર અવાજ સાંભળી શકે. કોન્કીટની ચાર દીવાલોની વચ્ચે બેસીને આજનો કવિ ખીલતા કમળનું વર્ણન કરે તેમાં તો કૈંક ખૂટવાનું જ. હવાઇ મુસાફરી કરીને સમયને પાછળ પાડનારા માનવીને પૂછી જુઓ કે ઉગતા આથમતા સૂર્ચને માણ્યો છે ક્યારેય ?

સતત ફેલાતા જતા શહેરીકરણ વચ્ચે સુખની શોધમાં નીકળેલો આજનો માનવી પ્રકૃતિથી તદ્ધન અલિસ થઇ પ્રકૃતિમાં રહેલા ખરા આનંદને માણવાની સંવેદના ખોઇ ચુક્યો છે. ઓ માનવી, તુ પ્રકૃતિનું જ એક અંગ છે, પ્રકૃતિથી અલિસ રહીને તુ કદાપી સુખી નહિ થઇ શકે.

વિજય પીજવાળા

હેડ ક્લાર્ક





____ નાનકડી ખુશીઓ

આપણા બધાના માત-પિતા પોતાના સંતાનો પાસેથી કંઈક પણ આશા રાખતા નથી. ફક્ત તેઓ ઈચ્છા રાખતા હોય છે કે એમનું બાળક સારૂ ભવિષ્ય બનાવે એને કોઇ પણ તકલીફ ન પડે. આપણી પાસે આપણા માતા-પિતા છે કે જે આપણી ચિંતા કરતા હોચ છે તેઓ આપણી સાથે છે, છતાં પણ આપણે કહીએ કે આપણી પાસે કંઇ જ નથી. દુનિયામાં માતા-પિતા જેવી મૂલ્યવાન વસ્તુ કોઇ જ નથી, કે જેમની સાથે દુનિયાની કોઇ પણ ખુશી અને ુદુઃખ વહેચી શકીએ છીએ. છોટી નામની એક નાની છોકરી એક વાર નાનકડા બગીચામાં એકબાજુ માં બેસીને કંઇક જોતી હતી, એના કપડાં ગંદા થઇ ચૂકયા હતા, અને એવું લાગતું હતું કે એણે કેટલાક દિવસથી પેટ ભરીને ખાધું નથી. એ બાગમાં આવેલા બાળકો અને તેના માતા પિતાને જોતી હતી, અને એ જોઇ ખૂબ રડતી હતી કારણકે એણે તો એના માતા-પિતા ને જોચા પણ નથી. એ એકલી હતી. આ બધું એક વુદ્ધ દંપતી નિહાળી રહ્યા હતા. તેમને ખૂબ દયા આવી ગઇ તેઓ છોટી પાસે ગયા અને થોડી વાતો કરી.. તેનો હાથ પકડીને આઇસ્ક્રીમ ખાવા માટે લઇ ગયા. છોટીએ ખૂબજ લાગણીશીલ આંખે તેમની બાજુ જોયું એની આંખોમાં આસું હતાં. પેલા વૃદ્ધ દંપતી માંથી દાદી, છોટી ને આઇસ્ક્રીમ લઇ આપ્યું. છોટી ખૂબ ખુશ થઇ, તેણે એમનો ખૂબ આભાર માન્યો અને આકાશ તરફ જોવા લાગી, અને માતા-પિતા ને કહેવા લાગી કે હું અહીં ખુબ ખુશ છું. તમે જરા પણ ચિંતા ના કરશો, અને એક સંતોષની અનુભૂતિ થઇ રહી હતી. આ જોઇને અનુભવી ને એવુ લાગે કે આ છોટી કરતા આપણી પાસે કેટલુ બધું છે, છતા પણ આપણે સમજી શકીએ છીએ કે માતા પિતાનું મૂલ્ચ આપણા જીવનમાં શું છે. આપણી પાસે બધુ જ છે, તો ક્યારેક આવા બાળકોની સાથે પણ સમય વીતાવી એમને નાનકડી ખુશીઓ આપવી જોઈએ, કારણ કે આપણા માટે નાનકડી ખુશી એમના માટે કેટલી મોટી ખુશી સાબિત થાય છે.

અંકિતા ડી. પટેલ

ટી.વાય.બી.એસ.સી.



સાંજ

સાવ ટચુકડી કેડી લઇને દોડી ગઇ છોરી, ચાંદા સાથે આમ મળીને સંઘ્યા થઇ ગઇ ગોરી, શ્ચામ ગુલાબી આકાશેથી પંખી પાછા વળતાં, વગડેથી ખેડૂતો વળતાં ગાંડે બળદો જોડી.... સાવ આવળ મળતા બાવળ મળતા વૃક્ષો રસ્તો ઘડતા કેડી મધ્યે ઠુંઠું ઉભુ પોતાનું મુખ મોડી સાવ ફૂલો પરથી સોડમ લઇને ભમરા પાછા વળતા બાગ મધ્યે કૈં બાળક રમતાં કાષ્ઠ લાકળી ખોડી... સાવ

> ડૉ. લિંકન ચૌહાણ ભૌતિકશાસ્ત્ર વિભાગ





અમારા અવિસ્મરણીય સ્મરણો NSS કેમ્પના

અમને વાત જાણવા મળી કે આપણી V.P. & R.P.T.P. Science College દ્વારા એક વાર્ષિક કેમ્પનું આયોજન કરવામાં આવી રહ્યું છે. આ સમયે અમને આવા કેમ્પ વિશે કોઇ માહિતી ન હતી. પણ મનમાં એક ભાવ હતો કે બસ આવા કેમ્પમાં જવાથી કંઇક જાણવા કે શીખવા મળશે. તો બસ આ જ વાતને કેન્દ્રમાં રાખી આ કેમ્પ માં અમે જવાનું નક્કી કર્યું.

કેમ્પ માટે તારાપુર થી ૨૫ કીલોમીટર દુર આવેલ પરીએજ ગામ, અતિકુદરતી, રમણીય સ્થળ પસંદ કરવામાં આવેલ છે જે આ કેમ્પ ના થીમ " Go Back To Nature " ને એકદમ મેચ થાય છે. આ થીમમાં અદભૂત ભાવ છુપાયેલો છે.

અમે જે સમયની ખુબ આતુરતાપુર્વક રાહ જોઈ રહ્યા હતા તે સમય આવી ગયો. આ એક સપ્તાહના નિવાસી કેમ્પ માટે અમે એ ધરતી પર પહોંચી ગયા. અમારી લાગણીનું વર્ણન કરવા જેટલું લખી શકાય તેટલું ઓછુ પડે.

