

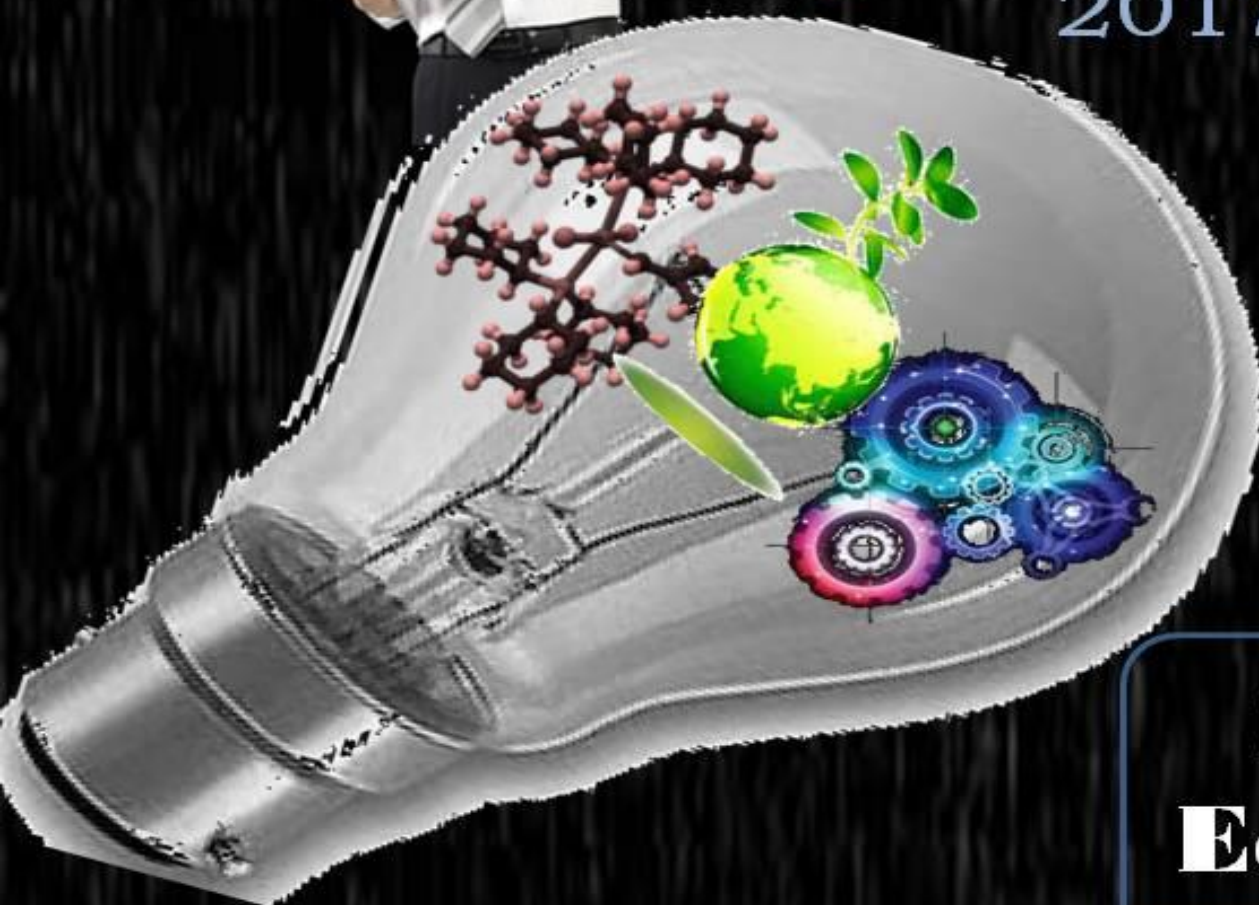


SHROFF S. R. ROTARY INSTITUTE OF CHEMICAL TECHNOLOGY

*Kathan*  
ज्ञानम् यजामहे ।



October  
2017



**22<sup>nd</sup>**  
**Edition**

## **KATHAN – EDITORIAL BOARD**

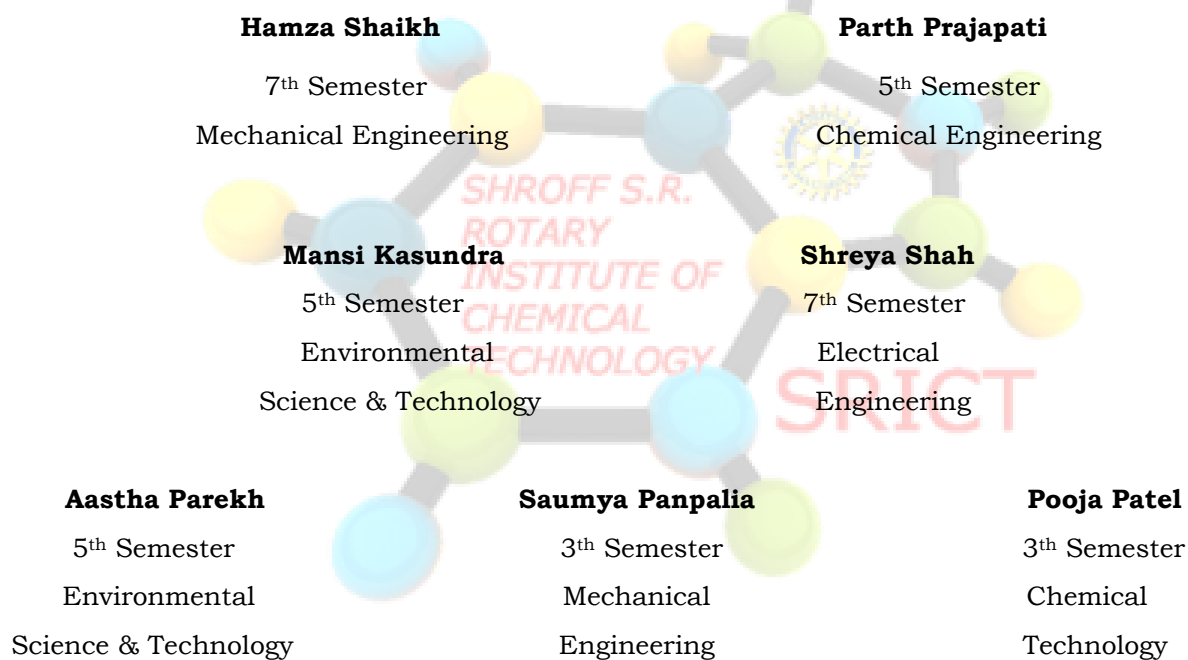
SHRIKANT J. WAGH

PRABIR CHANDRA PADHY

AMIT GALPHADE

ANJALI NAIR

**Especially thankful for the enthusiastic and dedicated efforts of:-**



### **ANKLESHWAR ROTARY EDUCATION SOCIETY**

**Chairperson:** Mrs. Sandra R. Shroff  
**Vice Chairman:** Rtn. Ashok A. Panjwani  
**Secretary:** Rtn. Angiras H. Shukla  
**Treasurer:** Rtn. Kishore S. Surti

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## EDITORIAL BOARD MESSAGE

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It gives us a great pleasure to put 22<sup>nd</sup> issue of Kathan in your hands. This is special issue. This issue marks the completion of successful 5 years of journey of Kathan. This has been great journey. The support which we have received from everybody has been fabulous. We take this occasion to thank everyone for the constant support.

Coming back to issue, as always, this issue gives the glimpses of the activities at SRICT. The current semester has been packed with lot of exciting activities and events and lot to come. SRICT is moving forward and is gathering the speed.

We value your feedback and once again would like to thank all those who have taken pain and have been our guide over the journey. To finish, we would like to present one small story.

Once there was a seminar of popular speaker organized at some college. At the beginning of his speech, he waved 500 Rupee note to the audience and asked who wanted it. All the hands went up.

“I am going to give 500 Rupees to one of you,” he said and continued “but before that let me do this” and he crumbled the note. He continued “Now who wants it?” Without any exception, all the hands went up.

“Now let me do this” he said and dropped the 500 Rupee note on the ground and stomped on it with his shoes. He picked it up, and showed it to the crowd. The note was crumpled and all dirty. “Now, which of you wants it?” All hands went up.

“Dear all, I have demonstrated you a very important lesson. No matter what I did to the money, you still wanted it because it did not decrease in value. It was still worth 500 Rupees” he said and continued “Many times in our lives, life crumples us and grinds us into the dirt. We make bad decisions or deal with poor circumstances. We feel worthless. But no matter what has happened or what will happen, you will never loose your value. You are special – Don’t ever forget it!”

Thanks to all readers and enjoy reading to explore the unknown info....!!!

Our special thanks go to Mr. Sunil Sharda for sharing his invaluable views with us.

Happy reading.

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## FROM PRINCIPAL'S DESK

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### BEST WISHES ...

Twenty two publications consistently published over a period of five years by a team of faculty members and students of SRICT speak a lot about the culture of the institute. “Innovation”, if is the word, Kathan stands for it, “creativity”, if is the word, Kathan signifies it, “evolution”, if is the word, Kathan takes it in its stride, and “team work”, if is the word, Kathan does it.

Kathan nucleated as a small inconspicuous star on the canopy of the institute five years ago, went largely unnoticed by many a rank and file but continuously growing and evolving through its numerous content specs, and finally making its presence felt to all, not only in the institute, but across many industries. The responses and comments on its various aspects from our worthy readers, thoughtful changes made by the organizing / editorial committee, continuous follow up by every editor-in-chief, and the intelligent support given by faculty/staff/student members of SRICT have brought Kathan to this respectable status. Over the years, Kathan has unknowingly and inadvertently become a fathoming gauge of SRICT's progressive activities. A cursory look over the past few issues will make it clear.

I am glad to witness, participate, and contribute to the evolutionary process of Kathan. While I am feeling happy and elated by the five-year completion event of Kathan, I wish for its long and successful journey.

Shrikant J Wagh



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## A MESSAGE FROM AN INDUSTRY PERSON: संदेश

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**Sunil G Sharda –**

**General Manager – Eskay Iodine Pvt. Ltd.**

I thank SRICT for this opportunity to reach out to all students and staff of SRICT through this article in the tri-monthly newsletter “Kathan”.

I was at the college recently to attend the Valedictory function of the 5<sup>th</sup> Annual event Technovation and was happy to note that, the event has now become a National event. It's heartening to note that Ankleshwar which has until now been known in India primarily, as an Industrial hub is now also getting noticed for its educational institutes.

But as we all know, well begun is only half done. It's now all the more important for all of you to consistently maintain and improve on the image built till date.

The teachers are the true power behind this achievement. And as is being said, with great power comes greater responsibilities. It's up to the teachers to keep raising the bar, in terms of the learning being imparted to the future entrepreneurs and intrapreneurs of India.

I have had the opportunity to work with a few of the students who have passed out from SRICT, and also interview quite a few candidates. I would like to stress here, that efforts have to be made from the students to **actually learn** what is being taught. The teachings should not be a medium to score marks, but a medium to help you understand and be able to implement the same in your professional life.

**Eskay Iodine Pvt. Ltd.** has been always open for the students of SRICT to come and experience the working of the Industry. I would be glad to organise on site workshop for students who would be interested in learning the best practices in API Manufacturing.

Wish you all a very Happy Festive Season Ahead.

Best Regards,

**Sunil G Sharda**

**General Manager - Eskay Iodine Pvt. L**

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## JOURNEY OF KATHAN

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KATHAN! ...

Kathan is a quarterly publication of SRICT that is published four times a year, at three months intervals. KATHAN was started with an intent to reach all the stake holders i.e., students, parents, donors, well – wishers, faculty members, staff and all friends who are helping SRICT directly or indirectly. This magazine is a platform to exhibit the literary skills and innovative ideas of the teachers and the students. It is an opportunity to gather together and organize ideas that are worth sharing with each other at large.

The mountain looks very far away. But as you walk toward it, step by step, you reach it fairly quickly. One small step holds great power and this one small step was the publication of the first issue of kathan. It was published on 2<sup>nd</sup> July, 2012. Starting something new or making a big change requires effort, persistence and motivation. Real change must start from individual initiative. Early few issues were published solely by the efforts of very few people which included only faculties and no student member.

They all worked together to make kathan a centre of excellence and to grab attention of the readers as well as writers, who are in search of a space to express their views. And then, there came an involvement of a student in the form of an article. Involvement of one brings along many others. Kathan was started with a step towards confidence – block building to reinforce the faith villa, and this involvement proved its purpose, that is, creating a literature window for the creativity of the youth.

Kathan provided an opportunity to display the budding writer or artist within them. An individual took an initiative by contributing an article which led to the involvement of many individuals as the committee members. As per Ratan Tata's saying: "If you want to go fast, walk alone, but if you want to go far, walk together."

Everyone came along and worked together, may they be committee members or the contributors who contributed in any form in the issue and, the journal became truly literary, creative document of talents of them. This self – motivated bunch of enthusiasts had greatly helped in giving the shape of issues. They all tried to innovate, improvise and put forth something new, more interesting and useful in its each issue.

Starting from the 1<sup>st</sup> to 21<sup>st</sup> issue, Kathan is expanding in its content, substance and variety. It kept on improving with each successive issue. Now, it

can be considered as the perfect blend of arts, science, technology and entertainment. Also, this endeavor brought everyone closer to understand each other better. Kathan has proved to be a well organized effort of all the members involved in it.

This magazine is like a mirror which reflects the clear picture of all sorts of activities undertaken by the institution and develops writing skills among students and faculties. KATHAN has successfully completed its five years, but success is an ongoing journey. Hard work and determination are the two most important factors in the pursuit of a successful journey. Also, this is not the end. It is not even the beginning of the end. But it is, perhaps, the end of the beginning.





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## SRICT NEWS...

श्रुति एवं प्रवृत्ति।

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### POSTER COMPETITION

[CHEMICAL ENGG DEPARTMENT]

#### **Poster competition and visit of Prof Parmeshwar De (National President of IChE)**

Professor Parmeshwar De, President of IICHE and Mr. Deepak Datta, honorary secretary of IICHE visited the labs of Chemical Engineering department. There was also event of IICHE poster presentation on same day. Topics were 'Renewable Energy' for 2<sup>nd</sup> year Chemical engineering students, 'Solid waste management' for 3<sup>rd</sup> year and 'Advance Separation Techniques' for 4<sup>th</sup> year Chemical engineering students. Total 67 students participated and 21 posters were presented. Newsletter of the department was also published by Professor.



### CHEM - O - QUIZ

[CHEMICAL ENGG DEPARTMENT]

A Chemical Engineering and basic Chemistry based quiz was organized on 8 August 2017 where 46 groups from 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year participated consisting 3 members in a group.

#### **ROUND 1**

1st round was a written test round which was of 15 minutes. In this round all teams had to answer questionnaire. 8 groups were selected for 2nd round.

#### **ROUND 2**

2nd round was crossword puzzle round. The time period for this round was also 15 minutes. 4 groups were selected for the 3rd round.



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## VISHWAKARAMA POOJA

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[MECHANICAL ENGG DEPARTMENT]

Mechanical Engineering Department organized Vishwakarma pooja on 15<sup>th</sup> September 2017 at Workshop at SRICT campus on the auspicious occasion of “Engineers’ Day”, all faculty members, staff members and students of SRICT took part in pooja and got the blessings for health, Wealth and grand success in education field. It was really a spiritual atmosphere.



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## SEMINAR ON ENTREPRENEURSHIP AWARENESS

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[MECHANICAL ENGG DEPARTMENT]

### **“Seminar on Entrepreneurship Awareness under the banner of Institution of Engineers (India)”**

The Department of Mechanical Engineering organized Seminar on Entrepreneurship awareness under the banner of Institution of Engineers (India). Mechanical Engineering student chapter on Saturday, 5<sup>th</sup> August, 2017 in association with “Centre for Entrepreneurship Development” (CED), Government of Gujarat with an aim at creating awareness and guidance among students about various aspects of entrepreneurship while highlighting the merits of pursuing such a career option.

Student members of IEI of the Mechanical Engineering department attended the seminar. The students shown their interest to be Entrepreneur through this seminar & they realized that this kind of Seminar can be fruitful to them in future. This seminar aimed at to promote Start up India initiative started by Govt. of India.

The seminar started with introduction & welcome of speaker as Mr. Sandip Patel, Assistant project leader, CED, Gandhinagar.

He briefed all about the CED & its activities with importance.

The whole program was coordinated by Assistant professor Mr. Devang S Patel (Coordinator of IEI student chapter) accompanied with all faculties and supporting staffs of Mechanical engineering Department.



## INAUGURATION PROGRAM OF E- MAGAZINE “YANTRAM”

[MECHANICAL ENGG DEPARTMENT]

Mechanical engineering department organized an inauguration program of bi-annual E-magazine “Yantram” on 15<sup>th</sup>

September, 2017 at seminar hall-1 at SRICT campus in the presence of Dr. Vinesh Gada (Development Engineer, Siemens, Pune), Dr. Shrikant Wagh (The Principal, SRICT), Dr. Kalyan Sundaram (Professor, MED), Mr. Samir Jariwala (HoD, MED), other faculty members and students. The vote of thanks given by Mr. Vinesh Gada. Mr. Samir Jariwala, HoD, MED introduced and summarized the content of E-magazine “Yantram”. On the auspicious occasion of “Engineers day”, “Yantram” was unveiled by Dr. Vinesh Gada, Dr. Shrikant Wagh, Dr. Kalyan Sundaram, Mr. Shivang Ahir (Asst. Professor, MED) and Mr. Nishant Modi (Student, 5<sup>th</sup> sem MED).

## FACULTY TRAINING REPORT

[ELECTRICAL ENGG DEPARTMENT]

Mr Praful Chudasama, HOD ,DEE has attended a Two week training course on title **“Energy Auditor/Energy Manager Practitioner Course”** organized by Centre of excellence for training in Energy Efficiency, NATIONAL PRODUCTIVITY COUNCIL (Under Ministry of Commerce & Industry, GoI), in Dr. Ambedkar Institute of Productivity, Chennai from 17/7/2017 to 28/7/2017. The overall goal of that course was to raise the professional standards of



energy auditing professionals- both experienced and new.



## FACULTY DEVELOPMENT PROGRAM

[ELECTRICAL ENGG DEPARTMENT]

Mrs. G.Pradeepa, Assistant Professor, DEE has attended 4 days Faculty Development Program on title **“Open Design School”** organized by Gujarat Technological University, Ahmedabad from 28/6/2017 to 1/7/2017.

### DEE Meeting with Mentor

The Department of Electrical Engineering Faculties and staff members had a mentor meeting with **Mr. S.M.Takalkar, Director, Takalkar Power Engineering Consultancy Pvt. Ltd. Vadodara** on 24<sup>th</sup> August 2017. The discussion took place regarding

1. Academic improvements for faculties (Energy Manager, Energy Audit & Power Trading) - The Faculties are requested to take part in seminars / workshops related to the above said fields.
2. Selecting departmental electives according to industrial needs for students (Energy Management & Power Trading in Electrical Engineering curriculum) – to improve the knowledge of students related to current scenario.
3. Students training program (arranging Expert Lectures & Industrial Visit) related to Industrial Maintenance and Power Sharing.
4. Organizing seminar/ workshop for industry & academic persons related to Power Trading & Energy Management.
5. To encourage students to improve their communication skills.
6. To join with CSR (Corporate Social Responsibility) activities of well know reputed industries improve students ratio for admission in Electrical Engineering.
7. Mentor meeting with Final Year Students (Weaker & Brighter) is arranged and discussion took place

regarding results & placement activities.

8. He also motivated faculties to take part in project consultancy work in industries.



## OZONE DAY CELEBRATION

[ENVIRONMENTAL SCIENCE AND TECHNOLOGY]

## THALASSEMIA AWARENESS & TESTING CAMP

[MATHEMATICS, SCIENCE & HUMANITIES]

As per the guidelines of GTU, the parameters of social responsibility and awareness of health related issues of the students have been prioritized when SRICT organized “A camp of Thalassemia awareness & testing **\_Rakta Kundali\_**” The participants were also shown a 30 minutes video on Thalassemia Awareness. 166 students of 1st year were tested for Thalassemia at the Institute. Dr. Deepika Shah was the coordinator of the camp

Ozone day was celebrated in Shroff S R Rotary Institute of Chemical Technology with Gujarat Pollution control Board on 16th September 2017. Regional officer of Ankleshwar Region Shree R B Trivedi has remained present along with his team. From SRICT the Vice chairmen of ARES, Rtn Ashok Panjawani has remained present as a chief guest with Principal of SRICT Prof. Shrikant Wagh. Environmental Science and Technology Department hosted the whole program. Mr. Anil Choumal presented a very thought-provoking presentation about “Hole in Ozone”. Students of 7th EST and 1st EST had together presented a “Story of Ozone”, in which they have represented current, past and future scenario of Ozone. This year we are celebrating Ozone day for special purpose as for on the 30th year of Montreal protocol, a grand success story of environmental remedies’ is a step ahead to save the earth. Followed by this churning there is a



tree plantation takes place where various dignitaries have planted the tree at new hostel area.