આ સપ્તાહમાં Bird Watching, Tracking, Fire Camp જેવા જુદા-જુદા કાર્ચક્રમો આચોજિત થયા. પ્રાણીઓ, પક્ષીઓ પ્રત્યે નિઃસ્વાર્થ પ્રેમ જે માત્ર અમે પુસ્તક માં વાંચેલુ તે અમે પોતે અનુભવ કર્યો તે અવિસ્મરણીય છે. આ કેમ્પ અમારા માટે શુદદ ભાવ સાથે આ એક પર્યાવરણ તરફની સફર હતી. પરીએજ જે વનવિભાગની સાઇટ હતી ત્યાં જે લોકો કાર્ચરત હતા તેઓએ એક એવો સુખદ અનુભવ કરાવ્યો કે બસ અહીંનું આ વાતાવરણ માં જ સુખ મળે અને આ ભાવ પર્યાવરણ પ્રેમી મારા મિત્રોએ અનુભવ કર્યો.

આ સાત દિવસોમાં અમે સપ્તાહના છેલ્લા બે દિવસ ગામમાં અમે જનજાગૃતિ માટે ના કાર્ચો કર્ચા. આ ગામની કન્ચાશાળા અને કુમાર શાળા મા NSS વિદ્યાર્થીઓ દ્વારા ત્યાંના નાના ભૂલકાઓને પર્ચાવરણ વિશે જાગૃતિ લાવવા વિવિદ્ય કાર્ચક્રમો આચોજીત કરવા માં આવ્યા હતા.

કેમ્પ દરમ્યાન જુદા-જુદા નિષ્ણાંતો પાસેથી પર્યાવરણ વિશે ઘણી વાતો જાણવા મળી. આ રાત્રે અમે જુદા-જુદા નિષ્ણાંતો પાસે અમને મગર, ગીધ જેની જાતી જે લુપ્ત થવાને અણી પર છે તેના વિશે જાણવા મળ્યું . નાના નાના પ્રયત્નોથી જ આ લુપ્ત પ્રજાતિ ને બચાવી શકીએ તેમ છીએ. આ માટે અમારા થી શક્ય પ્રયત્નો અમે કરીશું એવો અમે સૌ એ સંકલ્પ કર્યો.

આવા કુદરતી વાતાવરણમાં કેમ્પનું આયોજન કરવા માટે કોલેજ અને પરીએજ ગામના દરેક વ્યક્તિનો હું તમામ વિદ્યાર્થીઓ વતી આભાર માનું છું. અમારા Co-ordinators રાજીવસર અને અતુલસર દ્વારા અમને જે જીવનના પાઠ જાણવા મળ્યા તે અમને Life Time ચાદ રહેશે.

કોરાટ જયકુમાર દવે વૈભવકુમાર વામજા શિવમ એફ.વાચ.બી.એસ.સી.





કાયમ ખુશ રહેવાની રીત

જીવનમાં હંમેશા સુખ નથી મળતું, ખુશી નથી મળતી આ વાસ્તવિકતાથી કોઇ અજાણ નથી. જીવનમાં દરેક પરિસ્થિતિ કે સંજોગો સારા નથી હોતા, પંરતુ શું ગમે તેવા કપરા સંજોગો માં ખુશ રહી શકાચ? તો જવાબ હા છે.

પણ સૌ પ્રથમ આપણે જોઈએ કે આપણે સામાન્ય રીતે કઈ બાબતે દુખી હોય એ છીએ. આપણા સામાન્ય કારણો કંઇક આવા હોય છે. જેમ કે,

- (૧) મારું ઘર નાનું છે.
- (૨) મારી પાસે પૈસા ઘણા ઓછા છે.
- (૩) મારે ઘરે ઘણું કામ કરવું પડે છે.
- (૪) મને ભણવાનો કંટાળો આવે છે..... આવી તો ઘણી સમસ્યાઓ છે.

ચાલો આપણે જોઇએ આપણી પરિસ્થિતિ કોની સાથે સરખાવી શકીએ છીએ.

- (૧) કદાચ તમે પરિસ્થિતિમાં નિષ્ફળ થયા છો તો કદાચ તમે ખુબ નિરાશ દશો. પરંતુ એકવાર પોતાની પરિસ્થિતિને એક એવા વેપારી સાથે સરખાવો કે જેની બધીજ મૂકી - રોકાણ નું વેપારમાં ધોવાણ થઇ ચુક્યું છે. શું એ વ્યક્તિ કરતા તમે વધુ નિરાશ છો ?
- (૨) તમારું ઘર નાનું છે. પણ જેની પાસે ઘર જ નથી કુદરતી હોનારતમાં જેનું ઘર તુટી ગયું છે. તેના કરતા તો તમારી પાસે ઘર છે. એ સારી બાબત નથી ?
- (૩) પૈસા ઓછા હોવાની સમસ્યા છે. તો પોતાને કોઇ ધાર્મિક સ્થળ પાસે બેઠેલી અને પૈસા માંગી ને નિર્વાહ ચલાવતી વ્યક્તિ સાથે સરખાવો. શું તેના કરતા તમારી પાસે પૈસા ઓછા પૈસા છે?
- (૪) સરહૃદ પર પોતાના પરિવાર થી ખુબ દૂર દેશ ની રક્ષા માટે ઉભેલા સૈનિકો કરતા વધુ એકલતા છે આપણા જીવનમાં ?
- (૫) કોઇ અપંગ વ્યક્તિ કરતા આપણી પાસે આપણા લક્ષ્ય સુધી પહોંચવાનો રસ્તો તો સરળ છે ને. સગવડો
- (૬) કોઇ બાળ મજુર જેટલી ખરાબ હાલત આપણી ઘરકામ કરવામાં તો નથી ને ?
- (૭) આપણી પાસે આપણી સારસંભાળ રાખવા માટે આપણા માતાપિતા છે. કોઈ અનાથને પૂછો તેની સાર સંભાળ લેવા વાળું કોણ છે ?
- (૮) આપણને આપણું ભાવતું ભોજન મળે છે. પરંતુ એક નજર આપણા દેશ તરફ કરીએ તો ખબર પડશે કે દેશની અડધી પ્રજા ને એક સમયનું ભોજન મળવા માટે પણ સંઘર્ષ કરવો પડે છે.
- (૯) પોતાની આજુબાજુ નજર કરો અને ભગવાન નો આભાર માનો કે તમને જીવન માં ઘણું મળ્યું છે આપણા ઘણા ભાઇ બહેન પાસે આમાંનું કશું નથી.

આપણે જોશું તો ખબર પડશે કે બીજા બધાની સામે આપણી સમસ્યાઓ તો ઘણી જ નજીવી છે. માટે આપણે કાચમ ખુશ રહીશું. ફરિચાદ બંધ કરી હકારાત્મક થઇ આપણી પાસે જે છે એ બીજાને આપી, મદદ કરીશું. ભગવાન ને પ્રાર્થના કરીશું કે મને જે મળ્યું તે બધાજ ને મળો. બધા જ ને મળો.

Kachhia Zalak S. Master Pooja R.

F.Y.B.Sc.





ઇન્ટરનેટની એક મિનિટ....

સ્માર્ટફોન અને સ્માર્ટફોન પર પોપ્યુલર થયેલી કેટલીક એપ્લિકેશન્સને કારણે ઇન્ટરનેટનો વ્યાપ હવે અંત્યત વધી ગયો છે. માણસની હથેળી સુધી પહોંચી ગયેલા ઇન્ટરનેટને કારણે એવી હાલત ઊભી થઇ છે કે જગત આખું એક ગામડું બની ગયું હોય એવો ઘાટ ઘડાયો છે. ન્યૂયોર્કથી નાલાસોપારા એક ફોટો પાંચ સેકન્ડમાં પહોંચે છે અને મોરબીથી માન્ચેસ્ટર એક ફાઇલ મોકલવામાં અઢી સેકન્ડ લાગે છે. મોટાભાગના ઇન્ટરનેટ યુઝર્સ આજે ૨-જી કે ડોમેસ્ટીક ઇન્ટરનેટ પ્લાન વાપરી રહ્યા છે. પણ જે સમય ૪જી દેશમાં ઇન્ટ્રોડયુસ થશે એ સમયે ઇન્ટરનેટ કઇ હદે અને કયા સ્તરે બધા સુધી પહોંચશે.

એક મિનિટમાં નોકરી

આજના સમયમાં કપડાં વિના ચાલી શકે પણ ઇન્ટરનેટ વિના ન ચાલે. ઇન્ટરનેટની જરૂરિયાત એ હદે લોકોમાં ઘર કરી ગઇ છે. ટપાલ, પોસ્ટ, ગ્રિટિંગ્સ જેવા કાગળોનાં વ્યવહાર નેસ્તનાબૂદ થવાની તૈયારીમાં છે.

તમે માનશો નિર્દ પણ ઇન્ટરનેટની એક મિનિટમાં ૬,૩૯,૬૦૦ જીબી કેટા એક જગ્યાએથી બીજી જગ્યાએ ટ્રાન્સફર થાય છે. આ ટ્રાન્સફર થયેલા કેટાને સાચી વસ્તુમાં ફેરવવામાં આવે તો એનાથી બત્રીસ ટ્રક ભરાય ! આ બત્રીસ ટ્રક માલ એક મિનિટમાં અને લાઇટનિંગ સ્પીકમાં એક જગ્યાએથી બીજી જગ્યાએ પહોંચે છે.

આ જ આંકડાને આગળ સમજાવીને કહેવાનું હોય તો કહી શકય કે દર મિનિટે જે કેટા ટ્રાન્સફર થાય છે. એ કેટા એવરેજ સત્તર કિલોમીટર દૂર મોકલવામાં આવે છે. ઇન્ટરનેટના કારણે આ સત્તર કિલોમીટરનું અંતર એક મિનિટમાં ક્પાઈ જાય છે. વિચારો જરા કે ઇન્ટરનેટ ન હોય તો એક મિનિટમાં આટલું સાહિત્ય એક સ્થળેથી બીજા સ્થળ પર કઈ રીતે પહોંચી શકતું હોત!

મજાની વાત એ છે કે મિનિટ દરમિયાન જે ૧,૩૯,૦૦૦ જીબી કેટા ટ્રાન્સફર થાય છે. એ કેટામાંથી ૪૭,૦૦૦ જીબી કેટા એપ્લિકેશનનો હોય છે. આ એપ્લિકેશનને જો નંગમાં ફેરવવાની હોય તો કહી શકાય કે ઇન્ટરનેટને કારણે દર મિનિટ સરેરાશ દોઢ લાખ જેટલી એપ્લિકેશન થઇ રહી છે. થનારી આ એપ્લિકેશનમાંથી ૪૨,૦૦૦ લોકોને જોબ મળે છે. જેમ ૪૨,૦૦૦ લોકોને એક મિનિટ દરમિયાન ઇન્ટરનેટને પ્રતાપે જોબ મળી જાય છે. એ જ રીતે વીસ લાખ લોકો એવા છે કે જેમને ઇન્ટરનેટને કારણે તેમના મનના પ્રશ્નોના જવાબ મળી જાય છે. અફકોર્સ ગૂગલ પરથી કહેવાની સીધી વાત એ છે કે દર એક મિનિટે દુનિયાભરના વીસ લાખ ગૂગલ સર્ચ એન્જિન પર સર્ચ કરે છે. આ ઇન્ટરનેટની એક મિનિટની કમાલ છે. અને આ એક કમાલ નથી. ઇન્ટરનેટની એક મિનિટ દરમિયાન હજુ પણ ઘણું ઘણું થાય છે.

नજરદર્शन

ઇન્ટરનેટની એક મિનિટ દરમિયાન આગળ જે વાત થઇ એ વાતમાં તો માત્ર કેટાની વાત હતી પણ હવે જે વાત કરવામાં આવે છે એ વીડિયો અને ફોટોગ્રાફની વાત છે. ઇન્ટરનેટ દ્વારા એક મિનિટમાં બે કરોડ લોકો અલગ અલગ ફોટોગ્રાફસ જુએ છે. તો આ જ એક મિનિટ દરમિયાન કુલ 3,000 લોકો ફોટોગ્રાફ અપલોડ કરે છે. વીડિયોની વાત કરીએ તો આ એક મિનિટ દરમિયાન ૧૩ લાખ લોકો ઇન્ટરનેટ પર વીડિયો જુએ છે.

દર મિનિટે ઇન્ટરનેટ પર ત્રીસ કલાકનું વીડિયો કન્ટેન્ટ અપલોડ થઇ રહયું છે. કલ્પના કરો એક મિનિટમાં વાત છે આ એક મિનિટમાં ૩૦ કલાકનું વીડિયો કન્ટેન્ટ અપલોડ થતું હોય તો કહી શકાય કે એક કલાકમાં ૧૮૦૦ કલાક ચાલે એટલો વીડિયો અપલોડ થાય છે. ૧૮૦૦ કલાકને હજી વિગતવાર સમજવા હોય તો કહી શકાય કે એક, કલાકમાં ઇન્ટરનેટ પર ઓછામાં ઓછી ૭૫૦ ફિલ્મ જેટલું કન્ટેન્ટ અપલોડ થાય છે. અપલોડ થયેલા

આ કન્ટેન્ટમાં પણ કેટેગરી પાડી શકાચ છે.