The students of the school were informed about the facilities of the college along with various career options. The students showed their keen interest about their future.

## SAKSHATKAR

[MATHEMATICS, SCIENCE & HUMANITIES]

Students of Vidyamangal School, Kamrej visited SRICT on 16/9/2017. The students were informed about the facilities of the college along with various career options available at SRICT.



Total 275 students of (12th) Swaminarayan Gurukul School, Ankleshwar visited SRICT on 21<sup>st</sup> July, 2017.

## ELITE-2

[MATHEMATICS, SCIENCE & HUMANITIES]

English Language Improvement for Teaching Effectively-2 started on 14<sup>th</sup> February, with a target of 40 hrs. The concluding speech session was organized on 21<sup>st</sup> July, 2017. All the 11 faculty members who participated delivered motivating speeches on a wide range of topics and personalities like Narmada Samagra, GST, Digital India, Sakuntala Devi and Rachel Carson. The program was organized by the Department of Mathematics, Science and Humanities and was judged by Honorable Secretary ARES, Adv. Angiras Shukla and Principal, Professor Shrikant J Wagh and Dr. Purvi Naik.

## FELICITATION

[MATHEMATICS, SCIENCE & HUMINITIES]

**SRICT** has secured **2<sup>nd</sup>rank** among **109 Engineering colleges under GTU** in the recent results of 8th sem B E exams held in May 2017. This is the second time in succession when the institute has shown such an exemplary performance in B E exams. To felicitate the top scorers a program was organized by the Mathematics, Science & Humanities Department of SRICT on Friday, 30th June 2017. Our students once again proved that patience and perseverance have a magical effect before which difficulties disappear and obstacles vanish forever. It was a proud moment for all of us at SRICT, to see our students finally stand up on their feet and that too standing tall meritoriously.

### Batch2013:

	RESULT SUMMARY	RANK SUMMARY
1	TOTAL STUDENTS - 306	GTU RANK: 2 <sup>ND</sup> (OUT OF 109)
2	PASS: 299	SOUTH ZONE RANK: 1 <sup>ST</sup>

		OUT OF 18
3	FAIL: 7	CE: 1 <sup>ST</sup> OUT OF 16
4	CE: 98.08%	EE: 26 <sup>TH</sup> OUT OF 88
5	ME: 100%	ME: 1 <sup>ST</sup> OUT OF 101
6	EST: 100%	
7	EE: 92.19%	
8	CT: 98.55%	
	OVERALL: 97.71%	

The event was graced by the presence of honorable ARES Chairperson Mrs. Sandra Shroff, Vice Chairman Rtn. Ashok Panjwani, Rtn. Meera Panjwani Secretary Adv. Angiras Shukla, Technical Committee member Mr. Dileep Udas and Principal Professor Shrikant J Wagh.

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## TECHNOVATION 2K'17

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[ELECTRICAL ENGG DEPARTMENT]

Technovation, the Annual Fest of Shroff S R Rotary Institute of Chemical Technology started in 2013 under the banner of Sustainable Technology Mission, aims to promote technology, scientific thinking and innovation among the students. This time SRICT celebrated its Fifth National Level Technical Symposium on 15<sup>th</sup> & 16<sup>th</sup> September 2017.

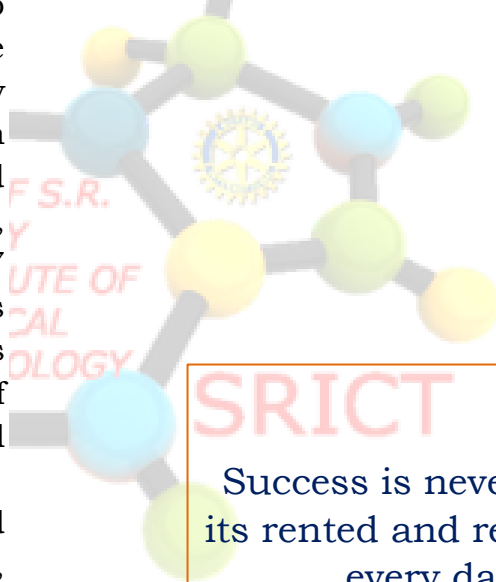
This year the participation was made open for other college students from Gujarat & different parts of country like Maharashtra, Rajasthan, Andhra Pradesh & Delhi. More than 2000 students comprising an outreach of more than 25 colleges participated in around 26 events like Robo Soccer, Electro-Labyrinth, Circuitrix, Robo Ignitors, Cantilivo, Chem-unified, Chem-o-Race Aqua-thrust, Chemical synthesis, Junkyard, Chem-e-car, Fun Zone, Technical Workshops (PLC, Industrial Safety, MATLAB & Solid Works) and lot more.

The Technical Symposium was inaugurated by the hands of the Chief Guest Dr. Atul Kumar Gupta, Sr.Vice President Operation, PI Industries Ltd, Panoli in a very distinctive Mechanism. The theme for the technical event was 'Innovative India'. Technovation strikes the right

chord in a magnitude so large that it astounds and amazes everybody.

Dr. Shrikant J Wagh, Principal delivered the welcome speech during inaugural session. Mr. Praful P Chudasama, HOD, EE briefed about the Technovation 2017. The Souvenir third edition of Technovation 2017 i.e., "TECHNOPHILE" was unveiled on the inaugural session. Secretary, ARES, Mr. Angiras Shukla conveyed his best wishes for the Event. Vice chairman, ARES, Mr. Ashok Panjwani addressed the gathering emphasizing the need of our theme 'Innovative India'. He also appreciated the efforts made by the Technovation team. Guest of Honour Dr. P H Tandel, Chairman, The Institution of Engineers (India), South Gujarat, Local Center, Surat addressed the students about the benefits of Student Chapter (IEI) and also appreciated the students endeavour. Chief Guest Dr. Atul Kumar Gupta, Sr.Vice President Operation, PI Industries Ltd, Panoli, addressed the students how important are such Tech Fest and also he mentioned by participating like this event students skills are improved. He conveyed his best wishes to all the participants from Gujarat and other states also. Concluding his speech Dr. Atul Kumar Gupta declared Technovation 2017 officially opened.

Events were celebrated with great enthusiasm for the entire two days. Chief Guest of valedictory function Mr. Sunil G. Sharda, General Manager, Eskay Iodine Pvt. Ltd., Jhagadia GIDC, Bharuch. Dr. Shrikant J Wagh, Principal addressed during valedictory session. He emphasis on emerging field Biotechnology and its future magnification. Chief Guest of valedictory function Mr. Sunil G. Sharda appreciated the students & faculty efforts in the success of this event. He addressed the students to proceed in right direction to preserve our environment. During valedictory function, winners were given cash prizes worth Rs. 75,500 and certificates. Mr. Sourav Choubey, Coordinator, Technovation 2017 proposed vote of thanks. This National Level Technical Event was coordinated by the Department of electrical Engineering with the full support of ARES Management. Overall it proved to be a good platform for students to interact, share and exchange innovative and technical ideas.



Success is never owned  
its rented and rent is due  
every day.

### Event details & Winners

SR. NO.	Event Name	Winning Position	Winning Amount	Student Name	College Name
1	AquaStrike	1	RS.2500	KAUSHAL PATEL	SRICT
2				JAYDEEP PATEL	SRICT
3				HEM LAD	SRICT
4		2	Rs.1500	YASH GOEL	SRICT
5				TALATI DIPAL	SRICT
6				MODI SHIVANI	SRICT
7		3	Rs.1000	MAYUR CHAUDHARY	SRICT
8				GARVIT TRIVADI	SRICT
9				MAYUR CHAUDHARI	SRICT
10	Chemorace	1	RS.2500	VISHAL MAKADIYA	SRICT
11				JATIN AHIR	SRICT
12		2	Rs.1500	VIREN NASIT	SRICT
13				BHARGAV MANHAR	SRICT
14	Chemunified	1	Rs.2500	MEETKUMAR ROJIVADIYA	SRICT
15				HARDIK SHIROYA	SRICT
16				SAGAR VARMA	SRICT
17		2	Rs.1500	RIDDHI CHANDEGANA	SRICT
18				TARUN CHAUHAN	SRICT
19				KRUNALSINH CHAUHAN	SRICT



20		3	Rs.750	KATARIYA PRADIP	GEC Bharuch
21				BHAUTIK JOLGARIYA	GEC Bharuch
22				HIMANI PATEL	GEC Bharuch
23	Chermengence	1	Rs.2500	YASH GOEL	SRICT
24				ABHIJEETSINH YADAV	SRICT
25				VINAY KARELIYA	SRICT
26		2	Rs.1500	DHARMESH SHAH	SRICT
27				HARSH JADAV	SRICT
28				ABHISHEK DWIVED	SRICT
29		3	Rs.750	POOJA PATEL	SRICT
30				MAITRI PATEL	SRICT
31				PUNIT PATEL	SRICT
32	TechnoQuest	1	Rs.3000	MANSI TRIPATHI	AMIT Delhi
33				RAHUL MODI	AMIT Delhi
34				VINAY PAWAR	AMIT Delhi
35	EnviroPoster	1	Rs.1500	KRUNAL LASHKARI	SRICT
36				KRISHNA MANI	SRICT
37		2	Rs.750	UNNATI PRAJAPATI	SRICT
38				MAITRI BHATT	SRICT
39		3	Rs.500	DHIRAJ SINGH	GEC Bharuch
40	Florahunt	1	Rs.1500	KWINAL ANTALA	SRICT
41				MANSI	SRICT

				KASUNDRA	
42				PRUTHVISH PATEL	SRICT
43				DRASHTI GHODASARA	SRICT
44		2	Rs.1000	MOHIT KAPADI	SRICT
45				SARVESH TRIPATHI	SRICT
46				KRISHNA SINGH	SRICT
47				PRADEEP SINGH	SRICT
48		3	Rs.500	VIRBHADRASIN H YADAV	SRICT
49				DEEP CHAVDA	SRICT
50				SHRADDHA SUNVA	SRICT
51				KENA LAKHANI	SRICT
52	Envastigation	1	Rs.1500	ARUN GAUTUM	SRICT
53				Shubhi Sharma	SRICT
54		2	Rs.1000	PRUTHVISH PATEL	SRICT
55				MANSI KASUNDRA	SRICT
56		3	Rs.500	DARSHAK GADHESARIYA	SRICT
57				JAYESH PRAJAPATI	SRICT
58	Circuitrix	1	Rs.1500	PARTH M PATEL	SRICT
59				DARSH SHAH	SRICT
60		2	Rs.1000	EZHAJALAM ANSARI	SRICT

61				MUZZAMMIL UMER	SRICT
62		3	Rs.500	VISHAL	SRICT
63				RAVIRAJ	SRICT
64	Electro Labyrnith	1	Rs.1500	RAHUL JAISWAL	SRICT
65				VAIBHAVI PATEL	SRICT
66				RAVI PATEL	SRICT
67		2	Rs.1000	MOHOMAD HUSAIN KAPADIA	SRICT
68				GUPTA SAPNA	SRICT
69		3	Rs.750	GAYATRI KHER	SRICT
70				DHARTI PARMAR	SRICT
71				RIYANSHI BRAMBHATT	SRICT
72	Robo Soccer	1	Rs.2500	PATEL PARTH	SRICT
73				PATEL SAFVAN	SRICT
74				ASHU RAJPUT	SRICT
75				ANSARI EJAJ	SRICT
76		2	Rs.1500	CHAUHAN PATHKUMAR	SRICT
77				MEHTA JIGAR	SRICT
78				RAKHOLIYA TIRTH	SRICT
79		3	Rs.1000	MODI NISHANT	SRICT
80				MODI SIDDHARTH	SRICT
81				GHHONIYA MUBASSIR	SRICT

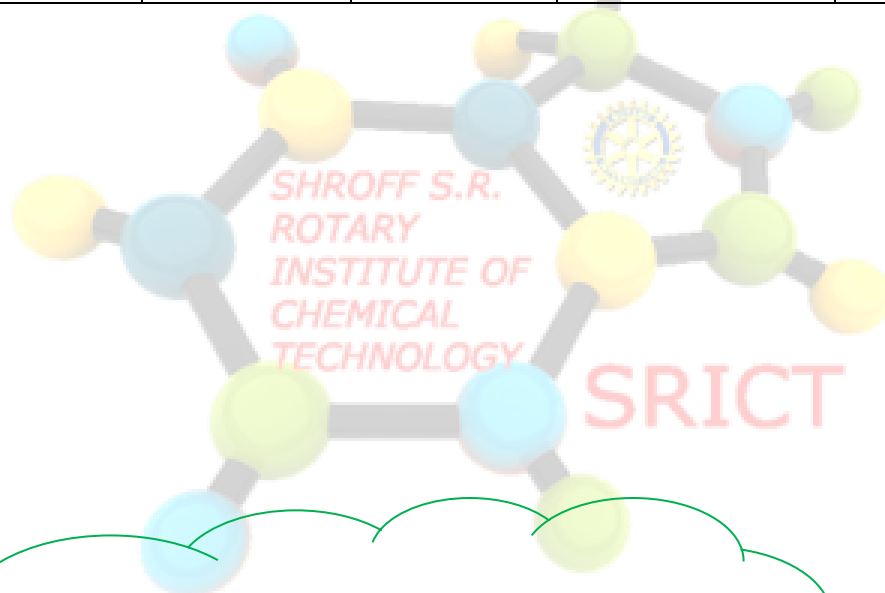
82				GOSWAMI PARTH PURI	SRICT
83	VIDHYUTNOV A	1	Rs.2000	SHAH BHUMI	MALIBA
84				KEYUR KHER	MALIBA
85				SHERUBHA KHER	MALIBA
86		2	Rs.1000	NISHANT PATEL	SRICT
87				SAHIL VHORA	SRICT
88				JAIMIN ATODARIA	SRICT
89		3	Rs.750	JIGAR	SRICT
90				HARSH	SRICT
91				HARDIK	SRICT
92	Junkyard	1	Rs.2500	AJAY CHAUDHARY	VIT
93				DARSHAN DESAI	VIT
94				UMANG JOSHI	VIT
95				PARIMAL CHAUHAN	VIT
96		2	Rs.1500	HIMANSHU TRIPATHI	SRICT
97				VANSHIKA RANA	SRICT
98				ISHA LAD	SRICT
99				ADRIYA PALIPAD	SRICT
100		3	Rs.750	PATEL AKIB	SRICT
101				PATEL SHAHBAZ	SRICT
102				RIZWAN KHANJARA	SRICT

103				KAPADIYA MOHAMMADAA TIL	SRICT
104	Robo ignitors	1	Rs.3000	NISHANT MODI	SRICT
105				SIDDHARTH MODI	SRICT
106				MUBASSIR GHONIYA	SRICT
107		2	Rs.2000	KEYUR KHER	MALIBA
108				MINRAJ	MALIBA
109				BHUMI SHAH	MALIBA
110		3	Rs.1000	DHRUV MODH	PARUL
111				MEHTA RAHIL	PARUL
112				NISHANT VORA	PARUL
113	Cantilivo	1	Rs.1500	JAY PATEL	SRICT
114				PARTHIV PATEL	SRICT
115				KEVAL PATEL	SRICT
116				PAVAN PATEL	SRICT
117		2	Rs.1000	SAGAR PATEL	SRICT
118				TEJAS PADHIYAR	SRICT
119				MIHIR SHAH	SRICT
120				KAMALJEETSIN H	SRICT
121	MechInquisiti on	1	Rs.2000	SOURABH PRADHAN	SRICT
122				SOHEL HATIYA	SRICT
123				RAHUL KEWAT	SRICT
124				SHUBHAM PATEL	SRICT



125		2	Rs.1500	NISHANT MODI	SRICT
126				PARAS PATEL	SRICT
127				TUSHAR PARMAR	SRICT
128				AKSHAY BHATIYA	SRICT
129	Treasurehunt	1	Rs.2500	RUSHI RAWAL	SRICT
130				KUNAL PATIL	SRICT
131				VATSAL PATEL	SRICT
132				TANMAY MANDALIYA	SRICT
133		2	Rs.1500	RUTVIKA BHALLA	SRICT
134				KRISHNA ICHHAPURIA	SRICT
135				RAJ CHANDEGARA	SRICT
136		3	Rs.1000	DARSH SHAH	SRICT
137				ROMIN PATEL	SRICT
138				PRANV CHAUHAN	SRICT
139				RAVIRAJ SOLANKI	SRICT
140	Quiz	1	Rs.1000	AMAN	SRICT
141				CHAYA	SRICT
142		2	Rs.750	RAVIJEET	SRICT
143				ASHISH	SRICT
144	Counter Strike	1	Rs.1750	KARAN VEKARIYA	SRICT
145				HEET BHUVA	SRICT

146				KEVIN PATEL	SRICT
147				HARIKRISHNA PATEL	SRICT
148				VIRBHADRASIN H YADAV	SRICT
149	NFS	1	7Rs.50	TANMAY MANDALIYA	SRICT
150		2	Rs.500	ABHISHEK PATIL	SRICT
151	MINIMILITIA	1	Rs.350	DHAVAL KUMAR JOGANI	SDPC, KIM
152				KAOADIA VATSA	SDPC, KIM



We cannot all be great, but we  
can always attach ourselves to  
something that is great.

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## EXPERT LECTURES

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### [DEPARTMENT OF ENVIRONMENTAL SCIENCE & TECHNOLOGY]

- “Industrial Hygiene” for the 7<sup>th</sup> semester EST Students on 17<sup>th</sup> July 2017 by Mr. Mayur Vaghela, Executive Engineer, Kohler India Ltd.
- “Advanced Waste Water Treatment” for the 7<sup>th</sup> semester EST Students on 21<sup>th</sup> July 2017 by Mrs. Mayurika Leuva, Environmental Engineer, GWWSB, Ankleshwar.
- “Goods & service Tax” for the 7<sup>th</sup> semester EST Students on 27<sup>th</sup> July 2017 by Ms. Pankti Trivedi, Chartered Accountant, Surat.
- “How to face interviews” for the 7<sup>th</sup> semester EST Students on 10<sup>th</sup> August 2017 by Mrs. Prexa, Hr, NCTL Ankleshwar.

- “Industrial Hygiene” for the 5<sup>th</sup> semester EST Students on 17<sup>th</sup> July 2017 by Mr. Mayur

Vaghela, Executive Engineer, Kohler India Ltd.

- “Activated Sludge Process” for the 5<sup>th</sup> semester EST Students on 21<sup>th</sup> July 2017 by Mrs. Mayurika Leuva, Environmental Engineer, GWWSB, Ankleshwar.
- “Goods & service Tax” for the 5<sup>th</sup> semester EST Students on 27<sup>th</sup> July 2017 by Ms. Pankti Trivedi, Chartered Accountant, Surat.
- “Time Management” for the 5<sup>th</sup> semester EST Students on 23<sup>th</sup> August 2017 by Mr. Balasubhramian, JCI, Ankleshwar.

### [DEPARTMENT OF CHEMICAL ENGINEERING]

- “Introduction to corporate world” for the 7<sup>th</sup> semester EST Students on 14<sup>th</sup> August 2017 by Mr. Sunil Panjwani, Senior VP, HDFC Bank.

- “Safety aspects in chemical Engineering” for the 7<sup>th</sup> semester CE Students on 21<sup>st</sup> July 2017 by Mr. Saumil

Shah, Senior Safety Officer, GNFC, Bharuch.

- “Projects for final year” for the 7<sup>th</sup> semester CE Students on 29<sup>th</sup> July 2017 by Mr. Ankit Tiwari, Coromondal group.

- “Basics of Fluid engineering in view of industry” for the 3<sup>rd</sup> semester CE Students on 3<sup>rd</sup> August 2017 by Mr. Arpit G. Patel, Sr. Chemical Engineer-Methanol plant, GNFC.

[DEPARTMENT OF ELECTRICAL ENGINEERING]

- “Pinch Technology” for the 7<sup>th</sup> semester CE Students on 2<sup>nd</sup> August 2017 by Mr. Jaiprakash Tiwari, Assistant Manager, UPL-1 Ltd.

- “GST- One nation one tax” for the 7<sup>th</sup>, 5<sup>th</sup>, 3<sup>rd</sup> semester CE Students on 27<sup>th</sup> July 2017 by Ms. Pankti Trivedi, Chartered Accountant, Surat.

- “Distillation” for the 5<sup>th</sup> semester CE Students on 13<sup>th</sup> July 2017 by Mr. Gajender Kumar Jain, Retired director, P I industries.

- “Energy management at industries” for the 5<sup>th</sup> semester CE Students on 5<sup>th</sup> August 2017 by Mr. Shantanu Das, General Manager, RIL.

- “Process Safety” for the 3<sup>th</sup> semester CE Students on 21<sup>st</sup> July 2017 by Mr. JagdishModi, Senior Safety Officer, GNFC, Bharuch.