એક મિનિટમાં ઇન્ટરનેટ પર જે ત્રીસ કલાકનું કન્ટેન્ટ અપલોડ થાય છે. એમાંથી સાત કલાકનું કન્ટેન્ટ પોનોગ્રાફિકસ હોય છે. તો ચાર કલાકનું કન્ટેન્ટ પર્સનલ વીડિયોનું બાર, કલાકનું કન્ટેન્ટ ફિલ્મ અને એક્વર્ટાઇઝમેન્ટ સ્તરનું અને સાત કલાકનું કન્ટેન્ટ મીડિયા ઇન્ડસ્ટ્રીને સ્પર્શતું હોય છે. જે સમયે ૪ જી કનેકટીવીટી આવશે એ સમયે ટેકસ્ટ કન્ટેન્ટ કરતાં પણ વિડિયો કન્ટેન્ટનું ચલણ વધી જશે અને એવું થશે ત્યારે એપ્લિકેશનની પહેલાં જ વીડિયો કોન્ફરન્સ શરૂ થઇ જશે.

મોબાઇલ.....

મોબાઇલની સાથે જો ઇન્ટરનેટની એક મિનિટની સરખામણી કરવાની આવે તો કહેવું પડે કે એક મિનિટમાં મોબાઇલ પર ૪૭૦૦૦ મોબાઇલ એપ્લિકેશન કાઉનલોક કરવામાં આવે છે. કાઉનલોક કરવામાં આવતી આ એપ્લિકેશન માટે દર એક મિનિટમાં આઠ હજાર મોબાઇલ કસ્ટમર ૩ જી કનેકશન સાથે વીડિયો જુએ છે. અને આ એક જ મિનિટ દરમિયાન ૪૮ લાખ વાકયની મોબાઇલ એપ્લિકેશનથી ચેટ થાય છે.

મજાની વાત એ છે કે ચેટ દરમિયાન ઉપયોગ કરવામાં આવેલા ૧૮,૦૦૦ વાક્યોમાં પ્રેમનો એકરાર કરવામાં આવે તો ૧૨,૦૦૦ લોકો બ્રેકઅપ કરતાં હોય છે. ઇન્ટરનેટનો આ પ્રતાપ છે. અને આ પ્રતાપના ભાગરૂપે જ ઇન્ટરનેટની એક મિનિટ દરમિયાન દુનિયાભરમાં ૧૭ મેરેજ એવા થાય છે કે જેમાં મોબાઇલ ચેટ બોકસ મહત્ત્વનો ભાગ ભજવ્યો હોય અને બે વ્યક્તિને એક કરવાનું કામ કર્યું હોય.

પટેલ અરવિંદ એ.

ટી.વાચ.બી.એસ.સી.

ન≒**∺ જુવનમાં લાગશૅ અધુરપ આધ્યાત્મ વિના

બાળપણ માણી લેવું ને યુવાનીમાં કશુંક મેળવી લેવું, પછી એમ ન થાય કે, જીવનમાં કશુંક ઘટે છે. સમયચક્રની એવી વિટંબણા છે કે, ન કરવાનું થઇ જાય ને, કરવાનું બાકી રહી જાય છે. પછી એમ થાય છે કે, હજુ પણ જીવનમાં કશુંક ઘટે છે. નજીવા સ્વાર્થ ને ખાતર, પોતાના ખોટા અહ્મને પોષવા, સંબંધોનો કચ્ચરઘાણ વાળીએ ત્યારે, એમ થાય છે કે હજુ કાંઇક ઘટે છે. સમગ્ર પૃથ્વીને જીતનાર, સિકંદર પણ તેના અંત સમચે, એમ કહેતો કે હજુ કાંઇક ઘટે છે. નહીં જીવનમાં સમાધાન આધ્યાત્મ વગર, નહીંતો જીવનભર લાગશે જીવનમાં કંઇક ઘટે છે.

પંચાલ પરેશ કે.

"સ્વામી"

ભૌતિકશાસ્ત્ર વિભાગ

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પીળાં ગુલાબનાં ફૂલો

પરદેશની આ વાત. એક સ્ત્રીનો પતિ એને ખૂબ જ ચાહતો હતો. એમનાં લગ્નની દરેક વર્ષગાંઠ એટલે કે ઍનિવર્સરી નિમિત્તે એ તેને ગમતાં પીળાં ગુલાબનાં ફૂલોનો ગુલદસ્તો સવારનાં પહોરમાં જ ભેટ આપતો. ફૂલોની દુકાનવાળો દર ઍનિવર્સરીના રોજ સવારમાં જ એ ફૂલો આપી જાય તેવી વ્યવસ્થા એણે કરેલી. પેલી સ્ત્રીને આ બધું અત્યંત ગમતું. એ પોતાની જાતને ખૂબ સુખી ગણતી.

એક દિવસ એના પતિને પેટમાં દુખાવા સાથે ઊલટીઓ શરૂ થઇ. એને હોસ્પિટલમાં દાખલ કરવામાં આવ્યો. તપાસને અંતે નિદાન થયું કે એને સ્વાદુપિંડનું કેન્સર થયું છે અને આયુષ્ય હવે ફકત ૧૫ કે ૨૦ દિવસનું જ છે. દંપતી અચાનક લાગેલ આ આંચકાથી આઘાતમાં સરી ગયું, પરંતુ પતિએ વાસ્તવિકતાને જલદી સ્વિકારી લીધી. હોસ્પિટલમાં રહ્યો તેટલા દિવસ એણે પત્નીને પોતાની પાછળ વિલાપ ન કરવા અને જિંદગીની હકીકતોનો ન ગમતી હોય તો પણ સ્વીકાર કરવા ખૂબ સમજાવ્યું. આખરે થોડા દિવસ બાદ એણે દૃનિયામાંથી વિદાય લીધી.

એના મૃત્યના બરાબર એક મહિના બાદ એમની ઍનિવર્સરી - લગ્નની વર્ષગાંઠ આવતી હતી.

ઍનિવર્સરીના દિવસે સવારથી જ પેલી સ્ત્રી ઉદાસ હતી. પોતાનો પતિ જીવતો હોત તો આ સમચે એણે પેલા કૂલવાળાને ત્યાં બુક કરાવેલો પીળાં ગુલાબનાં કૂલનો ગુલદસ્તો કચારનો આવી ગયો હોત. કેવા સરસ હતા એ દિવસો! એની આંખો આંસુથી ઊભરાઇ ગઇ. બરાબર એ જ સમચે દરવાજો ખખડચો. એણે બારણું ખોલ્યું. જુએ છે તો પીળાં ગુલાબનાં ફૂલનો ગુલદસ્તો લઇને ફૂલોની દુકાનનો માણસ ઊભો હતો. 'બ્હેન! આ તમારા લગ્નની વરસગાંઠ નિમિત્તે તમારા પતિ તરફથી ભેટરૂપે છે.' એટલું કહીને એ માણસ તો જતો રહ્યો. એક ક્ષણ માટે પોતાની ગમતી ભેટ અને ગમતાં ફૂલો જોઇને એને ખૂબ જ હર્ષ થયો. પણ તરત જ પોતાનો પ્રેમાળ પતિ સાંભળી આવ્યો અને દિલ ઉદાસીનતાથી ભરાઇ ગયું, પણ એને વિચિત્ર વાત એ લાગી કે આ વરસે તે પોતાનો પતિ હયાત નથી તો પછી તો ફૂલોનો ઓર્ડર કોણે આપ્યો? કદાચ એના અવસાનની જાણ દુકાનદારને ન હોય અને દર વરસની માફક આ વખતે એણે એમના ફૂલો મોકલી દીધાં હોય એવું બની શકે એમ એણે માની લીધું.

આ વાતને બરાબર એક વરસ વીતી ગયું. પેલી સ્ત્રીથી કોઇ પણ રીતે પોતાનો દિવંગત પતિ ભૂલી જ નહોતો શકાતો અને આમેય પોતાના પ્રિય પાત્રને ભૂલવા માટે એક જિંદગી પણ નાની પડે છે તો અહીં તો હજુ એક વરસ જ પસાર થયું હતું.

એમ કરતાં એમના લગ્નની વર્ષગાંઠ આવી લાગી. પીળાં ગુલાબનાં ફૂલના ગુલદસ્તાને એ હજુ ચાદ જ કરી રહી હતી ત્યાં જ ડોરબેલ વાગી. પેલી સ્ત્રીએ બારણું ખોલ્યું જોયું તો એ જ ફૂલોનો દુકાનવાળો માણસ ગુલદસ્તો લઈને હાજર હતો! 'મેડમ! તમારી ઍનિવર્સરી નિમિત્તે આ તમારા પતિ તરફથી ભેટ છે. સ્વીકારો!' એટલું કહીને પેલો માણસ તો જતો રહ્યો.

પેલી સ્ત્રીને પોતાનાં મનગમતાં કૂલોને જોઈને આનંદ તો ખૂબ જ થયો, પરંતુ સાથોસાથ આ વખતે તો દુકાનદાર પર દાઝ પણ ચડી. ગયા વરસે ફૂલો આવ્યા પછી એણે દુકાનના માલિકને જાણ કરેલી આ કે પોતાના પતિનું અવસાન થયેલ છે. તેમ છતાં આ રીતે ફૂલો મોકલવાં તે બદમાશી જ કહેવાય. કદાય ફૂલોની દુકાનવાળો પોતાની મશ્કરી તો નહીં કરતો હોય ને ? ગુસ્સાથી એણે પેલા દુકાનદારને ફોન જોડયો. પૂછયું કે : 'આ પીળાં ગુલાબનાં ફૂલો મોકલવાનું તમને કોણે કહ્યું ? શું તમને જાણ નથી કે મારા પતિ હવે આ દુનિયામાં નથી ? તો પછી એ સ્વર્ગસ્થ માણસના નામે ફૂલો મોકલવાં એ મશ્કરી સમાન નથી ?' …. એ રાતીપીળી થઇ ગઇ હતી.

'માફ કરજો મેડમ !' ફૂલોની દુકાનવાળો બોલ્યો. પરંતુ આપના પતિએ એમને કેન્સર છે એવું નિદાન થયાના બીજા જ દિવસે આપ જયારે ઘરે ગયાં હતાં ત્યારે મને બોલાવીને આવો એક ખાસ ઓર્ડર નોંધાવી દીધો હતો અને એ મુજબ મારે દરેક વરસ આ તારીખે - કે જે આપનાં લગ્નની ઍનિવર્સરી છે - એક પીળાં ગુલાબના ફૂલનો ગુલદસ્તો આપને ત્યાં મોકલવાનો હતો. એટલે જ દર વરસે આ તારીખે છેલ્લાં બે વરસથી હું આપને આ ફુલો મોકલી રહ્યો છું. આ વાત એમણે આપ પૂછો તો જ મારે બતાવવી એવું કહેલું એટલે મેં આપને જાણ નહોતી કરી. જો આપે આજે કૂલોને ધ્યાનથી જોયાં હોત તો ખ્યાલ આવી જ જાત કે મેં ફૂલોની વચ્ચે એક કાર્ડ રાખેલું છે. આ કાર્ડ આપના પતિ એમના હાથે લખી ગયા હતા. જે મારે તમને એમના મૃત્યુના બરાબર એક વરસ પછીની ઍનિવર્સરીના દિવસે એટલે કે આજે મોકલવાનું હતું. આ એ વાંચી જજો. પછી પણ આપને એવું લાગે કે અમારાથી કચાંચ ભૂલ થઇ છે કે અમારા કાર્ચથી આપની લાગણી દુભાઇ છે તો ક્ષમા માંગીએ છીએ...

પેલી સ્ત્રી નવાઇ પામી ગઇ. એનો બધો જ ગુસ્સો શમી ગયો. એણે દુકાનદારનો આભાર માન્યો અને પોતાના ગુસ્સા માટે માફી પણ માંગી. પછી એણે પેલાં ફૂલોની વચ્ચે રહેલું, એના પતિએ જાતે લખેલ કાર્ડ શોધી કાઢ્યું. કાર્ડ એના પતિએ મૃત્યુના થોડા દિવસ અગાઉ જ લખેલું હતું.

કાર્ડમાં લખ્યું હતું : પ્રિચે,

'આજે મારી વિદાયને બરાબર એક વરસ થયું હશે. આશા રાખું છે કે ભગવાને તને મારા ન હોવાનું દુઃખ સહન કરવાની શક્તિ જરૂર આપી હશે. હું સમજી શકું છું કે આ રીતે એકલા પડવું એ કેટલું દુઃખદ હોઇ શકે છે. તારી જગ્યાએ હું હોઉં તો મારી શું દશા થાય તે હું કલ્પી પણ નથી શકતો.'