- “How to Face Interview” for the 7<sup>th</sup> semester EE Students on 15<sup>th</sup> July 2017 by Cdr. Pawan Kumar Gupta (Retd), Head Manufacturing, EWAC Alloys Ltd., Ankleshwar.

- “Power System Protection & Distribution in Industry” for the 7<sup>th</sup> semester EE Students on 25<sup>th</sup> July 2017 by Mr. Chirag C Borsania, Sr. Officer-Electrical, Godrej Industries Ltd., Valia.

- “Substation Engineering” for the 7<sup>th</sup> & 5<sup>th</sup> semester EE Students on 24<sup>th</sup> August 2017 by Mr. S. M. Takalkar, Director, Takalkar Power Engineering Consultancy Pvt. Ltd, Vadodara.

- “Solar Inverters & Charge Controllers” for the 7<sup>th</sup> & 5<sup>th</sup> semester EE Students on 29<sup>th</sup> July 2017 by Mr. Ashok

Virani, Project Designer,  
Dishachi Energy, Surat.

- “Power Electronics in Industrial Application” for the 5<sup>th</sup> & 3<sup>rd</sup> semester EE Students on 24<sup>th</sup> August 2017 by Mr. Krishnamurthy, Assistant Manager and Plant Engg. Electrical, EWAC Alloys Limited, Ankleshwar.

- “Electrical Measuring and Testing Instruments” for the 5<sup>th</sup> semester EE Students on 08<sup>th</sup> Sept 2017 by Mr. R. B. Kalariya, Manager (Electrical) GNFC, Bharuch.

- “Electrical Measuring and Testing Instruments” for the 3<sup>rd</sup> semester EE Students on 08<sup>th</sup> Sept 2017 by Mr. R. B. Kalariya, Manager (Electrical) GNFC, Bharuch.

[DEPARTMENT OF CHEMICAL TECHNOLOGY]

- “Analytical techniques in Pharmaceutical Industries” for the 7<sup>th</sup> semester CT Students on 28<sup>th</sup> July 2017 by Dr.NavtamlalSajitra.

- “Introduction to corporate world” for the 7<sup>th</sup> semester CT Students on 14<sup>th</sup> August 2017 by Mr. Sunil Panjawani.

- “GST: one nation one tax one market” for the 7<sup>th</sup> semester CT Students on 20<sup>th</sup> July 2017 by Ms. Pankti Trivedi, Chartered Accountant, Surat.

- “Positive Attitude” for the 7<sup>th</sup> & 5<sup>th</sup> semester CT Students on 13<sup>th</sup> Sept 2017 by Smita Shah.

- “Time management” for the 5<sup>th</sup> semester CT Students on 23<sup>th</sup> August 2017 by N. Balasubramaniam.

[DEPARTMENT OF MECHANICAL ENGINEERING]

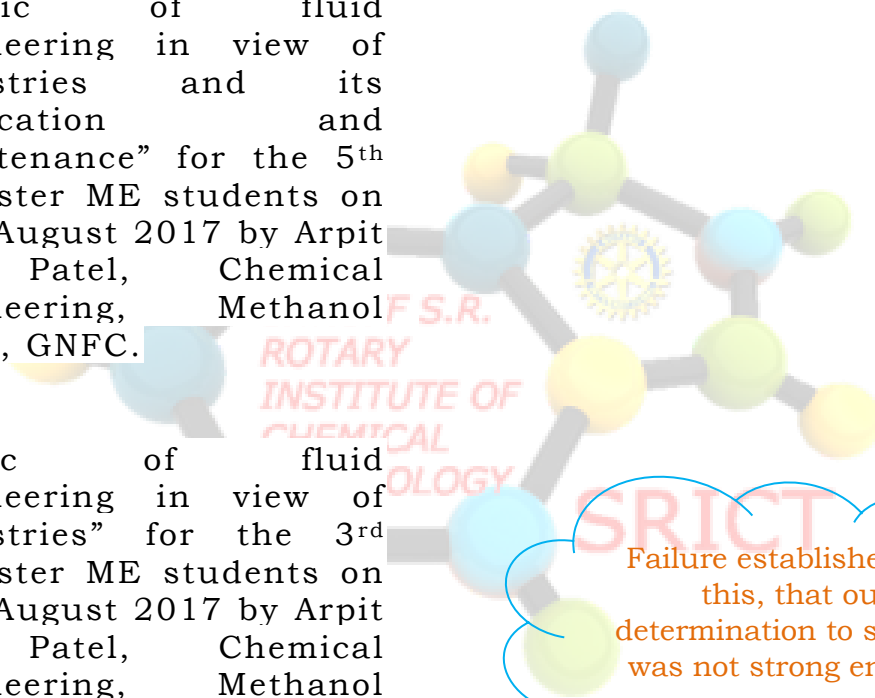
- “Energy scenario in India” for the 7<sup>th</sup> semester ME students on 19<sup>th</sup> august 2017 by Mr. Kumar Phatrani, head mechanical work, BEIL, Ankleshwar.

- “Energy management” for the 7<sup>th</sup> semester ME students on 16<sup>th</sup> august 2017 by Mr. Sunil Motivani, general



manager in operation,  
UPL.

- “Welding technology” for the 7<sup>th</sup> & 5<sup>th</sup> semester ME students on 4<sup>th</sup> August 2017 by Mr. Parmender Singh, Assistant manager at training & development EVAC alloys.
- “Basic of fluid engineering in view of industries and its application and maintenance” for the 5<sup>th</sup> semester ME students on 22<sup>th</sup> August 2017 by Arpit A. Patel, Chemical engineering, Methanol plant, GNFC.
- “Basic of fluid engineering in view of industries” for the 3<sup>rd</sup> semester ME students on 19<sup>th</sup> August 2017 by Arpit A. Patel, Chemical engineering, Methanol plant, GNFC.



Failure establishes only this, that our determination to succeed was not strong enough.

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## INDUSTRY VISITS

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### [DEPARTMENT OF MATHEMATICS, SCIENCE & HUMANITIES]

- ETL, Ankleshwar on 06<sup>th</sup> Sept 2017 by 1<sup>th</sup> semester EST students.
- ETL, Ankleshwar on 06<sup>th</sup> Sept 2017 by 1<sup>th</sup> semester CE students.

### [DEPARTMENT OF ENVIRONMENTAL SCIENCE & TECHNOLOGY]

- Palsana Enviro Protection Ltd. Surat on 29<sup>th</sup> July 2017 by 5<sup>th</sup> semester EST students.
- Uniphos Envirotronic Pvt Ltd Vapi on 14<sup>th</sup> July 2017 by 7<sup>th</sup> semester EST students.
- Lupin Ltd, Ankleshwar on 25<sup>th</sup> July 2017 by 3<sup>rd</sup> semester EST students.

### [DEPARTMENT OF CHEMICAL ENGINEERING]

- Isagroasiapvt Ltd, Ankleshwar on 25<sup>th</sup> July 2017 by 7<sup>th</sup> semester CE students.

- Kanoria Chemicals, Ankleshwar on 09<sup>th</sup> July 2017 by 7<sup>th</sup> semester CE students.

- Jayshree aromatics, Ankleshwar on 10<sup>th</sup> July 2017 by 5<sup>th</sup> semester CE students.

- Meghmani Organics Limited, Ankleshwar on 18<sup>th</sup> July 2017 by 5<sup>th</sup> semester CE students.

- Sajjan India, Ankleshwar on 28<sup>th</sup> July 2017 by 3<sup>th</sup> semester CE students.

### [DEPARTMENT OF ELECTRICAL ENGINEERING]

- SOLARISM, Bharuch on 31<sup>st</sup> July 2017 by 7<sup>th</sup> semester EE students.
- ELCOP Controls, Bharuch on 09<sup>th</sup> Sept 2017 by 7<sup>th</sup> semester EE students.
- Astek Electricals, Surat on 28<sup>th</sup> July 2017 by 5<sup>th</sup> semester EE students.
- Happy Engineering, Surat on 28<sup>th</sup> July 2017 by 5<sup>th</sup> semester EE students.

- ABC Bearings, Bharuch on 29<sup>th</sup> July 2017 by 3<sup>rd</sup> semester EE students.

[DEPARTMENT OF MECHANICAL ENGINEERING]

[DEPARTMENT OF CHEMICAL TECHNOLOGY]

- Survival technology Pvt. Ltd. on 18<sup>th</sup> July 2017 by 7<sup>th</sup> & 5<sup>th</sup> semester CT students.
- Krishna polymers on 29<sup>th</sup> July 2017 by 7<sup>th</sup>, 5<sup>th</sup>, & 3<sup>rd</sup> semester CT students.
- Chevron PharmaPvt. Ltd. on 5<sup>th</sup> August 2017 by 7<sup>th</sup>, 5<sup>th</sup>, & 3<sup>rd</sup> semester CT students.
- ChemoxChemopharmaIndutriesPvt. Ltd. on 7<sup>th</sup> Sept 2017 by 7<sup>th</sup>, 5<sup>th</sup>, & 3<sup>rd</sup> semester CT students.
- Jaganath extrusion Pvt. Ltd. on 28<sup>th</sup> July 2017 by 5<sup>th</sup> & 3<sup>rd</sup> semester CT students.
- Shri BhagwatiChem Tech on 8<sup>th</sup> Sept 2017 by 5<sup>th</sup> & 3<sup>rd</sup> semester CT students.
- Shri Ambica Organics Pvt. Ltd. on 8<sup>th</sup> Sept 2017 by 5<sup>th</sup> & 3<sup>rd</sup> semester CT students.

- NPCIL, kakrapar on 18<sup>th</sup> August 2017 by 7<sup>th</sup> semester ME students.
- Jay metal on 07<sup>th</sup> Sept 2017 by 7<sup>th</sup> semester ME students.
- Flometallic on 21<sup>st</sup> August 2017 by 5<sup>th</sup> semester ME students.

Coin always makes sound, but the currency note is always silent. So when our value increases, keep yourself calm and silent.

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## SCIENTIFIC ARTICLES: प्रयुक्तिलेख

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SR.NO.	TITLE	AUTHOR
1.	POWERRAY	UDIT DAVE (ME 3 <sup>RD</sup> )
2.	GO TOUCH	HARSH SHAH (ME 3 <sup>RD</sup> )
3.	PARROT POT	VISHAL PRAJAPATI (ME 3 <sup>RD</sup> )
4.	ENVIROBOT: ROBOTIC EEL	DARSHANSINH SOLANKI (ME 3 <sup>RD</sup> )
5.	XENEN GERM ZAPPING ROBOT	ANIKET GOHIL (ME 3 <sup>RD</sup> )
6.	ALL CONTROLLER GAMING REMOTE	KRUSHANPALSINH MAHIDA (ME 3 <sup>RD</sup> )
7.	ORII: SMART RING	RINU ROY (ME 3 <sup>RD</sup> )
8.	BRINGY: UNIQUE TOY	NITU CHANDEL (EST 3 <sup>RD</sup> )
9.	SHUNTARO	JAY VALA (CE 3 <sup>RD</sup> )

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## POWERRAY

[UDIT DAVE, 3<sup>RD</sup> SEMESTER,  
MECHANICAL ENGINEERING]

The Power Ray, the waterproof device can find, attract and record fish. It operates at a depth of 30 meters, or about 98 feet, for up to four hours at a time. It is suitable for use in fresh-, salt- or chlorinated-water.

The Power Ray garnered buzz when Power Vision Technology Group first announced it at CES in January 2017. Of course it was a crowd pleaser among technophiles. But it remains to be seen how outdoor and marine biology enthusiasts may embrace or reject this technology.

The basic package, the Power Ray Explorer, has a 50 meter cable that tethers the device back to a base station above water. Besides keeping the drone from getting lost in a strong current, the cable transmits power to and video from the PowerRay back to the base station. All PowerRays have a 4K camera on board. ZEISS provides optical components to PowerVision. The mid-level package, the PowerRay Angler, gives fishermen a way to cheat, homing in on prey underwater with the company's "Powerseeker Fishfinder," shining lights and dropping bait to attract them using a remotely operated "Bait Drop Line."

The PowerRay Wizard edition includes a VR headset that lets users watch what they're recording

in a kind of immersive open water exploration that doesn't require a wetsuit. The PowerRays cost from \$1,488 to \$1,888 in the US, and €1,599 to €2,099 in European markets.



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## GOTOUCH

[HARSH SHAH, 3<sup>RD</sup> SEMESTER,  
MECHANICAL ENGINEERING]

GoTouch is the portable, easy-to-use device that instantly turns any TV or projector into a giant interactive whiteboard. Businesses and schools across Korea have been helping us test GoTouch for more than a year. Now we're ready to bring it to the rest of the world. GoTouch brings highly-accurate infrared technology to the TV or projector in your office... the one in your client's office... the one in your child's classroom... or even the one at home.

And GoTouch is internet connected, so your colleagues or students can all join in, using their phones or tablets, no matter where in the world they are. GoTouch connects instantly and wirelessly to any TV or projector. It tracks what you write or draw on screen with 4K Ultra HD accuracy. A rechargeable battery means GoTouch doesn't



have to be plugged into anything during your presentation. GoTouch uses a 4K Ultra HD camera to track the infrared light in the GoTouch Pen, giving it pinpoint accuracy. The camera runs at 100 frames per second, which is more than three times faster than the refresh rate of most TVs. This means you don't notice any lag at all when you draw or write.

The GoTouch Pen has an infrared sensor in the nib. GoTouch senses this light with 4K, Ultra HD accuracy and ignores unintentional touches from your fingers, palm or arm. First, connect your phone or computer to your TV or projector. You can do this with an HDMI cable, or wirelessly with Apple TV or a similar device. Then, pair GoTouch with your phone or computer using Bluetooth. Place GoTouch on your table and launch the app. That's it. You're ready to go. The GoTouch App is already available for download on the iOS App Store and the Google Play Store, so you can check it out for yourself. The app is free, and you can use it without GoTouch to collaborate on documents remotely.



## PARROT POT

[VISHAL PRAJAPATI, 3<sup>RD</sup> SEMESTER MECHANICAL ENGINEERING]

It looks like a rather tall and not very interesting flower container, but Parrot's device — simply-named Pot — may be just what your plants crave.

This Bluetooth device can tell when your plant is thirsty and then water it for you. Standing roughly a foot tall and introduced at CES 2015, the tall white pot has built-in sensors that can read the level of fertilization, temperature and level of moisture in the soil and notify you when the plan needs water.

It holds a full 2 liters of water (enough for 3 weeks of watering) that you pour into an opening on the side.

Pot is a follow up to Parrot's Flower Power devices. Like Pot, they work with an app that notifies you about your plant's condition based on readings collected from the soil and surroundings, and the kind of plant you designated.

Pot behaves similarly. You select your plant from the app's vast database, and Pot knows how often it will need water — as well as light and fertilizer, though the device has no control over either one of those conditions.

Perhaps the only notable deficiency of Pot is that it's Bluetooth only, which means that if you're not

nearby you can't control the watering (as you would if it had Wi-Fi connectivity). You can't water your plants from your vacation destination.

There may be a good reason for this choice, however: Pot operates on batteries. Wi-Fi might have eaten too much battery power to be dependable for, say, a three-week stretch of auto-watering.



If a full-sized smart pot is too overwhelming, Parrot is also offering H2O. It too can automatically water your plants, but is more like Flower Power in that it's a stand-alone sensor that sticks right into the dirt of your potted plants. Its water supply comes from a small water bottle you attach directly to H2O.

## ENVIROBOT: ROBOTIC EEL

[DARSHANSINH SOLANKI: 3<sup>RD</sup>  
SEMESTER MECHANICAL  
ENGINEERING]

Swiss researchers have developed an eel-like robot that can effectively detect the contamination levels of

lakes and other bodies of water. The robotic eel, known as Envirobot, has built-in sensors and motors that give it the potential to function autonomously in the future. The robotic eel was built with various sensors that can detect chemical, physical, and biological anomalies within a body of water. With its eel-like shape and smooth flow of movements, Envirobot is able to swim through water without disturbing marine life and stirring up mud along its course. The robot's sensors are capable of taking measurements across various locations and feed the gathered data to a computer in real-time.

Envirobot is built using several modules, which gives it the flexibility to smoothly navigate through the water. Each module is equipped with a small electric motor to propel the robotic eel forward. By designing the robot in a modular system, the engineers have the freedom to tweak it according to specific missions by varying its length and compositions.

Auke Ijspeert, the Head of EPFL's Biorobotics Laboratory (BioRob), explained how Envirobot is much more effective compared to conventional methods of monitoring wild water conditions.

"There are many advantages to using swimming robots. They can take measurements and send us data in real-time – much faster than if we had measurement



stations set up around the lake. And compared with conventional propeller-driven underwater robots, they are less likely to get stuck in algae or branches as they move around. What's more, they produce less of a wake, so they don't disperse pollutants as much".

Ijspeert also mentioned that their technology could be further developed to function autonomously. "The Envirobot can follow a preprogrammed path and has also the potential to make its own decisions and independently track down the source of pollution"

## XENEX GERM-ZAPPING ROBOT

[ANIKET GOHIL, 3<sup>RD</sup> SEMESTER, MECHANICAL ENGINEERING]

A new robot is helping hospitals lower their risk of patient infections from deadly pathogens and multi drug resistant organisms. The Xenex Germ-Zapping Robot emits waves of ultraviolet (UV) light to destroy bugs found in hospitals and medical centers.

Using Ultraviolet light is not a new idea, but the robot system provides an easy to use and safe method of using the light for the first time. The Xenex robot uses pulsed xenon, a high-intensity UV light. The light is emitted from the device which then penetrates the cell walls of microorganisms, including bacteria, viruses, mold, fungus and spores. The light fuses the DNA of the organisms which renders them unable to mutate or reproduce, effectively killing them on the spot.

The germ-zapping robot is used in conjunction with regular cleaning and sanitizing routines. Once the room has been cleaned according to hospital regulations, the Xenex robot enters the room and is left to do its work, a room can be completely sanitized within 10 minutes. The room is first cleaned as normal, then a few small preparations are made so the light is directed at the highest traffic and high-risk areas.





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## ALL CONTROLLER: GAMING REMOTE

[KRUSHANPALSINH MAHIDA: 3<sup>RD</sup>  
SEMESTER,  
ENGINEERING] MECHANICAL

The All-Controller is exactly that, a controller that works with (almost) everything. Universal controllers aren't a new idea but the All-Controller has taken the idea one step further and created a product that makes the connectivity to diverse platforms really easy.

The handset runs on both cable and Bluetooth mode and connects easily with Mac, PC, Android, iOS as well as the big console makers, Xbox and PlayStation. To connect to the consoles you'll need the custom USB adapter. This will allow the device to connect to the Xbox 360, Xbox One, PlayStation 3 and PlayStation 4. The device also hosts 11 USB drivers, making it possible for wireless use with any Windows, Mac, Linux, or Android game.

Where the All-Controller sets itself apart from its competitors is the addition of an LCD screen. The screen allows gamers to easily navigate through what device they want to pair the controller with. The screen makes connecting and reconnecting to various platforms simple and visual.

For something that claims to do everything, the design of the handset looks pretty smooth. Cleverly it hasn't been dominated by one platform too much, though you can see the PlayStation similarities

straight off the bat, there are design features from other controllers too.



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## ORII: SMART RING

[RINU ROY, 3<sup>RD</sup> SEMESTER  
MECHANICAL ENGINEERING]

If you're one of those people who heavily rely on their phone to do business then it's probably wise to invest in this game-changing smart ring called ORii.

ORii is the very first voice-powered smart ring that allows you to call or message anyone using only your finger. The smart ring uses bone conduction technology, which sends clear audio from the device through your finger and onto your ear with absolute privacy. This type of technology has been tested and proven before and is being used in medical-grade hearing aids. Using ORii for calling or messaging means you can be more aware of what's happening around you especially when you're on-the-go. You don't have to take your mobile device out from your pocket or bag. Simply touch your ear by the finger where

ORii is worn and you can easily get on with communicating. The smart ring is capable of doing much more than just making or receiving phone calls and sending messages. ORii has been devised to also work with voice command features such as Siri and Google Assistant. The smart assistant can be summoned by pressing down on the CapSense button and subsequently speaking through the advanced microphones to dish out a command.

Unlike other hands-free devices like Bluetooth and earphones, ORii is extremely durable, lightweight, and comfortable to use for long hours. The hardware is made from scratch-resistant anodized aluminum so it keeps its sleek and clean look over time. Even though it's a heavy-duty device, using ORii won't make you look over-gearred. In fact, the smart ring can be a fashionable jewelry as it comes in three different colors.



The ring's size is customizable according to your finger's circumference. Other than being

high-end, the smart ring's splash proof and water resistant features ensure that you can be clumsy without destroying it.

As bone conduction technology works by utilizing physical vibration to feed sound to your ear, background noises are unable to interfere with the audio quality. Your voice is clearly transmitted to the other person you are speaking to through the built-in dual noise canceling microphones. And all of your conversations are kept private, only you can hear the audio feed. This means you can smoothly deal with all your business phone calls in public places or on-the-go.