'પણ પ્રિચે ! આપણે જે કંઇ ક્ષણો જોડે ગુજારી હતી એ દુનિયાની સૌથી અદ્ભુત ક્ષણો હતી. દુનિયા ત્યારે કેટલી સુંદર અને સરસ લાગી હતી ! સાચું કહું ? તું મને મારી પત્ની કરતાં મારી પ્રેમિકા કે એક ઉત્તમ મિત્ર હો એવું જ લાગ્યું છે હંમેશાં ! આ બધા વિશે હું વધારે નહીં લખી શકું. મારી પાસે શબ્દો પણ ઓછા પડતા હોચ તેવું લાગે છે. હજું એક જ વરસ થયું છે એટલે મારા જવાની ઘટના હજુ સાવ તાજી હશે.'

'પરંતુ મારે તને એક વિનંતી કરવાની છે અને એ જ આ પત્રનું પ્રચોજન છે. તું હવે તારી ખાતર નહીં તો મારી ખાતર પણ શોક ન કરીશ. આ દિવસથી તારી જાતને મારી ચાદથી દુઃખી ન કરવાનું તારે મને વચન આપવાનું છે. દું તને અંત્યત ચાહું છું અને સદા તારી સાથે જ રહીશ એની પ્રતિતિ તને થાય તે માટે આ પીળાં ગુલાબનાં ફૂલનો ગુલદસ્તો તને દર વર્ષે આ દિવસે મળી જાય તેવી વ્યવસ્થા કરતો જાઉં છું. તું હવેથી એક જિંદગી શરૂ કર. બાકી બધું હવે ભૂલી જા. તારી રીતે તું એક નવી જિંદગી શરૂ કરે અને એને સારી રીતે ગુજારે એવી મારી તમન્ના છે અને ભગવાન તને એમાં જરૂર મદદ કરશે.'

'હા ! આ ફૂલો માટે મેં વરસો સુધીના એડવાન્સ પૈસા આપી દીધાં છે. એ ફૂલો દર વરસે આ તારીખે આવી જ જશે ! અને જે દિવસે તું પણ મને મળવા નીકળી પડીશ એ દિવસે છેલ્લી વખત એ માણસ આ પીળાં ફૂલોને આપણે બન્ને જણાં જયાં સૂતાં હઈશું ત્યાં મૂકી જશે.'

'તું તારી બાકીની જિંદગી ખૂબ જ સરસ રીતે વિતાવે એવી શુભેચ્છાઓ સાથે અને ખૂબ જ વહાલ સાથે.

'પેલી સ્ત્રીના પ્રેમઅશ્રુઓથી કાગળ પરના અક્ષરો ઓગળવા માંડચા !

પટેલ બંસી એમ.

ટી.વાય.બી.એસ.સી.





ઘણા બધા પ્રશ્નોથી ધેરાચેલા માણસ શું જાણતો હોય છે કે એને જે જવાબ મળે છે એમાં કેટલી સત્યતા રહેલી છે અથવા તો શું જવાબ મળ્યા પછી પણ આપણે પ્રયત્ન કરીએ છીએ ખરા કે જે જવાબ આપણને મળ્યો છે તે સાચો છે કે ખોટો ? આપણે આપણા અનુભવોથી ધારણાઓ બનાવીએ છે, ધારણાઓ વિચારો નો સમુહ આપણા માટે સત્ય બની જાય છે. ક્યારેક અમુક વસ્તુ એ સત્યને ડગમગાવી દેતી હોય છે પરંતુ શું આપણે જાણતા હોઈએ છીએ ખરા ખરેખર મારા જીવનનું સત્ય શું છે ? મારા માટે શું સત્ય છે?

આપણે તો જ્યાં ઉભા છીએ કે આપણે જે રીતે આગળ ચાલતા રહીએ છે એજ સત્ય લાગે છે અને એ સાચું હોય છે પણ જ્યારે બીજા ના સત્યની વાતઆવે છે ત્યારે આપણે શું જાણવા પ્રયત્ન કરીએ છીએ કે ખરેખર સત્ય શું છે ! આપણે ખરેખર સત્ય સમજવા માટે બીજા વ્યક્તિની જગ્યાએ ઉભીને કે એ જેવી રીતે આગળ વધે છે એ સત્ય સમજવાની જરૂર હોય છે. જ્યારે આપણે એકબીજાના સત્યો સમજતા થઈએ ત્યારે વાસ્તવિકતાની ખબર પડે છે. હર એક વ્યક્તિ પોતાની જગ્યા પર સાચો જ હોય છે પરંતુ ક્યારેક એક સરળતાથી જો આપણે બીજાનું સત્ય જાણવા પ્રયત્ન કરીશું ત્યારે આપણા મોટાભાગના પ્રશ્નોના જવાબ આપણને આપોઆપ મળી જશે.

આપણે સતત એવું લાગતું રહે કે મારી વાત કોઇ સમજે હું કહું છું એ વાત નું સત્ય જાણે જયારે આપણે બીજા પાસેથી એવી અપેક્ષા રાખીએ કે એ મને સમજે ત્યારે આપણે એક વસ્તુ ભૂલી જતા હોઈએ છે કે જો હું એવું ઈચ્છું કે કોઇ મને સમજે ત્યારે મને થવું જોઇએ કે શું જેની પાસેથી મને સમજવાની અપેક્ષા રાખુ છું શું હું એને સમજવા પ્રયત્ન કરું છું ? જો મને જોઈએ કે મને સમજે તો પેલા મારે બીજાઓને સમજવા પ્રયત્ન કરવા જોયે. સત્યનું પણ કઈ એવું છે. એક બીજાને જાણતા રહીશું તો સત્ય પણ સમજતા રહીશું.

આજનો આપણને થતો મોટો પ્રશ્ન, એણે મને call કેમ ના કર્યો હું એને હર વખતે call કરું છું એ મને call નથી કરતો આવી નાની વાત ને આપણે કેટલી મોટી બનાવી દઈએ છીએ, અરે દોસ્ત, તું એની પરિસ્થિતિ તો સમજવા પ્રયત્ન કર, કદાચ એ ક્યાંચ બહાર હોચ, કદાચ એ વાંચતો હોઈ, કદાચ એના પરિવારમાં કંઈ બન્યુ હોઈ, એને કોઇ પરિસ્થિતિ ને આધીન થઇને તને call ના કર્યો હોઇ, પરંતુ આપણે આપણું જ જોવું હોય છે, બસ એને મને call ના કર્યો તો હું પણ હવે call નહી કરું કે એની જોડે વાત નહી કરું, આટલી નાની વાત જોવા જાઈએ તો બંન્ને સાચા કેમ કે ક્યારેક અમુક call ની પણ જુરંર હોય છે, બસ એકબીજાની પરિસ્થિતિ સમજવાની જરૂર છે, એ સમજાય તો આવા પ્રશ્નો રહે ખરા ?