So, what makes ORii just a bit more different from other hands-free devices? The smart ring comes with an app where you can customize your mobile's settings so you're not overwhelmed with all the unnecessary notifications. You can filter through only your important contacts and most used apps and choose corresponding colors for each. A LED light on the smart ring then flashes a color that is relative to the notification so you know what you're dealing with.

## BRINGY: UNIQUE TOY

[NITU CHANDEL, 3<sup>RD</sup> SEMESTER, ENVIRONMENTAL SCIENCE & TECHNOLOGY]

Are you looking to improve the bond between you and your dog? Or perhaps play with them more effectively? Then you definitely need this smart ball. It's called Bringy, a

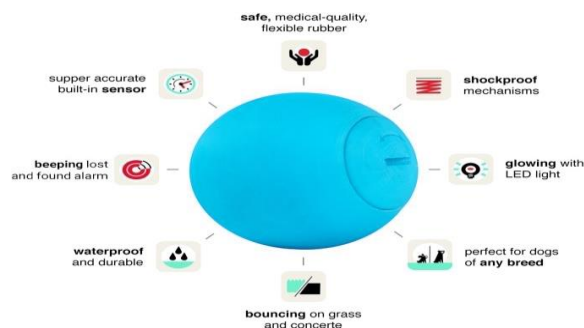


unique toy that will help you train your dog like a pro.

Bringy is more than just a toy for your dog, it's a smart ball that helps owners look after the well-being of their pets. It also optimizes playing sessions making it more fun for the dogs to fetch the ball. With its built-in sensor, the ball is capable of measuring a dog's statistics such as speed and reflexes, distance run, and even how high he jumped. The ball is equipped with motion tracking technology that works similar to how pro tennis players improve their training. So, you can train your dog more effectively while having fun. Fetch games wouldn't be mundane or boring anymore with the help of Bringy.

The smart ball is controlled using a mobile app compatible with both iPhone and Android devices. The work-and-award play basis will be more effective as the app allows you to monitor your dog's training achievements. There's also no need to second guess if your dog is ill or slightly feeling under the weather.

There's also no need to second guess if your dog is ill or slightly feeling under the weather. Bringy's app automatically sends out notifications if the dog needs to drink, eat, or rest. If you're finding it a challenge to keep your dog in shape then you can take advantage of Bringy's many features to help you handle its health.



Of course, it's not just the technology that matters. The aesthetic design of the ball is durable and chews friendly. It's made with safe, medical-quality, and flexible rubber. So, there's no need to worry in case your dog bites on the ball too hard. With its waterproof exterior, the interior electronics of the ball wouldn't get wet and cause it to malfunction while the pets are using it. It's therefore, ideal for outdoor use and other weather dependent scenarios.

The smart ball is ideal for any breeds and ages. It's easy to adjust the training program according to your dog's preference by tweaking the app. Pet owners can also teach their dogs how to be more obedient by using the ball as a tool.

In the case you or your dog loses Bringy, the ball is equipped with a beeping signal you can turn on via the app to find its location. Playtimes doesn't have to be limited to daylight. With Bringy's glowing LED light, dogs can play even at night. You can change the color of the glowing ball using the app feature. To learn some dog life hacks, head over to Bringy's YouTube channel and discover some

easy tricks to improve the way you take care of your pet.

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## SHUNTARO

[JAY VALA, 3<sup>RD</sup> SEMESTER  
CHEMICAL ENGINEERING]

A new Japanese robot called Shuntaro is both cute and brutally honest when it comes to foot odor. Shuntaro or Hana-chan (a play on the Japanese word for nose) is an adorable robot dog with a built-in odor detection sensor that will cause it to literally pass out if your feet don't pass the smell test. Discretion is not this technology's strong suit.

Developed by Japanese company, Next Technology, the mutt is diminutive at 6 inches or 15 centimeters long and will let out quite a bark if your feet even stink a little. Better yet the pooch will spray your feet with air freshener to amend the issue.

The inspiration for the cute bot comes from a Japanese man who was eager to know if he had a smelly foot problem but was too shy to ask.

"He told us his daughter had said his feet were smelly . . . But he didn't want to know how bad the odor was because he would feel hurt, that's why we developed this cute robot," Next Technology employee Kimika Tsuji told Japan Times.



The world is  
filled with  
nice people.  
If you can't  
find one, be  
one.

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## GENERAL ARTICLES

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SR.NO.	TITLE	AUTHOR
1.	THE EFFECT OF CLIMATE CHANGE	OM PRAKASH SINGH, ASSISTANT PROFESSOR (EST)
2.	INDIAN ELECTORIAL SYSTEM BIGGEST FESTIVAL OF DEMOCRACY	URVIJ B. DAVE, ASSISTANT PROFESSOR (EST)
3.	EARTH CONSERVATION TECHNIQUES	SAGAR BHATT, ASSISTANT PROFESSOR (EST)
4.	MAKE IN INDIA VS INCREDIBLE INDIA	HAMZA SHAIKH (ME 7 <sup>TH</sup> )
5.	ENTROPY: WHY LIFE SEEMS TO GET MORE COMPLICATED	PARTH PRAJAPATI (CE 5 <sup>TH</sup> )
6.	HOW TO TRAIN YOUR BRAIN TO THINK IN NEW WAY	PARTH PRAJAPATI (CE 5 <sup>TH</sup> )
7.	YOGA	AASTHA PAREKH (EST 5 <sup>TH</sup> )
8.	GST	HETAL PATEL (EST 5 <sup>TH</sup> )
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10.	SPORTS & GAMES IN ANCIENT INDIA	NIKITA PATEL (EST 5 <sup>TH</sup> )
11.	THE IMPORTANCE OF PEACE OF MIND IN YOUR LIFE	CHAITANYA VAGHELA (CE 5 <sup>TH</sup> )

# THE EFFECT OF CLIMATE CHANGE

[OM PRAKASH SINGH, ASSISTANT PROFESSOR  
GENERAL ENGINEERING DEPT]

Over the past 150 years, we've changed the balance of our planet by living beyond our means. We've burnt huge amounts of fossil fuels (such as coal, oil, gas), bred huge amounts of methane-producing livestock and cut down vast swathes of forests, which would naturally absorb carbon dioxide from the air.

Climate change poses a fundamental threat to the places, species and people's livelihoods WWF works to protect. To adequately address this crisis we must urgently reduce carbon pollution and prepare for the consequences of global warming, which we are already experiencing. WWF works to:

- advance policies to fight climate change
- engage with businesses to reduce carbon emissions
- help people and nature adapt to a changing climate

Climate change is affecting our brilliant planet in lots of ways!

## MAIN CAUSES:

**HUMANS CAUSE CLIMATE CHANGE:** - Respected scientific organizations such as the National Academy of Science, the Intergovernmental Panel on Climate

Change (IPCC) and World Meteorological Association (WMO) have all identified climate change as an urgent threat caused by humans that must be addressed.

**FOSSIL FUELS:** - Burning fossil fuels, such as coal, oil and natural gas, to generate energy has the greatest impact on the atmosphere than any other single human activity.

**DEFORESTATION:** - Forests help protect the planet by absorbing massive amounts of carbon dioxide (CO<sub>2</sub>), the most abundant type of pollution that causes climate change. Unfortunately, forests are currently being destroyed or damaged at an alarming rate.



# INDIAN ELECTORIAL SYSTEM BIGGEST FESTIVAL OF DEMOCRACY

[URVIJ B. DAVE, ASSISTANT  
PROFESSOR, ENVIRONMENTAL  
SCIENCE AND TECHNOLOGY]

## Importance of Democracy in India

India has been consistently being a part of ancient civilization. In ancient India two approaches of rulers were there, as they there are monarchy on the one side while on the other side partial democratic form "Gantantra" is there. On the same discipline we new India got independence from Great Britain. India chooses a parliamentary democratic format of administration. Many princely states have been merged then in to Democratic Republic of India. There are four main pillars of Indian democracy named Legislative body, Executive (Administrative) body, Judiciary and Press and Media. Judiciary is an independent and isolated organ which ensures legitimate protection to peoples' basic rights and protects essence of constitutional framework of India. While Legislative body and Administrative bodies are working with each others close proximity.

## Independent Bodies

There are many executive frameworks which are distinctly independent to the all organ known as constitutional bodies like Election

Commission, Comptroller and Auditor General of India, Planning commission etc. The whole democratic skeleton is dependent upon election commission for selection. It's Importance among Legislators and Executers is very high.

As per tradition Election Commission in India is run by experience administrators who are having their origins within Executive body but once they indulge in to Election commission, they are no further remain part of the same body.

## Frame work of Election Commission

Election Commission is headed by Chief Election commissioner and two joint Election commissioners for help and advice.

The Election commission is responsible for free and fair practices of election for Legislative assembly and State councils. It also ensures that no wrong practices would follow by contestant as well as parties to lure votes. Apart from this it is also responsible for having eye on funding of major parties. Election commission has special powers during election period to make use of any private and public resources for the work related to election.

There are two tyres of Election Commission. The Central election commission is responsible for country wide election while its' subordinate duplicate body is constitute in each state known as State election Commission.



## Working of Election Commission

Standard practice of election commission is depicted precisely. Election commission divide each state in to different constituency and each constituency are demarked as per the census data. In to each constituency there are subzones are there the zones have Returning officers and each subzones have Zonal officers. Subzones are further divided in to polling stations. Each polling station has number of Polling Booths. As per the index list of the electoral number each voters who is above the age of 18 years can cast his/her vote. The polling booths have presiding officer and assistant presiding followed by first and second officer.

## Counter check measurements

To avoid malpractices and wrongful deeds apart from local police, Central reserve police force and in sensitive areas border security police force is also stationed. Apart from that one observer for neutral opinion is also appointed. Video recording of electoral process is taped and further checked by committee of higher officers.

## EARTH CONSERVATION TECHNIQUES

[SAGAR BHATT, ASSISTANT PROFESSOR, ENVIRONMENTAL SCIENCE & TECHNOLOGY]

### **Walk or Bike (Bicycle)**

Cities and even many small towns are increasingly focused on becoming more walk able and bike-friendly. Obviously, neither of these modes of transportation requires the use of fossil fuels or electricity. They're also free or nearly so. Depending on where you live, you might not even have to buy a bike

### USE PUBLIC TRANSPORTATION

According to a study on commuter satisfaction, people who get to work on foot, bike, or via train are happiest. These options are not only more affordable compared with driving, the time of one's commute is more consistent and therefore less stressful. How much money and carbon emissions you could save by using public transportation in your neck of the woods.

### DRINK TAP WATER

According to the Environmental Protection Agency, tap water is completely safe; many bottled waters are just tap water that's sometimes (but not always) filtered. And bottled water easily costs 100 times or perhaps even 1,000 times more than tap water. Only an estimated 23% of disposable plastic water bottles are recycled, by the way.

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## SHOP WITH REUSABLE BAGS

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The environmental benefits of shopping with a reusable bag like these recommended by Real Simple are pretty obvious: They eliminate the need for plastic bags that tend to wind up in landfills.

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## DON'T OVERDO IT ON GROCERIES

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To waste less, shop smarter and be creative with foods that might otherwise be dumped in the trash. And to avoid going overboard with impulse purchases at the grocery store, always make a shopping list in advance, and stick to it.

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## USE ENERGY-EFFICIENT LIGHTBULBS, APPLIANCES

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They tend to cost more upfront than less efficient models. But they'll save you money in the long run because they eat up less electricity when being used, and, at least in terms of light bulbs, they have longer lifespan so therefore have to be replaced less frequently. As for appliances, look for the Energy Star label as a sign of a product's efficiency—and its potential to shave dollars off your utility bills.

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## COMPOST

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Many towns give residents free or deeply subsidized composters, and using one is generally as simple as dumping vegetable peelings, coffee

grounds, fallen leaves, grass clippings, and such into the bin. The resulting material can be help your garden and new plants grow, and eliminate much of the need to water and buy fertilizers and pesticides. Composting reduces the amount of waste in landfills as well, of course.

## Take Notes Electronically

Thankfully, the world is now digitally focused and your studies can be, too. You'll save money (and stop wasting paper) on purchasing notebooks and flashcards if you begin to electronically take down what you need to remember in class.

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## Make In India - Vs Incredible India

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[HAMZA SHAIKH , 7<sup>TH</sup> SEMESTER , MECHANICAL ENGG. DEPARTMENT]

With the advent of new government, the period has seen coming up of many policies, initiative, campaign and movement. These are undertaken or implemented for a good cause that is betterment of the nation. But many of these moves though praiseworthy are facing criticism as they are likely to depose the meaning of several other already implemented moves.

These policies have a divergent backdrop but the basic theme they share in common is to stimulate forex inflows into the economy of our nation.

For seeing the validity of the issue, we will consider two such moves and compare them. These moves are- Make in India and Incredible India.

'Make in India' is an initiative of the government of India to encourage FDI in India or in one way it means inviting multinational as well as domestic industries to manufacture their products in India.

The initiative was launched on 25th September, 2014 with an aim of making India emerge as top destination for FDI, surpassing USA and China. The move aims at affecting 25 sectors (Pharmaceuticals, Defense, Textiles Industrial equipment etc are under this basket). The FDI caps in these sectors were hiked to an hitherto unprecedented extent which have great value for India Economy. But this initiative has its own merits and demerits.

#### **Merits:**

- Facilitate Skill management and Job creation: With India being country of about 1.29 billion people and the figure likely to increase in near future, job availability is major concern. Many people are still unemployed and if population grows, the figure of unemployed will also grow. So an urgent need of job creation

is required otherwise the asset of the nation will be a burden.

- High quality goods and services at cheap rates: With more and more companies coming in India, it will create an atmosphere of competition. The healthy benefit of this would be that people would get high quality services and goods at cheap rates.
- Strengthening the economy: With so many companies coming to India and making their goods and providing various services, it will remove a lot of burden on Indian wealth that is used on import of various goods.

#### **Demerits:**

- Automation: With so many companies coming in India and setting up their factories would not see good measure for employment. Nowadays with advent of science and technology many companies are reducing the manpower in their factories and are depending on automated machineries, robotics etc for production.
- Improper Labour laws: The incoming of foreign companies can exploit the working labour as our labour laws are not upto standards. That means it will create misery condition for the working population causing stress, distress and diseases.
- Environmental concern: The rise in number of factories in

India will poses the biggest threat to the environment and climate change. If the companies are not evaluated for their carbon footprint and environment impact, it will worsen our ecology.

'Incredible India' is an initiative implemented by ministry of tourism in 2002 to promote tourism in India. It aimed at

- Attracting visitors in India to admire the rich cultural and varied heritage of our nation
- Generate income out of it
- Providing employment to locals
- Give a boost to local artistic works.

The move was a success as the tourism industry of India was enhanced and India emerged as global tourist destination. The program 'Atithi Devo Bhava' launched in 2009 was also a success.

It was implemented in alignment with 'Incredible India' to make people aware of how to treat the visitor and treat our country in order that it is praised. But now the 'Incredible India' is likely to lose its meaning because of 'Make in India' initiative and some other. The question is how?

The answer lies in the demerit of the 'Make in India'. If a proper check is not given to the environment impact caused by all these factories being set up in India, it will worsen our condition. It will destroy our rich and varied culture. The enemies in

form of pollution, deforestation and environment degradation will rob up the country of its aesthetic value.

My highlight is not against the 'Make in India' initiative but it is against that darker impact of the initiative which can cause destruction. It should be made that government give a lead to environment protection over the initiative. It should be not that the initiative kills other initiative or worsen the condition. 'Make in India', 'Incredible India' and other initiative or moves should be a paragon of symbiotic relation and not a parasite for healthy growth of the country. It turns onerous to evaluate the champion in this strife, await and watch till the next fiscal could alone clear our qualms. Hence the battle of make in India v/s Incredible India ends in a stalemate.

ENTROPY: WHY LIFE ALWAYS SEEMS TO GET MORE COMPLICATED

[PARTH PRAJAPATI, 5<sup>TH</sup> SEMESTER, CHEMICAL ENGINEERING]

Murphy's Law states, "Anything that can go wrong, will go wrong."

This pithy statement references the annoying tendency of life to cause trouble and make things difficult. Problems seem to arise naturally on their own, while solutions always require our attention, energy, and effort. Life never seems to just work itself out for us. If anything, our

lives become more complicated and gradually decline into disorder rather than remaining simple and structured.

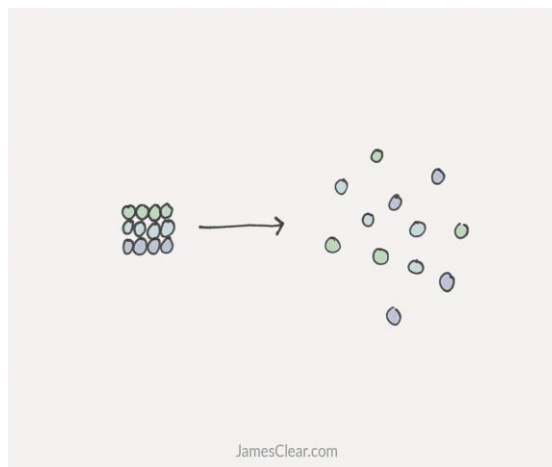
### Why is that?

Murphy's Law is just a common adage that people toss around in conversation, but it is related to one of the great forces of our universe. This force is so fundamental to the way our world works that it permeates nearly every endeavor we pursue. It drives many of the problems we face and leads to disarray. It is the one force that governs everybody's life: Entropy.

What is Entropy and Why Does It Matter?

### What is entropy? Here's a simple way to think about it:

Imagine that you take a box of puzzle pieces and dump them out on a table. In theory, it is possible for the pieces to fall perfectly into place and create a completed puzzle when you dump them out of the box. But in reality, that never happens.



### Why?

Quite simply, because the odds are overwhelmingly against it. Every piece would have to fall in just the right spot to create a completed puzzle. There is only one possible state where every piece is in order, but there are a nearly infinite number of states where the pieces are in disorder. Mathematically speaking, an orderly outcome is incredibly unlikely to happen at random.

Similarly, if you build a sand castle on the beach and return a few days later, it will no longer be there. There is only one combination of sand particles that looks like your sand castle. Meanwhile, there are a nearly infinite number of combinations that don't look like it.

Again, in theory, it is possible for the wind and waves to move the sand around and create the shape of your sand castle. But in practice, it never happens. The odds are



astronomically higher that sand will be scattered into a random clump.

These simple examples capture the essence of entropy. Entropy is a measure of disorder. And there are always far more disorderly variations than orderly ones.

### **Why Does Entropy Matter for Your Life?**

Here's the crucial thing about entropy: it always increases over time.

It is the natural tendency of things to lose order. Left to its own devices, life will always become less structured. Sand castles get washed away. Weeds overtake gardens. Ancient ruins crumble. Cars begin to rust. People gradually age. With enough time, even mountains erode and their precise edges become rounded. The inevitable trend is that things become less organized.

This is known as the Second Law of Thermodynamics. It is one of the foundational concepts of chemistry and it is one of the fundamental laws of our universe. The Second Law of Thermodynamics states that the entropy of a closed system will never decrease.

"The law that entropy always increases holds, I think, the supreme position among the laws of Nature." —Arthur Eddington

The great British scientist Arthur Eddington claimed, "The law that entropy always increases holds, I think, the supreme position among

the laws of Nature. If someone points out to you that your pet theory of the universe is in disagreement with Maxwell's equations—then so much the worse for Maxwell's equations. If it is found to be contradicted by observation—well, these experimentalists do bungle things sometimes. But if your theory is found to be against the Second Law of Thermodynamics I can give you no hope; there is nothing for it but to collapse in deepest humiliation."

In the long run, nothing escapes the Second Law of Thermodynamics. The pull of entropy is relentless. Everything decays. Disorder always increases.

### **HOW TO TRAIN YOUR BRAIN TO THINK IN NEW WAYS**

[PARTH PRAJAPATI, 5<sup>TH</sup> SEMESTER, CHEMICAL ENGINEERING]

You can train your brain to think better. One of the best ways to do this is to expand the set of mental models you use to think. Let me explain what I mean by sharing a story about a world-class thinker.

I first discovered what a mental model was and how useful the right one could be while I was reading a story about Richard Feynman, the famous physicist. Feynman received his undergraduate degree from MIT and his Ph.D. from Princeton. During that time, he developed a reputation for waltzing into the

math department and solving problems that the brilliant Ph.D. students couldn't solve.

When people asked how he did it, Feynman claimed that his secret weapon was not his intelligence, but rather a strategy he learned in high school. According to Feynman, his high school physics teacher asked him to stay after class one day and gave him a challenge.

"Feynman," the teacher said, "you talk too much and you make too much noise. I know why. You're bored. So I'm going to give you a book. You go up there in the back, in the corner, and study this book, and when you know everything that's in this book, you can talk again."

So each day, Feynman would hide in the back of the classroom and study the book—Advanced Calculus by Woods—while the rest of the class continued with their regular lessons. And it was while studying this old calculus textbook that Feynman began to develop his own set of mental models.