સત્યની શોધમાં કરતા આપણે એ ખબર નથી હોતી કે આપણે જ એક સત્ય છીએ પ્રશ્નોના જવાબ શોધવામાં આપણે એ ભૂલી જ જઇએ છીએ કે એ પ્રશ્નોમાં જ જવાબ છે બીજે ક્યાંય નિંદ. ખરેખર સત્ય એજ છે કે જયાં સત્યતા છે જયાં પવિત્રતા છે જયાં નિસ્વાર્થતા છે ખરેખર સાચો ધર્મ ત્યાં સત્ય છે.

અંકિત ગોરાડ

એસ.વાય.બી.એસ.સી.





જીવનમાં વલણનું મહત્વ

સમય એ જીવન નો અમૂલ્ય ખજાનો છે. આપણે જેને પામી નથી શકતા તે સમય છે. કાળ સરી પડે છે માનવી ત્યાંની ત્યાં રહી જાય છે.

સરકી જાયે પલ કાળતણું જાણે કે એ તો ઝરમર વરસે જલ સરકી જાયે પલ મહાભારત કાળથી સમય સરી જાય છે પરંતુ આપણું વલણ…. માનવી હંમેશા સમયને સાથે લઈને ચાલતો હોય છે.

Time Treasure every movment that you have

જીવન માં બનતી દરેક ઘટના સમય સાથે સરી જાય છે. This will to pass આ પળ પણ પસાર થઇ જશે. માટે પ્રત્યેક ક્ષણની ચિંતા કર્યા વગર તેને આનંદથી માણવી જોઇએ. દુનિયાની સાથે ચાલનાર વ્યક્તિ હંમેશા નિતનવીન સકળતાઓને આંબે છે.

આપણી પ્રત્યેક સવાર ૮૬૪૦૦ સેકન્ડ નિત્ય આનંદ લઈને આવે છે. જે વ્યક્તિ લાભ લે છે તે ઉન્નત બને છે. આવતીકાલ પર કાર્ચ છોડનાર વ્યક્તિ હંમેશા દુઃખી થાય છે. જે સમય મળ્યો છે તેનો બને તેટલો સદ્ઉપયોગ કરી લો પછી પૈસા ખર્ચે પણ તે મળવાનો નથી અને ગયેલો સમય પાછો હાથમાં આવવાનો નથી.

કલ ખેલમેં હમ હો ન હો ગર્દિશ મેં તારે રહેંગે સદા

જીવનમાં વલણનું મુલ્ય બદલવા સમયની સાથે Positive attitude ને જીવનમાં ઉતારવું જ રહ્યું અંગ્રેજી આલ્ફાબેટ્સનું મહત્વ આપણી મહેનત જ્ઞાન અને નસીબ સાથે સંકળાયેલું છે. કુલ ૨૬ અંગ્રેજી મુળાક્ષરો છે.

ABCDE F GH I J K L M N O P Q R S T U V W X Y Z 12 34 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26

સખત મહેનત = H+A+R+D+W+O+R+K

= 8+1+18+4+23+15+18+14

= 98%

হাাল = K+N+O+W+L+E+D+G+E

= 11+14+15+23+12+5+4+7+5

= 96%

นิ้ม = L+O+V+E

= 12+15+22+5

= 54%

ਰ**ਮੀ**બ = L+U+C+K

= 12++21+3+11

=47%

ઉપરોક્તમાંથી એક પણ જીવનને ૧૦૦% સંપૂર્ણ બનાવી શકતા નથી. તો શું પૈસો નેતૃત્વ જીવનને ૧૦૦% બનાવે છે? ના જીવનના પ્રત્યેક પ્રશ્লોનો ઉકેલ તમારા વલણ પર રહેલો છે.

તે છે Attitude. જીવનમાં Positive Attitude ૧૦૦% સફળતા અપાવે છે. કારણ કે

$$A+T+T+I+T+U+D+E$$
 = 1+20+20+9+20+21+4+5
= 100 %

Therefore be positive સમય અને વલણનું ઘ્યાન રાખી તેને જાળવી ચલાવનાર માનવી જીવનમાં ૧૦૦% સળફતા હાંસલ કરે છે. માંહાલો જાગૃત રાખીશું તો પ્રેમ, જ્ઞાન, મહેનત, નસીબ, વલણ દ્વારા ૧૦૦% તરફ પરીવર્તન થશે.

Time and tide wait for none

એશા એમ, વ્યાસ

એસ.વાય.બી.એસ.સી.





જીવન માં સમયનું મહત્વ

- જીવનમાં એક વર્ષનું મહત્વ સમજવું હોય તો એ વિદ્યાર્થી ને પૂછો જે એક વાર પોતાના અભ્યાસ ના કોઇ ધોરણમાં નિષ્ફળ નિવક્યો હોય.
- 🕙 💮 જીવનમાં એક મહિનાનું મહત્વ સમજવું હોય તો એ માં ને પુછો, જેનું બાળક એક મહિના પહેલા જનમ્યું હોય.
- 🕙 એક સપ્તાહનું મહત્વ સમજવું હોય તો એ નવીનવેલી નવોઢાને પૂછો, જેનો પતિ સુહાગરાત પછી ચાલ્યો ગયો હોય.
- એક દિવસનું મહત્વ સમજવું હોય તો તેને પુછો કે જે રોજ મહેનત કરીને પોતાનું પેટ ભરે છે અને તેને એક દિવસનું કામ ન મળ્યુ હોય.
- 🕙 એક કલાકનું મહત્વ સમજવું હોય તો તેને પુછો, જે ટ્રાફિકમાં ફસાઇ જવાથી પોતાનો ઇન્ટરવ્યું આપતા રહી ગયો હોય.
- 🕙 એક મિનિટનું મહત્વ સમજવું હોય તો તેને પૂછો, જેની ટ્રેન નજર સામે દસ ડગલા દુર થી છુટી ગઇ હોય.
- એક સેકન્ડનું મહત્વ સમજવું હોય તો તેને પુછો જેણે બેઇજિંગ ઓલમ્પિક રમતોત્સવમાં ગોલ્ડમેડલ જીતીને ન લાવી શક્યો હોય.

વ્હોરા મોહંમદકીબ.

એફ.વાય.બી.એસ.સી.