"That book showed how to differentiate parameters under the integral sign," Feynman wrote. "It turns out that's not taught very much in the universities; they don't emphasize it. But I caught on how to use that method, and I used that one damn tool again and again. So because I was self-taught using that book, I had peculiar methods of doing integrals."

"The result was, when the guys at MIT or Princeton had trouble doing a certain integral, it was because they couldn't do it with the standard methods they had learned in school. If it was a contour integration, they would have found it; if it was a simple series expansion, they would have found it. Then I come along and try differentiating under the integral sign, and often it worked. So I got a great reputation for doing integrals, only because my box of tools was different from everybody else's, and they had tried all their tools on it before giving the problem to me."

Every Ph.D. student at Princeton and MIT is brilliant. What separated Feynman from his peers wasn't necessarily raw intelligence. It was the way he saw the problem. He had a broader set of mental models.

Richard Feynman teaching some of his mental models to physics students.

### **What is a Mental Model?**

A mental model is an explanation of how something works. It is a concept, framework, or worldview that you carry around in your mind to help you interpret the world and understand the relationship between things. Mental models are deeply held beliefs about how the world works.

For example, supply and demand is a mental model that helps you understand how the economy works. Game theory is a mental

model that helps you understand how relationships and trust work. Entropy is a mental model that helps you understand how disorder and decay work.

Mental models guide your perception and behavior. They are the thinking tools that you use to understand life, make decisions, and solve problems. Learning a new mental model gives you a new way to see the world—like Richard Feynman learning a new math technique.

Mental models are imperfect, but useful. There is no single mental model from physics or engineering, for example, that provides a flawless explanation of the entire universe, but the best mental models from those disciplines have allowed us to build bridges and roads, develop new technologies, and even travel to outer space. As historian Yuval Noah Harari puts it, “Scientists generally agree that no theory is 100 percent correct. Thus, the real test of knowledge is not truth, but utility.”

The best mental models are the ideas with the most utility. They are broadly useful in daily life. Understanding these concepts will help you make wiser choices and take better actions. This is why developing a broad base of mental models is critical for anyone interested in thinking clearly, rationally, and effectively.

## Tools for Thinking Better

Here's the good news:

You don't need to master every detail of every subject to become a world-class thinker. Of all the mental models humankind has generated throughout history, there are just a few dozen that you need to learn to have a firm grasp of how the world works.

Many of the most important mental models are the big ideas from disciplines like biology, chemistry, physics, economics, mathematics, psychology, philosophy. Each field has a few mental models that form the backbone of the topic. For example, some of the pillar mental models from economics include ideas like Incentives, Scarcity, and Economies of Scale.

If you can master the fundamentals of each discipline, then you can develop a remarkably accurate and useful picture of life. To quote Charlie Munger again, “80 or 90 important models will carry about 90 percent of the freight in making you a worldly-wise person. And, of those, only a mere handful really carry very heavy freight.”

I've made it a personal mission to uncover the big models that carry the heavy freight in life. After researching more than 1,000 different mental models, I gradually narrowed it down to a few dozen that matter most. I've written about some of them previously, like entropy and inversion, and I'll be

covering more of them in the future. If you're interested, you can browse my slowly expanding list of mental models.

My hope is to create a list of the most important mental models from a wide range of disciplines and explain them in a way that is not only easy to understand, but also meaningful and practical to the daily life of the average person. With any luck, we can all learn how to think just a little bit better.

### REFERENCE

Mental Models, By James Clear

### YOGA

[AASTHA PAREKH, 5<sup>TH</sup> SEMESTER, ENVIRONMENTAL SCIENCE & TECHNOLOGY]

YOGA is a group of physical, mental and spiritual practices or disciplines which originated in ancient India. There is a broad variety of yoga schools, practices, and goals in Hinduism, Buddhism, and Jainism. Among the most well-known types of yoga are Hath-yoga and Raja-yoga.

The origins of yoga have been speculated to date back to pre-Vedic Indian traditions, it is mentioned in the Rigveda, but most likely developed around the sixth and fifth centuries BCE, in ancient India's ascetic and sramana movements. The chronology of earliest texts describing yoga-practices is unclear, varyingly credited to Hindu Upanishads. The Yoga Sutras Of Patanjali date from the first half of

the 1<sup>st</sup> millennium CE, but only gained prominence in the West in the 20<sup>th</sup> century. Hatha yoga texts emerged around the 11<sup>th</sup> century with origins in tantra.

Yoga gurus from India later introduced yoga to the west, following the success of Swami Vivekananda in the late 19<sup>th</sup> and early 20<sup>th</sup> century. In the 1980's, yoga became popular as a system of physical exercise across the Western world. Yoga in Indian traditions, however, is more than physical exercise, it has a meditative and spiritual core. One of the six major orthodox schools of Hinduism is also called Yoga, which has its own epistemology and metaphysics, and is closely related to Hindu Samkhya philosophy.

### GST

[HETAL PATEL, 5<sup>TH</sup> SEMESTER, ENVIRONMENTAL SCIENCE & TECHNOLOGY]

**Q 1)** What is GST? How does it work?

**Ans.** GST is one indirect tax for the whole nation, which will make India one unified common market.

GST is a single tax on the supply of goods and services, right from the manufacturer to the consumer. Credits of input taxes paid at each stage will be available in the subsequent stage of value addition, which makes GST essentially a tax only on value addition at each stage. The final consumer will thus bear only the GST charged by the last

dealer in the supply chain, with set-off benefits at all the previous stages.

**Q 2) What are benefits of GST?**

**Ans.** The benefits of GST can be summarized as under:

-For business and industry

**Easy compliance:** A robust and comprehensive IT system would be the foundation of the the GST regime in India. Therefore, all tax payer services such as registrations, returns, payments, etc. would be available to the taxpayers online, which would make compliance easy and transparent.

**Uniformly of tax rates and structures:** GST will ensure that indirect tax rates and structures are common across the country, thereby increasing certainty and ease of doing business. In other words, GST would make doing business in the country tax neutral, irrespective of the choice of place of doing business.

**Removal of cascading:** A system of seamless tax-credits throughout the value-chain, and across boundaries of States, would ensure that there is minimal cascading of taxes. This would reduce hidden costs of doing business.

**Improved competitiveness:** Reduction in transaction costs of doing business would eventually lead to an improved competitiveness for the trade and industry.

-For central and state govt.

**Simple and easy to administer:** Multiple indirect taxes at the central state level being replaced by GST. Backed with a robust end-to-end IT system, GST would be simpler and easier to administer than all other taxes of the centre and state levied so far.

**Better controls on leakage:** GST will result in better tax compliance due to a robust IT infrastructure. Due to the seamless transfer of input tax credit from one stage to another in the chain of value addition, there is an in-built mechanism in the design of GST that would incentivize tax compliance by traders.

**Higher revenue efficiency:** GST is expected to decrease the cost of collection of tax revenues of the Govt., and will therefore, lead to higher revenue efficiency.

-For the consumer

**Single and transparent tax proportionate to the value of goods and services:** Due to multiple indirect taxes being levied by the centre and state, with incomplete or no input tax credits available at progressive stages of value addition, the cost of most goods and services in the country today are laden with many hidden taxes. Under GST, there would be only one tax from the manufacturer to the consumer, leading to transparency of taxes paid to the final consumer.



Relief in overall tax burden: Because of efficiency gains and prevention of leakages, the overall tax burden on most commodities will come down, which will benefit consumers.

## SOCIOLOGY

[ROSHNI PAL, 5<sup>TH</sup> SEMESTER,  
ENVIRONMENTAL SCIENCE &  
TECHNOLOGY]

Sociology, scientific study of human social behavior. As the study of humans in their collective aspect, sociology is concerned with all group activities-economic, social, political, and religious. Sociologists study such as areas as bureaucracy, community, deviant behavior, family, public opinion, social change, social mobility, social stratification, and such specific problems as crime, divorce, child abuse, and substance addiction. Sociology tries to determine the laws governing human behavior in social contexts, it is sometimes distinguished as a general social science from the special social science, such as economics and political science, which confine themselves to a selected group of social facts or relations.

The Evolution of Sociology: A number of Western political theorists and philosophers, including Plato, Polybius, Machiavelli, Vico, Hobbes, Locke, have treated political problems in a broader social context. Thus Montesquieu regarded the political forms of different states as a consequence of the working of deep

underlying climatic, geographic, economic, and psychological factors. In the 18<sup>th</sup> century, Scottish thinkers made inquiries into the nature of society, scholars like Adam Smith explored the economic causes of social organization and social change, while Adam Ferguson considered the noneconomic causes of social cohesion.

## SPORTS AND GAMES IN ANCIENT INDIA

[NIKITA PATEL, 5<sup>TH</sup> SEMESTER,  
ENVIRONMENTAL SCIENCE &  
TECHNOLOGY]

Games such as Chess, Snakes and Ladders, Playing Cards, Polo, The martial arts of Judo and Karate had originated in India and it was from here that these games were transmitted to foreign countries, where they were further developed.

Several games now familiar across the world owe their origins in India, particularly, the games of chess, Judo and Playing cards. The famous epic Mahabharata narrates an incidence where a game called Chaturang was played between two groups of warring cousins.

The age when epic Mahabharata was written is variously dated around 800 BC to 1000BC. In some form or the other, the game continued till it evolved into chess. H.J.R.Murry, in his work titled A History of Chess, has concluded that chess is a descendant of an

Indian game played in the 7<sup>th</sup> century AD. The game of cards also developed in ancient India. Abdul Fazal was a scholar in the court of Mughal emperor Akbar. In his book, Ain-e-Akbari, which is a mirror of life of that time, records game of cards is of Indian origins. Martial arts by the name of Kalaripayattu were a native of Kerala, a state of India. Kalaripauattu consists of a series of intricate movements that train the body and mind.

## THE IMPORTANCE OF PEACE OF MIND IN YOUR LIFE

[CHAITANYA VAGHELA, 5<sup>TH</sup> SEMESTER, CHEMICAL ENGINEERING]

In a world where stress, strain, rush and restlessness abound, peace of mind is of paramount importance. It is a treasure that everyone desires, but only very few know how to gain it, and even fewer really do something to get it.

With all the advancement of science, no remedy has yet been found for lack of inner peace. Often, even when being in good financial condition and in good health, people have no peace of mind, which only proves that peace of mind does not depend on external conditions or on any scientific or technical progress. The solution has to come from within, not through external means.

It is not always possible to change external conditions, but you can certainly change your

inner attitude and learn to stop allowing outside influences affect your moods and states of mind.

Peace of mind is not something to be found only on the Himalayas, by monks and hermits. It is attainable here and now, wherever you are, irrespective of your external circumstances, since it is an inner state, and is independent of circumstances and external conditions.

Peace manifests, when the incessant inner chatter of the mind slows down. When it appears, anxiety, stress, worries, fear, mental and emotional restlessness, nervousness and impatience disappear. It is a state of inner calmness, tranquility and serenity, which brings forth happiness, tolerance, inner poise, inner balance and self-control.

Peace of mind is an acquired skill, which requires time, practice and perseverance to develop, just like any other skill. With the right training, and with desire, motivation, patience and perseverance, you are sure to attain at least some degree of inner peace.

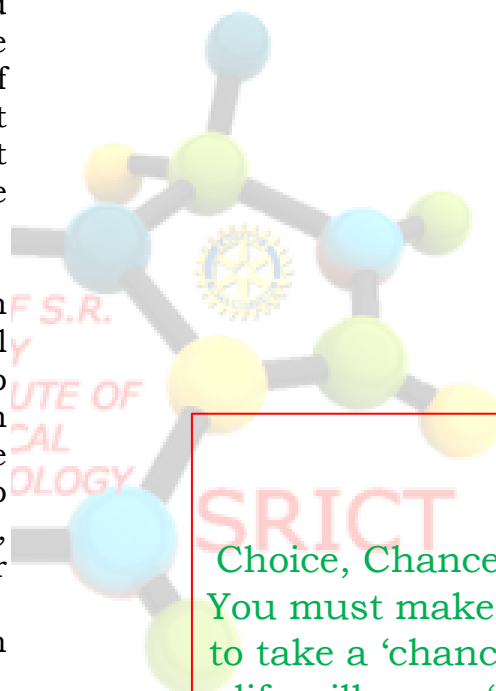
Peace of mind will enable you to manifest calmness and tranquility in your daily life, and also in difficult and trying situations. It will allow you to display emotional and mental detachment whenever needed, and thereby avoid being too affected by other people's words, feelings and behavior. It will also enable you to control your reactions and become a happy, patient,

tolerant and open-minded human being.

There are various techniques for gaining peace of mind, and following and implementing them, even for just a few minutes a day, will make a noticeable difference in your life, and you will soon become aware of positive inner changes within you.

You don't have to wait for the perfect circumstances to start working on gaining it. You can start here and now, regardless of the kind of life you are living, and irrespective of your circumstances. This might require some effort on your part, but it is a worthwhile project and the rewards are great.

You can continue living your own life, without changing your external condition, continue with your job and relationships, and yet work on attaining inner peace. This is done in a gradual manner, by learning to change your mental attitude, developing inner strength and inner detachment, through meditation and through other means.



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## LITERARY ARTICLES: સાહિત્યિક પ્રબન્ધ

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SR.NO.	TITLE	CATEGORY
1.	CHANGE IS CONSTANT BY LIFE GURU SHURAKSHIT	SHORT STORY
2.	HEAVEN & HELL	SHORT STORY
3.	POWER OF THOUGHT	SHORT STORY
4.	STARRY NIGHT	SHORT STORY
5.	TRIBUTE TO HARIVANSH RAI BACHCHAN	COLLECTION OF POEMS
6.	IMAGINE	POETRY
7.	WILL THERE BE PEACE?	POETRY
8.	દીકરી તારા વહાલ નો દરિયો જીવનભર છલકાય	POETRY
9.	BEST 10 TILL NOW!	COLLECTION FROM PREVIOUS ISSUES
10.	THE SECRET	BOOK REVIEW
11.	127 HOURS (2010)	MOVIE REVIEW

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## CHANGE IS CONSTANT BY LIFE GURU SURAKSHIT

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[FENI FALDU, 5<sup>TH</sup> SEMESTER ,  
ELECTRICAL ENGG. DEPARTMENT]

Once, a king hosted a huge party on his birthday, inviting friends and acquaintances. The guests arrived with beautiful gifts. After the party, the king eagerly unwrapped his presents. In one of them, he discovered to his chagrin only a piece of paper! On it was scribbled: 'This too shall pass'. Angry, the king ordered the bearer of the gift to put behind the bars. A few days later, the king was faced with an unexpected attack by the neighboring kingdom. He was captured and imprisoned. As he paced in his prison cell disturbed by the sudden turn of events, he found the same note in one of his pockets. This time he found great consolation in the message on the slip.

Within a few months, the king's army launched a counter – attack on the neighboring kingdom and freed him. At that moment, the king understood the true import of the message, 'This too shall pass'. Back in his kingdom, the king ordered the immediate release of the bearer of the message from prison. He then appointed him as his counsellor.

The root cause of our misery is that we fail to understand the impermanence of things. When we are happy, we want happiness to last forever. And when misfortune

strikes, we wallow in sorrow and think that we are doomed forever. Whatever the situation – joy or sorrow, loss or gain, praise or censure – we fail to face it with equanimity.

Nothing is permanent in this world. Everything changes, except for the law of change. Nothing remains forever. Joy and sorrow are two faces of the same coin. They too shall pass. You are just a witness to change. Experience it, understand it, and enjoy the present moment, as this too shall pass.

In the Bhagwad Gita, Krishna tells Arjuna that change is the essence of nature. It teaches us lessons in impermanence, life and death. These are things to be accepted. If there is anything that stays the same, it is our soul or our consciousness, or what some people call the higher Self. Those who realise this truth will always be happy.

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## HEAVEN & HELL

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[DRASTI GHODASARA, 5<sup>TH</sup>  
SEMESTER , ENVIRONMENTAL  
SCIENCE & TECHNOLOGY]

A holy man was having a conversation with the Lord one day and said, "Lord, I would like to know what heaven and hell are like." The Lord led the holy man to two doors. He opened one of the doors and the holy man looked in. In the middle of the room was a large pot of stew which smelled delicious and made the holy man's mouth water. But



the people sitting around the table were thin and sickly. They appeared to be famished. They were holding spoons with very long handles that were strapped to their arms and each found it possible to reach into the pot of stew and take a spoonful, but because the handle was longer than their arms, they could not get spoons back into their mouths. The holy man shuddered at the sight of their misery and suffering. The Lord said, 'you have seen hell.' They then went to the next room and opened the door. It was exactly the same as the first one. There was a large round table with the large pot of stew which made the holy man's mouth water. The people were equipped with the same long - handled spoons, but here the people were well nourished and plump, laughing, and talking. The holy man said, "I don't understand." "It is simple" said the Lord, "In this place the people have learned to feed one another."

## POWER OF THOUGHT

[DIPAL TALATI, 5<sup>TH</sup> SEMESTER,  
CHEMICAL ENGINEERING]

One day, a yogi and his disciple arrived in the big city. They had no money with them, but they needed food and a place to stay. The disciple was sure that they were going to beg for their food, and sleep in the park at night. "There is a big park not far from here. We can sleep there at night," said the disciple. "In the open air?" asked the yogi. "Yes," responded the student. The yogi

smiled and said: "No, tonight we are going to sleep in a hotel and eat there too." The student was amazed and exclaimed, "We cannot afford that!" "Come and sit down," said the yogi.

They both sat down on the ground, and the yogi said: "When you focus your mind intently on any subject, it comes to pass." The yogi closed his eyes and started to meditate with full concentration. After about ten minutes he got up and started to walk, with his disciple following him. They walked through several streets and alleys, until they arrived at a hotel.

"Come, let's go in," the yogi said to his disciple. They had just set foot in the hotel lobby, when a well - dressed man approached them. "I am the manager of this hotel. You look like travelling swamis, and I believe you have no money. Would you like to work in the kitchen, and in return I'll give you food and a place to stay?" "Fine", the yogi responded. The disciple was perplexed and asked the yogi: "Did you use any magic? How did you do that?"

The yogi smiled and said, "I wanted to show you how the power of thought works. When you think with full and strong concentration about something that you want to happen, and your mind does not resist the subject of your thought, your thought materializes." "The secret is concentrating, visualizing, seeing details, having faith and

projecting mental and emotional energy into the mental scene. These are the general perquisites. When your mind is empty from thoughts, and only one single thought is allowed to enter, it gains a very great power.

One should be very careful with what he thinks. A concentrated thought is powerful and exerts a very strong influence.” The disciple looked at his teacher and said: “I see that I have to sharpen my concentration in order to be able to use this power.” “Yes, this is the first step,” the yogi replied.

## STARRY NIGHT

[CHARMI PANCHAL, 5<sup>TH</sup> SEMESTER  
,ENVIRONMENTAL SCIENCE &  
TECHNOLOGY]

There were two brothers who owned a small farm. The name of the elder brother was Horey and the younger brother was Lorey. Horey worked hard on the farm and earned a living. But Lorey was very lazy. He wasted all his time gambling and loitering in the village. Horey tried everything to motivate his brother to take up work, cajoling him, rebunking him, but nothing worked. Lorey was not willing to mend his way. One day, Horey got so fed up that he said to Lorey, “Leave and earn your living.” Lorey was offended. He said: “I shall return home only with a fortune. I will go to the town and become a millionaire’s heir.” Saying this, Lorey told him: “I have left home to become a

millionaire. But I am very hungry and too tired now. Can you help me?” “Why not ...?” said the old man. “...Come with me and spend the night in my home. I can make you a millionaire tonight itself, but you will have to pass a test for that.” Lorey agreed and accompanied the old man to his palatial mansion. After a sumptuous supper, the old man took Lorey to a pond and said, “You have to remove the stars lying in the pond tonight itself.” “But they are nothing but the reflections of the stars,” said Lorey. “I want you to remove them,” insisted the old man. ‘The old man seems to have lost his mind,’ Lorey thought to himself and left and returned home. When Horey heard Lorey’s story and how the old man tried to make a fool out of his brother, he decided to tackle him. He went to the old man and said: “I shall remove the stars from the pond tonight itself.” When the old man was asleep, he picked up a shovel and dug a narrow canal from the pond. The water began to flow out and finally the pond got drained. Thereafter, he covered the canal with the same soil he had removed to create it. Next morning, the old man woke up and came out. Horey said: “look, I removed all the stars from the pond last night.” The old man said: “I thought you would give up and return home. I have been looking for a wise youngster to be my successor and I have found one. From now on, you will be heir to all my belongings including this mansion.” Horey was thrilled to hear this. He returned home and told

Lorey: "I have come back with a fortune. I have become a millionaire's heir. You can continue to stay with me." That very day, both the brothers went to live in the palatial mansion belonging to the old man.

## “POEMS”

### Tribute to “HARIVANSH RAI BACHCHAN”

[HAMZA SHAIKH , 7<sup>TH</sup> SEMESTER ,  
MECHANICAL ENGG. DEPARTMENT]

#### 1. जो बीत गई सो बात गई

जीवन में एक सितारा था  
माना वह बेहद प्यारा था  
वह डूब गया तो डूब गया  
अंबर के आंगन को देखो  
कितने इसके तारे टूटे  
कितने इसके प्यारे छूटे  
जो छूट गए फिर कहाँ मिले  
पर बोलो टूटे तारों पर  
कब अंबर शोक मनाता है  
जो बीत गई सो बात गई !!

जीवन में वह था एक कुसुम  
थे उस पर नित्य निछावर तुम  
वह सूख गया तो सूख गया  
मधुबन की छाती को देखो  
सूखी कितनी इसकी कलियाँ  
मुरझाई कितनी वल्लरियाँ  
जो मुरझाई फिर कहाँ खिलीं  
पर बोलो सूखे फूलों पर

कब मधुबन शोर मचाता है  
जो बीत गई सो बात गई !!

जीवन में मधु का प्याला था  
तुमने तन मन दे डाला था  
वह टूट गया तो टूट गया  
मदिरालय का आंगन देखो  
कितने प्याले हिल जाते हैं  
गिर मिट्टी में मिल जाते हैं  
जो गिरते हैं कब उठते हैं  
पर बोलो टूटे प्यालों पर  
कब मदिरालय पछताता है  
जो बीत गई सो बात गई !!

मृदु मिट्टी के बने हुए हैं  
मधु घट फूटा ही करते हैं  
लघु जीवन ले कर आए हैं  
प्याले टूटा ही करते हैं  
फिर भी मदिरालय के अन्दर  
मधु के घट हैं, मधु प्याले हैं  
जो मादकता के मारे हैं  
वे मधु लूटा ही करते हैं  
वह कच्चा पीने वाला है  
जिसकी ममता घट प्यालों पर  
जो सच्चे मधु से जला हुआ  
कब रोता है चिल्लाता है  
जो बीत गई सो बात गई !!

#### 2. मकान चाहे कच्चे थे

मकान चाहे कच्चे थे  
लेकिन रिश्ते सारे सच्चे थे...

चारपाई पर बैठते थे  
पास पास रहते थे...

\*\*\*\*\*  
सोफे और डबल बेड आ गए  
दूरियां हमारी बढ़ा गए...

छतों पर अब न सोते हैं  
बात बतंगड अब न होते हैं...

\*\*\*\*\*  
आंगन में वृक्ष थे  
सांझो सुख दुख थे...

दरवाजा खुला रहता था  
राही भी आ बैठता था...

\*\*\*\*\*  
कौवे भी कांवते थे  
मेहमान आते जाते थे...

इक साइकिल ही पास था  
फिर भी मेल जोल था...

\*\*\*\*\*  
रिश्ते निभाते थे  
रूठते मनाते थे...

पैसा चाहे कम था  
माथे पे ना गम था...

\*\*\*\*\*  
मकान चाहे कच्चे थे  
रिश्ते सारे सच्चे थे...

अब शायद कुछ पा लिया है,  
पर लगता है कि बहुत कुछ गंवा दिया...

\*\*\*\*\*  
जीवन की भाग-दौड़ में –  
क्यूँ वक्त के साथ रंगत खो जाती है?

हँसती-खेलती ज़िन्दगी भी,  
आम हो जाती है।

\*\*\*\*\*  
एक सवेरा था,  
जब हँस कर उठते थे हम...

और

आज कई बार,  
बिना मुस्कराये ही  
शाम हो जाती है!!

\*\*\*\*\*  
कितने दूर निकल गए,  
रिश्तो को निभाते निभाते...

खुद को खो दिया हमने,  
अपनों को पाते पाते... !!

### 3. अग्निपथ कविता

वृक्ष हों भले खड़े,  
हों घने हों बड़े,  
एक पत्र छाँह भी,  
माँग मत, माँग मत, माँग मत,  
अग्निपथ अग्निपथ अग्निपथ !!

\*\*\*\*\*  
तू न थकेगा कभी,  
तू न रुकेगा कभी,  
तू न मुड़ेगा कभी,  
कर शपथ, कर शपथ, कर शपथ,  
अग्निपथ अग्निपथ अग्निपथ !!

\*\*\*\*\*  
यह महान दृश्य है,  
चल रहा मनुष्य है,

अश्रु श्वेत रक्त से,  
लथपथ लथपथ लथपथ,  
अग्निपथ अग्निपथ अग्निपथ !!



– Harivansh Rai Bachchan

Born: 27 November 1907, Allahabad  
Died: 18 January 2003, Mumbai

## IMAGINE

[MANSI KASUNDRA, 5<sup>TH</sup> SEMESTER  
,ENVIRONMENTAL SCIENCE &  
TECHNOLOGY]

Imagine there's no Heaven  
It's easy if you try  
No Hell below us  
Above us only sky.  
Imagine all the people  
Living for today.....  
Imagine there are no countries  
It isn't hard to do

Nothing to kill or die for  
And no religion too  
You, you may say I am a dreamer  
But I'm not the only one  
I hope someday you'll join us  
And the wind will be as one.  
Imagine no possessions  
I wonder if you can  
No need for greed or hunger  
A brotherhood of man  
Imagine all the people  
Sharing the entire world.....  
You, you may say I am a dreamer  
But I'm not the only one  
I hope someday you'll join us  
And the wind will be as one.

## WILL THERE BE PEACE?

[SHIVANI MODI, 5<sup>TH</sup> SEMESTER,  
CHEMICAL ENGINEERING]

Nations are fighting each other in war,  
Deep in my heart, I have fear,  
Love & kindness going far.  
Is the doomsday near? Is the doomsday near?  
  
Oh! Peace comes into my heart,



Only you can calm down my fears.

Oh! Peace comes into my heart,

Without you nothing is clear.

Like the leaf covered with dust,

Hoping to see monsoon.

We are surrounded by violence,

And we hope to see you soon.

Oh! Peace come into my heart,

Greed & jealousy engulfed it

Oh! Peace come into my heart,

All evil has entered it.

Men are tearing each other's chest,

Blood is flowing like stream.

Peace is gone, there is unrest,

People are gloomy, they have no dream.

Oh! Peace comes to this land.

We do want you more than anything.

Our heart is turning like the desert sand,

Without you there is nothing.

દીકરી તારા વહાલ નો દરિયો જીવનભર છલકાય

[KWINAL ANTALA, 5<sup>TH</sup> SEMESTER,  
ENVIRONMENTAL SCIENCE &  
TECHNOLOGY]

દીકરી તારા વહાલ નો દરિયો જીવનભર છલકાય પામતા  
જીવન માતપિતા નું ધન્ય થયી જાય એક જ સ્મિત માં  
તારા ચમકે મોતીડા હાજર દીકરી મારી લાડકવાયી

ઢીંગલા સાથે રમતી ઢીંગલી જેવું મારું બાળ રમતા થાકી  
ને ભૂખ લાગે તો ખીર રાખું તૈયાર રૂપ માં તારા લાગે મને  
પરી નો અણસાર દીકરી મારી લાડકવાયી

કાલી ઘેલી વાણી થી ઘર ઘૂઘરો થઈ ને ગુંજે પ પ પગલી  
ચલાવતા બાપ નું હેયું ઝૂમે દીકરી તું તો માતપિતા નો  
સાચો છે આધાર દીકરી મારી લાડકવાયી

હેયા ના ઝૂલે હેત ની દોરી બાંધી તને ઝુલાવું હાલરડાં ની  
રેશમી રજાઈ તને હું ઓઢાડું પાવન પગલે તારા મારો  
ઉજળો છે સંસાર દીકરી મારી લાડકવાયી

દીકરી મારી લાડકવાયી લક્ષ્મી નો અવતાર એ સુવે તો  
રાત પડે ને જાગે તો સવાર.

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## BEST 10 TILL NOW!

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### HARE AND TORTOISE

[VINITHA VAKKAYIL, ASSISTANT  
PROFESSOR, MATHEMATICS,  
SCIENCE & HUMINITIES]

[PUBLISHED IN KATHAN ISSUE 3]

Once upon a time a tortoise and a hare had an argument about who was faster. They decided to settle the argument with a race. They agreed on a route and started off the race. The hare shot ahead and ran briskly for some time. Then seeing that he was far ahead of the tortoise, he thought he'd sit under a tree for some time and relax before continuing the race. He sat under the tree and soon fell asleep. The tortoise plodding on overtook him and soon finished the race, emerging as the undisputed champ. The hare woke up and realized that he'd lost the race.

The moral of the story is that slow and steady wins the race.

This is the version of the story that we've all grown up with. But then here is a more interesting version of this story. It continues thus.....

The hare was disappointed at losing the race and he did some soul-searching. He realized that he'd lost the race only because he had been overconfident, careless and lax. If he had not taken things for granted, there's no way the tortoise could have beaten him. So he challenged the tortoise to another race. The tortoise agreed. This time, the hare

went all out and ran without stopping from start to finish. He won by several miles.

The moral of the story?

Fast and consistent will always beat the slow and steady. If you have two people in the organization, one slow, methodical and reliable, and the other fast and still reliable at what he does, the fast and reliable chap will consistently climb the organizational ladder faster than the slow, methodical chap. It's good to be slow and steady; but it's better to be fast and reliable.

But the story doesn't end here.

The tortoise did some thinking this time, and realized that there's no way he can beat the hare in a race the way it was currently formatted. He thought for a while, and then challenged the hare to another race, but on a slightly different route. The hare agreed. They started off. In keeping with his self-made commitment to be consistently fast, the hare took off and ran at top speed until he came to a broad river. The finishing line was a couple of kilometres on the other side of the river. The hare sat there wondering what to do. In the meantime the tortoise trundled along, got into the river, swam to the opposite bank, continued walking and finished the race.

The moral of the story?

First identify your core competency and then change the playing field to suit your core competency.

The story still hasn't ended.

The hare and the tortoise, by this time, had become pretty good friends and they did some thinking together. Both realized that the last race could have been run much better. So they decided to do the last race again, but to run as a team this time. They started off, and this time the hare carried the tortoise till the riverbank. There, the tortoise took over and swam across with the hare on his back. On the opposite bank, the hare again carried the tortoise and they reached the finishing line together. They both felt a greater sense of satisfaction than they'd felt earlier.

The moral of the story?

It's good to be individually brilliant and to have strong core competencies; but unless you're able to work in a team and harness each other's core competencies, you'll always perform below par because there will always be situations at which you'll do poorly and someone else does well.

Teamwork is mainly about situational leadership, letting the person with the relevant core competency for a situation take leadership.

There are more lessons to be learnt from this story. Note that neither the hare nor the tortoise gave up after failures. The hare decided to work harder and put in more effort after his failure. The tortoise changed his strategy because he

was already working as hard as he could. In life, when faced with failure, sometimes it is appropriate to work harder and put in more effort. Sometimes it is appropriate to change strategy and try something different. And sometimes it is appropriate to do both.

The hare and the tortoise also learnt another vital lesson.

When we stop competing against a rival and instead start competing against the situation, we perform far better.

To sum up, the story of the hare and tortoise teaches us many things. Chief among them are that fast and consistent will always beat slow and steady; work to your competencies; pooling resources and working as a team will always beat individual performers; never give up when faced with failure; and finally, compete.

### METAMORPHOSIS

[PUBLISHED IN KATHAN ISSUE 5]

(Are You a Horse Or A Goat?)

*There was a farmer who had a horse and a goat.... One day, the horse became ill so he called the veterinarian, who said:*

*"Well, your horse possesses a virus. He must take this medicine for three days. I'll come back on the 3rd day and if he's not better, we're going to have to put him down."*

*Nearby, the goat listened closely to their conversation.*

*The next day, they gave the horse the medicine and left.*

*The goat approached the horse and said:*

*"Be strong, my friend. Get up or else they're going to put you to drop off!"*

*On the second day, they again gave the horse the medicine and left.*



The goat came back and said:

*"Come on buddy, get up or else you're going to die! Come on, I'll help you get up. Let's go! One, two, and three..."*

On the third day, they came to give the horse the medicine and the vet said:

*"Unfortunately, we're going to have to put him down tomorrow. Otherwise, the virus might spread and infect the other horses".*

After they left, the goat approached the horse and said:

*"Listen pal, it's now or never! Get up, come on! Have courage!"*

*Come on! Get up! Get up!*

*That's it, slowly! Great!*

*Come on, one, two, and three... Good, good.*

*Now faster, come on..... Fantastic! Run, run more!*

*Yes! Yay! Yes! You did it, you're a champion...!"*

All of a sudden, the owner came back, saw the horse running in the field and began shouting:

*It's a miracle! My horse is cured. We must have a grand party.*

*Let's kill the goat!!!!*

### MOTHER

[MEERA Y PATEL, ASSISTANT PROFESSOR, DEPT. OF MATHS, SCIENCE AND HUMANITIES]

[PUBLISHED IN KATHAN ISSUE 7]

It was a cloudy morning. I had a fever and I didn't want to go school. I asked my mother to write a leave note for me. My mother checked my temperature and reached to conclusion that I could go to school as I didn't have high temperature. I felt so much dejection. I thought 'Why my mother did this to me?' I went to school and passed my day.



Slowly and gradually days passed and I forgot the incident.

After a few days, one sparrow built a nest at my home. I was very happy seeing that sparrow and its eggs. I was curiously waiting for sparrow's babies to come out and finally the day came when chicks broke the eggs and came out. They were so little and pretty. I used to spend time with them. I talked to them and listened to their enchanting voice.



I observed them carefully every day. Mother sparrow brought cockroaches and other insects to eat for chicks.

Slowly and gradually chicks started fluttering wings in the nest. Now it's time to learn flying for babies. Mother tried to push babies so that they could learn fly. However chicks were so afraid of flying. They didn't come out of the nest. One evening I observed that mother sparrow had put pieces of mirror in the nest. I was shocked seeing this. I thought 'what kind of mother is she?' However, as chicks started fluttering in the nest, their wings were hurt by the pieces of mirror. To avoid injury,

chicks managed to come out of the nest and they started flying!

Suddenly it struck to my mind why my mother forced me to go to school on the day I had fever. I felt so guilty about my wrong perception towards my mother.

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## REFERENCE

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<http://www.dreamstime.com/stock-images-chipping-sparrow-nest-image15387054>

## THE WINNER OF HUMAN RACE

[CHINTAN  
SEMESTER,  
ENGINEERING]

CHAROLA, 3<sup>RD</sup>  
MECHANICAL

[PUBLISHED IN KATHAN ISSUE 10]

I open my eyes...ah! The joy of a new day,  
No matter what comes along, my happiness will stay,  
I take a deep breath... I am glad I am alive,  
The rest of the day is a bonus...no matter how hard I strive.  
To me all of life...is joy; again and again,  
My work is just a game I like to play,  
I love the hunt...the chase...the fray,  
I welcome the challenge...I am a smiling gladiator.  
Impossible to defeat...a laughing mediator,  
When everyone says it can't be done...just get on with it and do it,  
When things get loose...roll up your sleeves and screw it,



When things become old hat...just think and new thought will renew it, Remember!!  
There are always two ways...the hard way, or the easy way to do it.

### A GOODBYE TO REMEMBER !

[MS. SHIVALIKA V. PATEL,  
ASSISTANT PROFESSOR, MSH  
DEPARTMENT]

[PUBLISHED IN KATHAN ISSUE 13]

Wonderful memories flood my mind  
As I put my brain in re-wind  
I think of special characteristics of each person  
And will miss all, I am certain  
Who tells the best interesting stories?  
Who's outrageous outfits' number in the forties?  
Whose handwriting is the best?  
Who can multiply better than all the rest?  
Whose sweet smile is so cheerful?  
Who dances with finesse and is the finest  
Who is truthful and never biased?  
Who draws the loveliest art?  
Who always shares and does his/her part  
Who always listens and never whines  
Whose locker is organized and neat?  
Whose skill at irritating teachers cannot be beat?  
Who follows directions perfectly?  
Who is polite and shows courtesy  
Who collects interesting and cool stuff?  
Who easily gets the teacher off topic?  
Who is the most wonderful comic?  
Who is mindful and a great leader

Who loves books and excels as a reader  
The shy, the rowdy, the funny and the naughty  
These are my students I will always care & remember strongly.

### THOUGH

[MR.MIRCHANDANI JAY, 5<sup>TH</sup> SEM  
MECHANICAL ENGINEERING]

[PUBLISHED IN KATHAN ISSUE 14]

The good you do today, will be forgotten tomorrow.  
Though do well!  
People favour underdogs, but follow only top dogs.  
Though fight for underdogs!  
What you spend years building up may be destroyed overnight.  
Though build!  
Give the world the best you have and it may kick you in teeth.  
Though give the world the best you have got!  
People are unreasonable, illogical, and self-centred.  
Though love them.  
If you are successful, you will win false friends and true enemies.  
Tough succeed!

### જીવનભરનો દાખલો

[MR SANKET C THUMAR, 8TH SEM  
MECHANICAL ENGINEERING]

[PUBLISHED IN KATHAN ISSUE 16]

જન્મ્યોહુંને સાથે મારી આવ્યો જન્મનો દાખલો...  
છ વર્ષ નો થયો હું નેથયો મારો સ્કુલમાં દાખલો...  
ભણતો હું ને સાહેબ મારા મને ભણાવતા દાખલો...

મા-બાપ , ગુરુ સૌ આપતા ભણ્યા ગણ્યા નો  
દાખલો...  
શિષ્યવૃત્તિ જોઈએ તો લાવો જાતિનો દાખલો...  
આવક - મર્યાદા માટે પણ આવક નો દાખલો...  
શિક્ષણ - નોકરી - લગ્ન ને પેન્શન માટે દાખલો...  
જીવનભર દોડતો રહ્યો હું મેળવવા ને દાખલો...  
છોડી દુનિયા ગયો જ્યાં ત્યારે આવ્યો મરણ નો  
દાખલો...  
હું ન રહ્યોપણ રહ્યો મારા આવ્યા-ગયા નો દાખલો...

### MY COLLEGE LIFE

[RIDDHI D. CHANDEGARA, 5<sup>TH</sup>  
SEMESTER, CHEMICAL ENGINEERING]

[PUBLISHED IN KATHAN ISSUE 18]

My heart peevish for some time,  
so beautiful were college life,  
No one can ignore to discuss,  
That how was his college life,  
At the time of admission we said,  
so long is our college life,  
The first step was to admit at  
college,  
The second was to retired from  
college life  
Then to sat in class first year,  
We take start for college life,  
But after very little period of time,  
First year were ignored from college  
life,  
Then on promoting of next class,  
I felt the beauty of college life,  
But the time has to go on and so on!  
And never wait to enjoy college life,  
Now before ending the session,  
To shares activities of college life.

### KNOW THE ULTIMATE GOAL OF YOUR LIFE

[EKTA JASROTIA, EST 7<sup>TH</sup> SEM ]

[PUBLISHED IN KATHAN ISSUE 18]

When we speak of the goal of life, most of us think of some worldly ambition. We say, “I want to be an engineer”, ‘I want to be rich’, and so on and so forth. We are so pre-occupied in achieving our respective ambitions that we hardly explore what we really want in life .After working day and night, and struggling very hard, a person may become an engineer or doctor, may amass wealth, and have a good family too. But do these guarantee happiness and peace that is eternal? Is this all that is there to life? What is the purpose of our existence? Most of us remain unaware about the ultimate goal of the human life.

Within each of us is a natural urge to struggle for a better state of life than the present one. With regular practice of introspection we sense incompleteness in the current state of life. This makes us crave unalloyed happiness, uninterrupted peace, and immortality. This is the inner quest and ultimate goal of every human heart. We are all trying hard to attain it in our own way, irrespective of whether we are aware of our efforts in this direction and whether or not we succeed in our efforts during our life time.

We therefore work towards gaining a sense of completeness that we find missing in our lives. Generally we

want to achieve something that we think is within our reach, expect for some courageous men and women who like to make a sort of pole-vault to attain what is apparently beyond an individual's capacity. They are able to reject the alluring and prolific material goals, and focus only on the ultimate goal. Such people are very rare. Most of us are unmindful of the ultimate goal of life and set out to seek the desired completeness in life by pursuing material and tangible goals such as academic qualifications, a respectable career, marriage, progeny, creation of wealth, and so on though necessarily in the given order. This we do ignorantly and unintentionally, following social conventions or a kind of herd mentality, with the underlying belief that by working hard and achieving same position of importance in social life, we will be able to achieve a state that is different from the present one; a happier, freer, more peaceful, more powerful and less miserable state. Hope those who are reading this might be thinking the ultimate goal of their life and starts working upon it and achieving happiness soon.

## THE HEART THAT NEVER STOPPED BEATING

[ISHWAR JADHAV & MANSI VAGHASIYA, 2<sup>ND</sup> CE ]

[PUBLISHED IN KATHAN ISSUE 20]

Sir, your appointment is at 12'0 clock, the receptionist said handling the order.