બનવું છે મને

કોઇ સારી વાતનું કારણ બનવું છે મને ઘડી બે ઘડી બીજાને મદદગાર બનવું છે મને સુખ અને દુઃખ સિક્કાની બે બાજુ માં તટસ્થ બનવું છે મને

સૌ વિચારતા પોતાનું બીજાની દરકાર કરનાર બનવું છે મને ભરતી ઓટ આવે અને જાય દરિયો પાર કરનાર બનવું છે મને આજે સર્વે ને ઉપયોગી આવિષ્કાર કરનાર બનવું છે મને

મોજશોખની દુનિયામાં રહી સાદગીનું પ્રતિક બનવું છે મને લાંચરૂશ્વતથી થી દૂર રહીને પ્રમાણિકતાનું ચિદ્ધ બનવુ છે મને જૂઠાણાથી દૂર રહી સત્યનું પ્રતિનિધિ બનવુ છે મને

આ બધાની પહેલા અદભૂત વ્યક્તિ બનવું છે મને



બે કાવ્યો

ઘકી બે ઘકી સદી વીતી પણ મારી નજરે તું આ ઘકી



રાજેશ્રી લિચા

એસ.વાય.બી.એસ.સી. (કેમેસ્ટ્રી)

પ્રકૃતિ

આવતાને જતાં મારે જ રસ્તે હું ક્યાં ખોવાઈ?

શોધું છું પોતાને કલરવ કરતા પંખીની ઉડાનમાં ને વેલીની હરિચાળીમાં, પુષ્પો પરની ઝાકળમાં નદીના વહેતા નીરમાં, સાગરની ઉંડાઇમાં આવતાને જતાં મારે જ રસ્તે હું ક્યાં ખોવાઇ?

શોધું છું હું પોતાને બદલતાં આ મોસમમાં ને સૂર્યોદયની તાજગીમાં, સૂર્યાસ્તની શાંતીમાં આકાશની વિશાળતામાં, તળેટીની છાચામાં આજે હું ખોવાઇ ગઇ છું

> આ વ્યસ્ત જીવનમાં જ્યાં પ્રકૃતિ શેષ છે.



બે કાવ્યો

થાય છે અસ્ત સૂર્ચ નયન સમી, કરવા માટે સૂર્ચોદય





... એ જીંદગી છે

મુશ્કેલીઓ તો ઘણી બધી આવે, એમાં પણ હસતા જ રહેવું એ જીંદગી છે. હંમેશા જીવનમાં ખુશી નથી હોતી દુઃખમાં પણ મજા કરવી એ જીંદગી છે. ભણતરનો ભાર તો હંમેશા રહેશે ક્યારેક મસ્તીમાં સમય પસાર કરવો એ જીંદગી છે. ક્યારેક આપણું ધારેલું થતું નથી પરંતુ અનहોની આવકારવી એ એ જીંદગી છે. અહીંચા કોઇ કોઇનું નથી હોતુ, છતાં બીજાને મળવાની ઇચ્છા એ જીંદગી છે. લોકો ક્યારેય પોતે પોતાની ભૂલ ના જુએ બીજાની ભૂલ જોઇ અંદાજ લગાવો એ જીંદગી છે. જે વસ્તુઓને હું માનું છું એ તમે ના પણ માનો એ જીંદગી છે. જેનાથી મને ખુશી મળે એ વાતથી બીજુ કોઇ દુઃખી થાય એ જીંદગી છે ઘણુ બધું છે આપણામાં, દ્વેષ, ઇર્ષા, પ્રેમ, અભિમાન એ જીંદગી છે. દું જે વાત કહું છું એ મારા પર પણ લાગુ પડે છે પરંતુ તો પણ કહું જ છુ કદાચ એ જ જીંદગી છે.

જતિન હિરાણી

એસ.વાચ.બી.એસ.સી. (કેમેસ્ટ્રી) ***

સ્વાર્થ ના સગાં

સ્વાર્થ માટે સૌ સગા થાય છે. સંબંધોના નામે દગા થાય છે. ક્યાં નિભાવે છે આજે દોસ્તી કોઇ દોસ્ત તો સૌ બેવફા થાય છે કરે છે સંકલ્પ સાથે રહેવાનો જીવનમાં જલ્દી એ જ જુદા થાય છે બનીને આવે છે. ઇન્સાન ખુદા અહીં આવીને ક્યાં પછી કોઇ ખુદા થાય છે ઘણા ચુગો થયા રામ ગયા ના તારા રામના નામે આજે રાવણ બધા થાય છે કરી નથી વફા દોસ્તે વર્ષોથી કદી ને કહે છે આ બધી તો વફા થયા આજે આજ તો ઇન્સાફ છે પ્રભુ તારો ગુનેગાર નહીં નિર્દોષ ને સજા થાય છે.

જતિન હિરાણી

એસ.વાચ.બી.એસ.સી. (કેમેસ્ટ્રી)



સબંધૉ ની સરવાણી

કેટલાક સબંધો જીવન સાથે વણાઇ જાય છે, કેટલીક ચાદો સ્વપ્ન બની ને રહી જાય છે, લાખો મુસાફર પસાર થઇ જાય તો પણ કોઇકના પગલા કાચમ માટે ચાદ રહી જાચ છે

જીંદગી મળવી એ નસીબની વાત છે મોત મળવું એ સમયની વાત છે પણ મોત પછી પણ કોઇના દિલમાં જીવતા રહેવું એ જીંદગીમાં કરેલા કર્મની વાત છે

પાનખરમાં વસંત થવુ મને ગમે છે ચાદોની વર્ષામાં ભીંજાવુ મને ગમે છે. આંખ ભીની તો કાચમ રહે છે તો પણ કોઇના માટે હસતા રહેવું ગમે છે

મોકલું છું મીઠી ચાદ ક્યાંક સાચવી રાખજો મિત્ર હંમેશા અમુલ્ય છે યાદ રાખજો તડકામાં છાચો ના લાવી શકે તો કંઇ નહિ ખુલ્લા પગે તમારી સાથે ચાલશે એ જ ચાદ રાખજો

જીવનમાં સમયની સાથે ચાલવુ પડે છે. જે મંજુર ન હોચ, છતાં પણ તે જ કરવું પડે છે.

> રોવાનો અધિકાર પણ નથી આપતું આ જગત ક્યારેક લોકોને બતાવવા માટે હસવું પણ પડે છે.

આંસુ સુકાચા પછી જે મળવા આવે.. એ સબંધ છે, ને... આંસુ પહેલા મળવા આવે... એ પ્રેમ છે દરેક ઘરનું સરનામું તો હોય પણ... ગમતા સરનામે ઘર બની જાય એ જીવન છે.

મિલાપ સોલંકી

એસ.વાચ.બી.એસ.સી. (ક્રેમેસ્ટ્રી)





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Mr. Abhishek Chauhan Cleared UPSC examination at last year