"Okay", said looking at my watch still one hour left. I said to myself. I had no other option but to wait so I just sat in front of reception. Then I got busy in checking my social networking site.

While I was busy in doing nothing a soft but sad sobbing voice kept striking my ears. I tried to find out what was the source of that noise. I saw a boy about 18 years old was crying.

I couldn't help myself so I went near him and asked if he was okay "Why are you crying?" He was a smart looking boy who looked pale and tired in that hospital blue dress. He was carrying a big number of wounds on his body.

For few minutes, no one spoke there was an awkward silence. For two minutes, meanwhile the hospital chaos filled in the silence. Then a voice came and he uttered "Sorry" and started wiping his tears. 'It's okay' I said and asked if he was okay.

“Yes”, he said and sat silently. I asked so why are you here’. “I had a heart transplant” he answered.

“OH!” It went well I guess as you are sitting next to me. I said [It was lame I was never good with some things]. “Yes” he said. But can I ask you a question! I said, “If your surgery went fine why were you crying?”. “It’s a long story he said and tears again started” he said and tears again started to fall from his eyes. I had nothing to do so I said “Please tell me, I want to know”. “Okay” he said.

My name is Sarth. I have just entered my college. I live here in Delhi. I live with my grandparents as my mom-dad are in Mumbai for work.

Then suddenly he asked me a weird question “Who was the important person for me in life or who the most important person in my life was?” I was confused by the question but I answered “My parents, my wife, my kids and my friends”.

“Okay” he said. “Basically, all these roles in my life was played by friend well off course not children and wife. But the role of parents and friends and a companion. His name is Preyansh.

He was an orphan and lived in Delhi and got admission with me in my school. We were together from 6th grade. He is everything to me. I never got the love and affection. I should get from my parents, so I spent most time the day with him.

Just like all teenagers we did lots of fun together; Bunking, going for trips, night-outs. We spent as much time as we could together. We were soul brothers.

After completion of our higher secondary board, the school organized on farewell party. We were not at all excited as school parties were lame. We wanted to do something exciting and something worth remembering. So we decided to go on a bike trip. So on the day of farewell we took off. It was an old Bajaj bike which was unwillingly used by Preyansh. We were excited we talked, laughed, sang during the journey. We recalled our school memories how we bunked classes and all those canteen pranks. In every memory I had in my mind, Preyansh was with me, without him my life was like a plain book or an empty jar. We stopped in between to switch places. We reached our desired place spent some time there. It was getting dark so we set off again towards home. We were getting late so we decided to go faster.

Suddenly a truck came in front of us and it was all black, I could see nothing but lights and here Preyansh mourning, his legs were trapped in the bike, suddenly I felt pain in my chest and saw I was all covered with blood. Then someone picked us and put us in the ambulance I was looking at Preyansh he was looking at me. We both held each other’s hand and I said to him, “Don’t worry we will be fine”. Preyansh said, “Yaa, I know

bro but sorry if I ever hurt you and thank you so much for coming in my life, in case we didn't make it" he smiled gently and said that he loved me we both passed out.

I woke up in hospital room, my parents and relative were standing there, they told me the story of accident that a piece of glass pierced in my chest and damaged my artery. But I didn't care about what they said I was only looking for Preyansh, I looked on to my side bed but the bed was empty so I asked them about him. Everyone become quiet. I asked them again but no one answered then my grandpa come and hugged me and whispered that he is no more. I was shocked I couldn't believe it. It was like if some stopped my oxygen flow. I was sinking down like a ship tears rolling out of my eyes, I just want to ask that bastard why he didn't stay, why he left me alone?

My grandpa came and handed me a piece of paper, I opened it and read it.

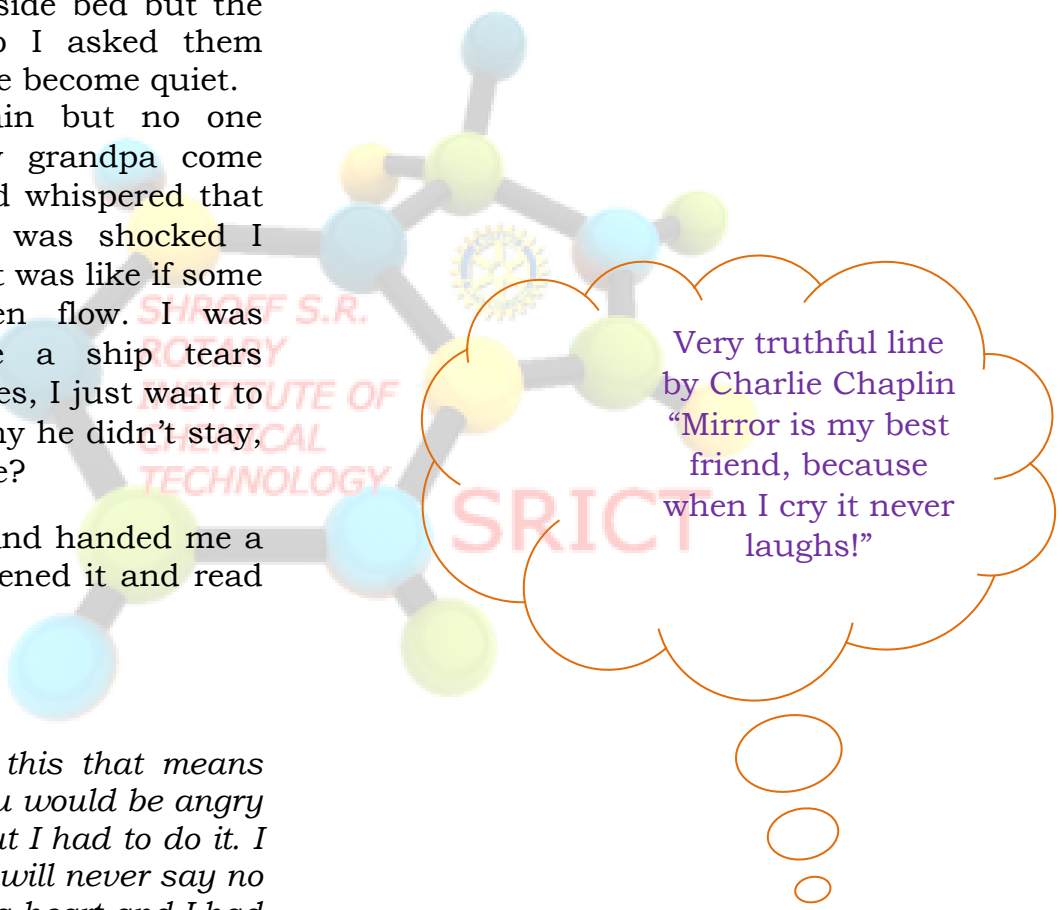
*Hey bro,*

*If you are reading this that means you are fine. But you would be angry as I am not there but I had to do it. I promised you that I will never say no to you. You needed a heart and I had to give it to you because I am an orphan there is no one behind me but you have your parents. Have a life buddy and don't worry our friendship is forever as my heart will always be beating with you.*

Love you

*Your friend Preyansh.*

(Some people think that blood relation is the ones we get forever but friendship is such a relation who is neither by birth nor by blood but it stays forever until we die and even after).



Very truthful line  
by Charlie Chaplin  
"Mirror is my best  
friend, because  
when I cry it never  
laughs!"



## “BOOK REVIEW: ‘THE SECRET’ BY RHONDA BYRNE – A BOOK THAT CAN CHANGE YOUR LIFE”

[HAMZA SHAIKH , 7<sup>TH</sup> SEMESTER ,  
MECHANICAL ENGG. DEPARTMENT]

Almost everyone has heard the phrase: “*It’s all in the mind,*” but how many have ever tried to understand its importance and implication? I was also a part of this crowd until a few days ago, till I was gifted ‘*The Secret*’ by my father. This book by Rhonda Byrne changed my way of life, renewed me and taught me how to live a peaceful and contented life and be an architect of my own happiness and success. In this book, the author unveils a ‘secret’ which she claims to have been known for centuries. In the words of the author, “*It has been passed down through the years, highly coveted, hidden, lost, stolen, and bought for vast sums of money.*”

The essence of the book is the power of our minds, which if identified and unleashed properly, can create waves of positive changes in our life. It deals with tuning our thought process which has the capability of making things happen; things that we otherwise would have never have imagined occurring. Everything that happens to us is directly or indirectly the doing of our own thoughts, which if modeled properly, can change everything in our lives. The book deals with the above mentioned theory scientifically, saying that our thoughts are magnetic and a frequency is associated with each one of them

and when they are sent out into the universe, they attract like objects which are reflected back to us. In short, our thoughts become things.

This book answers questions like *why are we asked to culture good and healthy feelings right from our childhood.* As a matter of fact, these are the things that decide the course our lives take. The importance and need of feelings and emotions, the need to sometimes give in to things that our hearts desire for, the need to prematurely ‘feel’ the things we want to happen, the need to take good care of our health, the need to treat ourselves with love and respect, the ways to make our relationships with others work, the need and ways of expressing our gratitude to the Maker as well as everyone and everything that have touched our lives – all these have been discussed intricately in a detailed manner in the book.



The best part is that the theories mentioned in this book are nothing new. It is just an organized representation of what we have already experienced either consciously or subconsciously. Even before reading the book I have made certain things happen by just

thinking strongly about them. A class test being cancelled when I strongly wanted it, my mother calling me when I wanted to badly talk to her, my fever vanishing when I convinced myself that I was perfectly fine are a few situations that have actually happened in my life. *'The Secret'* has been realized by many great men like Plato, Galileo, Beethoven, Edison, Carnegie, Einstein and many other inventors, theologians, scientists and great thinkers and this realization has gone a long way in achieving success and helping them carve a space in people's minds and hearts, to be remembered and talked about incessantly for generations to come.

A documentary movie has been made on *'The Secret'* to showcase the importance and methods of implementation of this concept, but I feel there is a great difference between reading and viewing something. The impact created when we read something attentively is far more than any form of visual representation of the same. But owing to the shift of allegiance from printed text to videos in the current age, the movie is expected to reach a greater chunk of the human population. But I am sure that there is still a crowd that will support me in advocating for the book.

Rhonda Byrne has used statements and theories by many eminent personalities to illustrate and fortify the concept of *'The Secret'*, who are the co-authors of the book. They include Bob Procter, philosopher, coach and personal coach, Dr. Joe Vitale, metaphysician, marketing

specialist and author, John Assaraf, entrepreneur and money making expert, Dr. John Demartini, philosopher, chiropractor, healer and personal transformation specialist, Dr. Denis Waitley, psychologist and trainer in the field of mind potential, Michael Bernard Beckwith, visionary and founder of Agape International Spiritual Center, and last but not the least, Jack Canfield, author, teacher, life coach and motivational speaker.

The book teaches various techniques and shortcuts to understand and implement this concept in our lives. Throughout the period when I was reading the book, I was unconsciously nodding my head in approval of the theories discussed, realizing how true and appropriate each one of them is. All in all, it is a must read in order to discover oneself, understand one's true needs and desires, improve one's life in every possible aspect and make the most of the power which resides within oneself.

## MOVIE REVIEW:

### 127 HOURS (2010)

[TEAM KATHAN]

One fine morning you decide you want to go for hiking. You do not inform anybody - neither your family nor your friends. They are also sort of used to this behaviour.

As you are hiking alone, you encounter few people and then finally you reach your destination. While hiking, you are descending the slot canyon, a suspended boulder becomes dislodged. This is boulder from which you were climbing down. Your one hand gets trapped below boulder. It is crushed.

There is no mobile network. You are having 350 ml of water with you. The food supply is also limited. The tool sets available are also limited in number and are obviously not very professional.

There is no way you can call for help. Also there is no one around or above to whom you can shout for help. So what will happen to you?

The above scenario is not some work of fiction but is the true story of Aron Ralston who had to actually undergo all the ordeals mentioned above. 127 hours is the movie based on his novel Between the Rock and a Hard Place based on the accident.

James Franco has played Aron's character.

127 hours is the time he spent trapped in the slot canyon with his hand under the boulder.

The film is directed by Danny Boyle who is also known for Slum dog Millionaire.

The film begins in the month of April of 2003. It follows how Aron starts hiking and reaches Utah's Canyonlands National Park. Here he befriends two hikers. Then he continues through a slot canyon in Blue John Canyon. Here, while climbing down, he slips and falls and gets right hand crushed under the boulder.

The film then follows the struggle of Aron. It shows in detail how he utilizes his limited resources. It captures how he oscillates between giving up and keeping on fighting beautifully. Finally when he decides to amputate his right hand. But he again faces challenge as his tools are not sharp enough to cut through the bone.

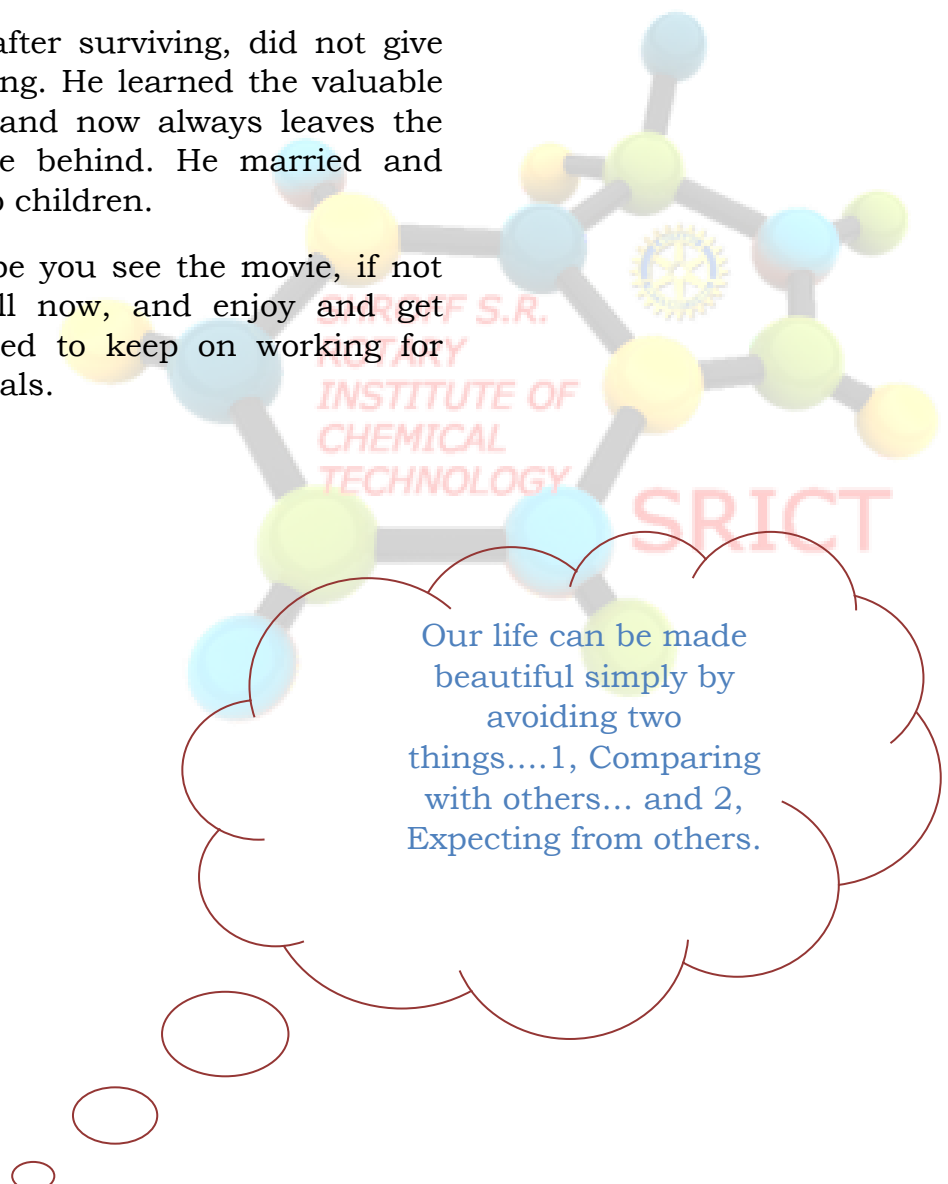
He finally manages to cut his arm with lot of effort and gets out of the spot. He manages to get down from the rockface. He finds some water to drink. Finally he meets a family who are also on day hike. They give him food and water and hurry to

alert the authorities. Meanwhile his family had also alerted the authorities because of his absence for long time. So the authorities were looking for him and helicopter was sent to rescue him. In the end he was saved.

The movie is truly inspirational. The fact that there is indeed someone who had to undergo such ordeal and come out of it with minimal damage really motivates.

Aron, after surviving, did not give up hiking. He learned the valuable lesson and now always leaves the message behind. He married and has two children.

We hope you see the movie, if not seen till now, and enjoy and get motivated to keep on working for your goals.



Our life can be made beautiful simply by avoiding two things....1, Comparing with others... and 2, Expecting from others.

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## OMNISCIENT (OFFBIT FACTS)

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[HAMZA SHAIKH, 7<sup>TH</sup> SEMESTER,  
MECHANICAL ENGG DEPARTMENT]

### 1. Land where Lord Krishna lived

Dwarka, a coastal city which existed around 12,000 years ago in the western Gujarat, is said to be the place where Lord Krishna spent most of his life. The culture, traditions, and ambiance of Gujarat echo the footprints of Lord Krishna.

### 2. Land of Mahatma Gandhi!

Sabarmati Ashram (Gandhi Ashram), Ahmedabad, Gujarat  
Gujarat's soil is blessed with great legend Mahatma Gandhi, who is known as the *Father of the Nation* in India. Sabarmati Ashram in Ahmedabad, Gujarat still shows the glimpses of the lifestyle of this great man.

### 3. A Vegan State!

India is the leading vegan country in the world among that out of its 29 states, Gujarat has the most vegan people.

### 4. Longest coastline!

Among the coastal states of India, Gujarat has the longest coastline of around 1215 km.

### 5. Rich Diaspora!

Gujaratis are known for their business skills and are spread the world over especially in North America. In fact, one in every five Indian-American is a Gujarati.

### 6. World's largest salt desert is here!

With a total area of about 7,505.22 square kilometers, the Great Rann of Kutch is considered one of the largest salt deserts in the world. This seasonal salt marsh is spread in the Kutch district of India and Sindh province of Punjab.

### 7. India's largest district is here!

With a total area of 45,674 km, Kutch is the largest district in India.



### **8. Asia's greenest capital city is in Gujarat!**

Located around 23 km from Ahmedabad, Gandhinagar is considered to be the greenest capital city in Asia with around 1/2 of its area covered with greenery.

### **9. One of the secure state of India!**

Because of the governance in Gujarat and friendly nature of *Gujaratis* and according to stats, it is considered the safest Indian State with the least rate of crime.

### **10. Business friendly state!**

Gujarat has always been considered as the best place for investment in India because of its trade policies, economic resources, and co-operative mindset and in 2015, *World Bank* ranked Gujarat at first position on *Ease of Doing Business* in India. An area in between Ahmedabad and Gandhinagar is being developed as the GIFT City (Gujarat International Finance Tec-City) to promote businesses in Gujarat.

### **11. Somnath Temple is 1st among ,12 Jyotirlingas**

Somnath Temple, Saurashtra, Gujarat On the western coast of Veraval, Saurashtra, Gujarat, the magnificent Somnath Temple which is dedicated to Lord Shiva is the 1st among the 12 Jyotirlingas in India.

### **12. Pivot of Petrochemical Production**

Gujarat is the petrochemical hub of India and contributes more than 60% petrochemical production in India.

### **13. Largest WAN network in Asia**

Gujarat possesses the largest P-based ICT WAN network in Asia and 2nd best in the world.

### **14. Best management institute in Asia!**

Not only in India but also out of all management institutes in Asia, Indian Institute of Management, Ahmedabad is considered one of the best management institutes in Asia.

### **15. State of Rich people!**

Thanks to its rich commercial heritage, almost 2/5 of the richest people of India are proud Gujarati's. The top 5 richest people in India are Gujaratis, here goes the list: Mukesh Ambani (Reliance Industries)>>Dilip Shanghvi (Sun Pharma)>>Gautam Adani (Adani Enterprises)>>Azim Premji (Wipro Ltd.)>>Pallonji Mistry (Shapoorji Pallonji Group).

### **16. World's 27th most spoken native language**

Gujarati's are a big community and well spread throughout the world. Out of around 6500 languages, the Gujarati language stands 27th in the world with around 66 million speakers.

### **17. Longest optical fiber network**

With a vast area covering of around 50,000 km, Gujarat has the longest optical fiber network which is expensive but provides great bandwidth and low power loss.

### **18. Surat is the richest city in India**

Based on the annual income, Surat is considered the richest city in

India.

### **19. Asia's largest dairy is here!**

Kaira District Co-operative Milk Producers Union Limited (KDCMPUL) popularly known as Amul Dairy is the largest dairy in Asia.

### **20. World's 1st pure vegetarian Subway is here!**

Subway opened its first pure vegetarian outlet in the Ahmedabad district of Gujarat.

### **21. Largest consumer of sugar**

Gujarati's are well known for their surrender for sugar. Actually, the Gujarati recipes have such composition that they revolve around sugar to make it a complete dish.

### **22. Biggest oil refinery on the Planet!**

Owned by the Reliance Industries, the Jamnagar Refinery in Jamnagar is the biggest oil refinery on the planet with the output of around 1.2 million barrels every day.

### **23. Want to see Asiatic lions..come here!**

With an area of about 1412 sq km, Gir Forest National Park is known worldwide for Asiatic lions. Recent surveys show that more than 500 Asiatic lions are present in Gir.

### **23. World's biggest ship breaking yard town is here!**

Located in Bhavnagar, Gujarat, Alang is the biggest ship breaking yard town in the world. World's most colossal ships are broken here.

### **24. India's first port city is here!**

Gujarat is considered one of the main centers of Indus Valley Civilization and has ancient cities of Dholavira, Lothal and Gola Dhoro. Lothal is considered India's 1st port city by the historians.

### **25. Cotton hub**

Cotton is a very popular source of clothing in India, and around 1/3 of India's cotton is cultivated in Gujarat.

### **26. Majority of world's diamonds are refined in Surat**

Surat is an important center for diamond refining and is considered as world's major diamonds refining center.

### **27. Record number of Jain temples**

Palitana in Bhavnagar district holds the record for 900 Jain temples.

### **28. Non-Alcoholic State**

Gujarat is the first State in India to impose a complete ban on the sale of alcoholic beverages.

**Source :** <http://ohfact.com/interesting-facts-about-gujarat/>

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### FOUR DREAMERS

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[AMIT GALPHADE, ASSISTANT  
PROFESSOR, MECHANICAL  
DEPARTMENT]

#### **Chapter 2: The Traveler** YEAR 2263, Age of Mountain

(1)

The sun was out and shining at its best. Shinning would be the wrong word in this case. It was actually, as if, trying to burn the life on the Vasundhara. The summers in these areas of the planer were always tough, even if one was accustomed to the heat. There was path which passed from one forest and it was having some shade of trees occasionally. But the shade was just enough to protect a person from direct sun, and it no way prevented the heat or gave any coolness. The path was burning because of the heat radiated by the sun. It was not the tar road or cemented road. It was the path which the people passing through the forest, since ages long past had made, older than the Great War itself. Everything else was calm and there was not even a trace of air blowing. The birds too were resting in the nest. There was strange silence in the forest but given the time and condition no one would have been surprised.

Amidst all this, one traveler was walking on this path in the heat. He

was wearing white turban on his head, the cream colored shirt and white colored dhoti. The color were long lost but there was some trace that the clothes were of that colors. He was perspiring heavily, and he looked very tired. He was very thin and looked as if he had had food long time back. One would have thought that he was almost going to fall at any moment. But something in his eyes told clearly about his determination. Something was holding him and keeping him moving in the heat.

He had one bag which was hanging on his side. He had used it for very long time and it had been his companion over many journeys of his life. The bag was tearing on one side yet it gave the feel of solidity which was something unusual given the condition of the bag. The traveler stopped near one tree and decided to have some rest. He saw around him and observed one big Ipine tree which was some ten feet near him. He went near the tree and sat under it. He felt a bit better than he was walking. He opened the zip of the bag and removed one dirty cloth which should have been handkerchief some time back but now was extremely dirty. The dirt however didn't seem to bother the traveler as he wiped the sweat on his face. He now took out the water sack which he had filled in the morning. The water wasn't exactly

cool but it was still drinkable. The water brought some life to his face. He put the water sack aside and removed his shirt and put it aside besides the water sack. He then folded his bag and made temporary cushion out of it. He kept it near the tree and then slept resting his head on it. The situation of his being in the forest with the possibility of wild animals or even the scorching heat didn't seem to bother him at all and he was fast asleep within the minutes.

(2)

The sun was setting when the traveler woke up. He checked the bag and all his possessions were safe. He was light sleeper and he knew if anything would have come near him he would have known it quickly but it was his habit to do all things methodically. Besides his bag hold something very precious, still unknown to most of the world or he could tell confidently that hardly few people knew about it and only he knew that it existed. He got up and again wear his shirt. He drank some water from the sack and put it back in the bag. It was time to move ahead and since the sun was setting important to reach the village nearby which he should reach in some time. He took up his bag and started to move towards the village. He would have preferred to not go to the village but he was hungry for past 26 hours and he needed something to eat in order to regain his strength. It was normal for him to remain hungry for this long time but the heat and purpose of his travel made it important to have

something in his stomach. The setting sun provided him the opportunity to enter the village without getting noticed. He knew that few people would be aware about his existence, but those who knew were not the people whom he could completely trust. He had already made some mistakes and they had nearly proved fatal for his purpose and yet he had managed to survive them. But this time he couldn't afford to make even a small mistake. It was important to deliver what had been long promised. The time was coming fast.

(3)

When he entered the village, it was completely dark. People had returned back to their homes and were busy in the evening rituals, as he had hoped for. The village was slowly drifting into the sleeping mode. He thought about the place where he should go. He thought that temple should be good option. It was no important day as such and hence the people won't be there at this time and also as this village was small he would have no disturbance whatsoever there. The traveler hence went to Ravratheion, the temple of Kugius. It was very small and there was on one present. He was glad to visit the temple after some time. He sat down in front of statue of Kugius. He closed his eyes and started to hum the prayer he had learn long time back. After some time he opened his eyes. The priest of the temple had come back and he was busy in preparing for the last daily rituals of the temple. The traveler wanted to talk to priest and



take his permission to stay in the temple for one night. He went to the priest, and asked "Excuse me, can I talk to you for a moment."

Priest who was busy in his offerings looked back at the source of the voice. When he had come in the temple, he had seen the traveler busy in his prayer. So he wasn't surprised to hear the voice. But what surprised him was the persona of the traveler. Though the traveler was in simple clothes, yet he looked as if he was some king of wealthy and powerful kingdom. His face radiated some kind of unknown power and the eyes were sharper than any person's he had ever seen. He was somewhat frightened while at the same time some how he felt that the traveler would never hurt anybody or anything. He had read about saints of the past and the traveler seemed to be in the same line. He replied "Yes, you may stay here tonight and have rest. My name is Ismat and I am priest at this temple which you can see. May I know what is your name and where are you coming from."

The traveller thought for a moment. It was dangerous for him to reveal his true name and his origin, not for him but for the priest. So he decided to not reveal the true name but assume the different one. "Ismat, my name is Amriel and I am coming from small village called village of Durnatel. I had decided to visit different Pilgrimage places of our country by walking and I am currently on my way to Beckton to visit the origin of Misty Brook." His voice was steady and showed no

sign of nervousness. But somehow it made the impact on Ismat which traveler intended.

"Amriel, you are welcome at the abode of Kugius and you can surely stay here and do also pray for the betterment of my village. Also tell me if you have had any food. You are looking very weak and look as if you haven't had food since morning."

"No, I haven't had any food for some time. I would be great full if you can help me with that. I am giving you some trouble so please forgive me."

"I am not troubled at all Amriel. People in my village are giving enough offerings daily and some of that is kept to help the travelers like you. You have been unlucky that the people have retired back to their home or you would also have enjoyed the conversation with them. But the food is definitely there and as I am yet to have my dinner, we can both sit together and have food."

They both sat to have dinner. The traveler was silent but priest went on to talk on different things. Traveler was busy and thinking about his next steps. The time was very important factor. His task was very important, and for larger cause. The priest left after dinner. Before leaving he had kept one tumbler of water and glass for the traveler.

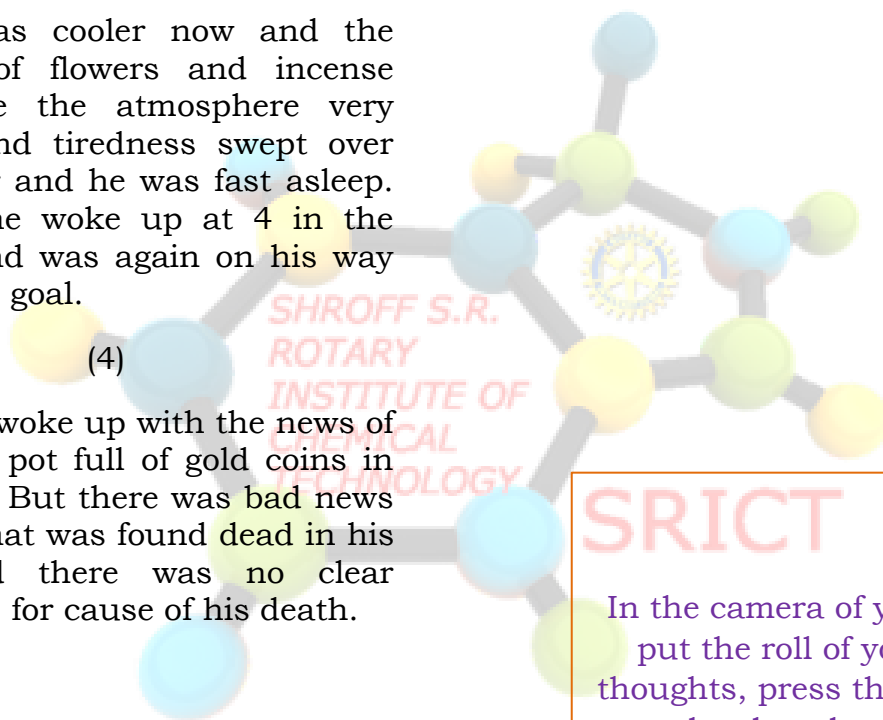
Once priest left, the traveler was with himself. He enjoyed his own company. The priest had been a nice person but he had long forsaken the company of the people but occasionally he had to come back in

touch with people but it helped him in knowing what and how much had happened. Also it helped him in focusing more keenly on the job in his hand. Now after talking to priest, he had made sure that he was on right direction, though he had lied to priest about Beckton. He was set to go to different village, very much like this but in different direction. There in lied the answer to the riddle he was trying to answer and the final part of his task in hand.

The air was cooler now and the fragrance of flowers and incense stick made the atmosphere very soothing and tiredness swept over the traveler and he was fast asleep. Next day he woke up at 4 in the morning and was again on his way towards his goal.

(4)

The village woke up with the news of finding the pot full of gold coins in the temple. But there was bad news as well. Ismat was found dead in his house and there was no clear explanation for cause of his death.



In the camera of your mind,  
put the roll of your good  
thoughts, press the button of  
your hard work, and get the  
photo of your success.

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## NOBLE NOBELS

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**Name:** Yoshinori Ohsumi

**Born:** 9 Feb 1945,

**Affiliation at the time of award:**  
Tokyo institute of Technology

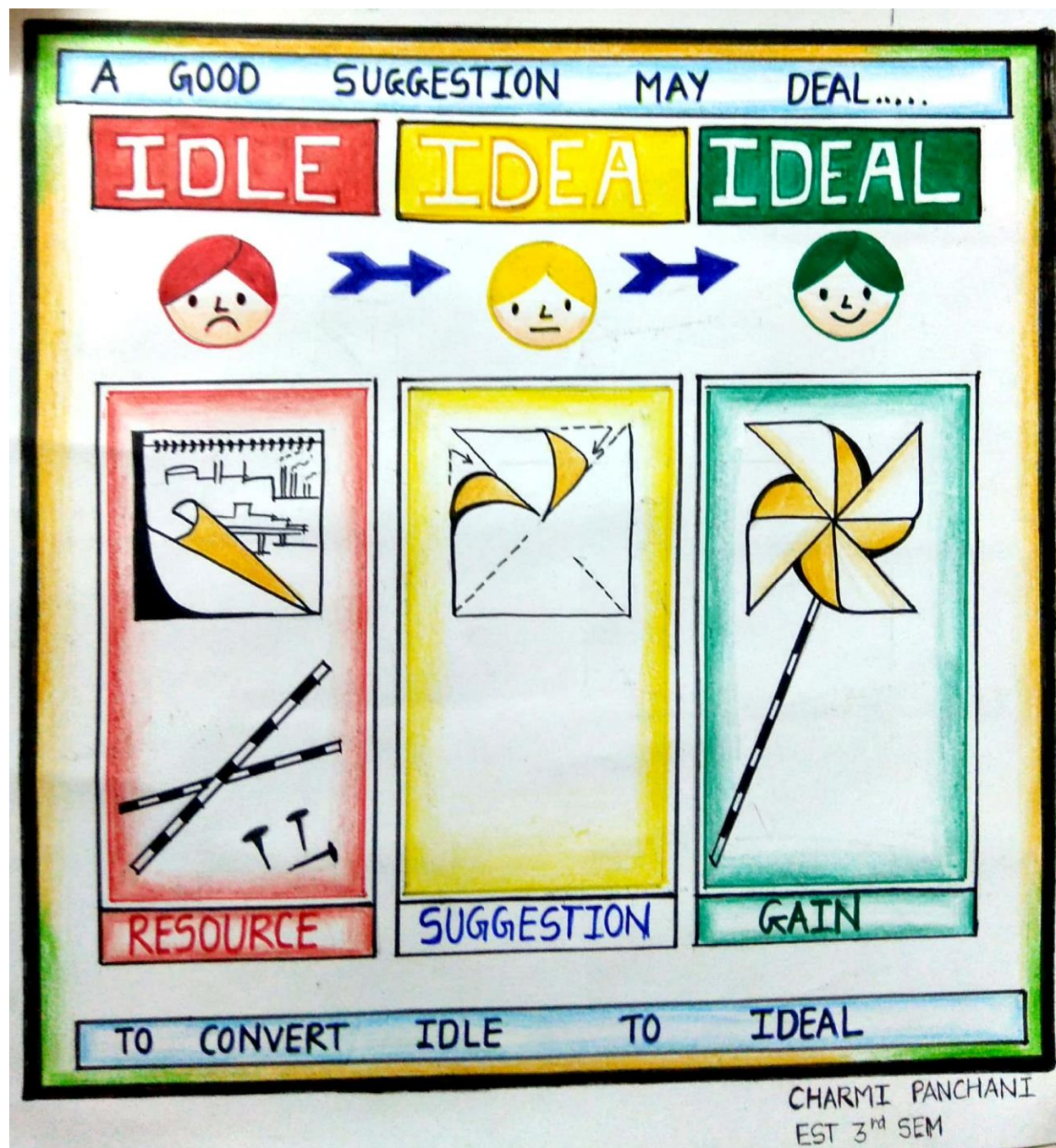
**Prize motivation:** "for his discoveries of mechanism for autophagy".

**Field:** Medicine

**Work:** Ohsumi's discoveries led to a new paradigm in our understanding of how the cell recycles its contents. His discoveries opened the path to understanding the fundamental importance of autophagy in many physiological processes, such as in the adaption to starvation or response to infection. Mutations in autophagy genes can cause disease, and autophagic process is involved in several conditions including cancer and neurological disease.

## ART CORNER : चित्र-लेख

[CHARMI PANCHANI, 3<sup>RD</sup> SEMESTER, ENVIRONMENTAL SCIENCE & TECHNOLOGY]





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## KNOW OUR FACULTY: गुरुं - विज्ञानियात्

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**Name of Faculty:** Akashlina Bhattacharya

**Designation:** Assistant Professor

**Department:** Mathematics, Science and Humanities

**Educational Qualification:**

M.A. in English from West Bengal State University

B. Ed from West Bengal State University

**Experience:** Teaching experience of 1 year and 5 months.

**Hobbies:** Travelling, Cooking, Reading





Teaching and research experience of 11.5 years

**Research Interest:**

Process modeling and simulation, Extraction of valuable metals from solid and liquid waste, Wastewater treatment using advanced oxidation methods, Pyrolysis of Biomass, Designing experiments.

**Research Paper Publications:**

International: 06&National: 02

**Book Chapters:**

International: 01

**Conference Papers:**

International: 05&National: 12

**Sponsored Projects:**

**Name of faculty:** Dr. Alok Gautam

**Designation:** Associate Professor & Head of Chemical Engineering

**Department:** Chemical Engineering

**Educational Qualification:**

- Bachelor of Technology: Chemical Engineering from Bundelkhand Institute of Engineering & Technology, Jhansi
- Master of Technology: Chemical Engineering from Indian Institute of Technology, Delhi
- Doctor of Philosophy: Chemical Engineering from University of Newcastle, Australia.

**Experience:**

- Electrochemical oxidation of wastewater- sponsored by ETL Bharuch.
- Recovery of lead from batteries- sponsored by Shivalik Soild Waste Management LTD, Solan H.P.
- Bio-diesel from Jatropa seeds sponsored by BEIL.
- Silver recovery from wastewater sponsored by ETL.
- Managing E waste through pyrolysis sponsored by Institution of Engineers India

from May 2017 to March 2018.

- Testing of Choked Pipe, J. K. Tyre, Bamor Plant, Gwalior(M.P.)
- Testing of polymer material, Krishna Cable, Gwalior (M.P.)

#### **Short Term Course:**

- Cement production and quality control, JIET Guna, India, 2008 and 2009.
- Process simulation using CHEMCAD, JUET Guna, India, May, 2014.
- Process simulation using CHEMCAD and MATLAB, JUET Guna, India, Dec, 2014.
- Process simulation using CHEMCAD, Jaypee University of Engineering and Technology, Guna, 2014, one day.
- Process simulation using CHEMCAD and MATLAB, Jaypee University of Engineering and Technology, Guna, 2014, two days.

#### **Award and Fellowship:**

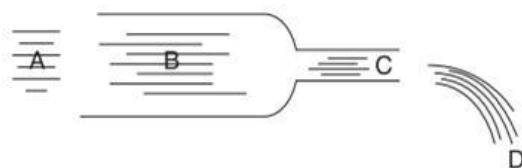
- UNIPRS, University of Newcastle International Postgraduate research Scholarship (2010-2013).
- UNRSC50:50 CENTRAL, University of Newcastle Research Scholarship centrally funded (2010-2013).
- UNIPRSE, University of Newcastle International Postgraduate research Scholarship external (2010-2013).
- Best paper award in CHEMCON 2016 for paper "Optimization of parameters for corn kernels drying in fluidized bed dryer by response surface methodology".
- Grant International Travel Support Scheme By SERB – DST, Govt of India.

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## PUZZLE & BRAIN STORMING

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- 1) A large volume of water is gushing through a pipe which narrows at the outlet. At which point A, B, C, or D will the water flow fastest?



- 2) SUNDAY  
MONDAY  
TUESDAY  
WEDNESDAY  
THURSDAY  
FRIDAY  
SATURDAY

What day comes three days after the day which comes two days after the day which comes immediately after the day which comes two days after Monday?

- 3) Gordon is twice as old as Tony was. When Gordon as old as Tony is now. The combined age of Gordon & Tony is 112 years. How old are Gordon and Tony now?

- 4) In a party of 35 people there are twice as many women as children and twice as many children as men. How many of each is there?

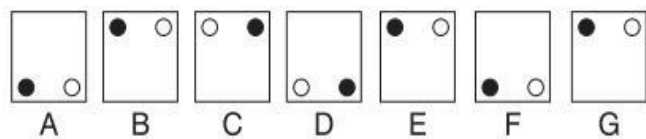
- 5) { A, B, C, D, E, F, G, H }

What letter comes two to the right of the letter which is immediately to the left of the letter that comes three to the right of the letter that comes midway between the letter two to the left of the letter C and the letter immediately to the right of the letter F?

- 6) What is black when you buy it, red when you burn it and grey when you throw it away.
- 7) A woman shoots her husband. Then she holds him under the water for 5 minutes. Finally, she hangs him. But 5 minutes later they both go out together and enjoy wonderful dinner together.
- 8) There are two plastic jugs full of water . How could you put all the water in to barrel, without using jugs , and still tell them which water came from which jug.

9) The first room is full of ragging fires , second room is full of assassins with loaded guns and the third room is full of lions who haven't eaten for 3 years. Which do is safest for person?

12) Which does not belong in this sequence?



10) Which set of letters is the odd one out?

ADE  
ILM  
RUV  
EHI  
VYZ  
JLM  
FIJ

//// ALL THE READERS, WHO SOLVE THE ABOVE PUZZLES ARE REQUESTED TO KINDLY MAIL THEIR ANSWERS TO THE [kathan@sriect.in](mailto:kathan@sriect.in) . THE NAMES OF THE FIRST 3 PUZZLE SOLVER WILL BE PUBLISHED IN THE UPCOMING ISSUE OF KATHAN////

SHROFF S.R.  
ROTARY  
INSTITUTE OF  
CHEMICAL  
TECHNOLOGY

SRICT

11) The three numbers in each box have a relationship that is the same in all six boxes.

3	1	5
2	7	6
4	0	3
8	4	5
10	1	6
1	?	2

To stay in the same place is to exist. To travel is to live.

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## ☺ JOKES ☺

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[AMIT GALPHADE, ASSISTANT  
PROFESSOR, MECHANICAL  
DEPARTMENT]

### **Honest Brand Slogans**

Hallmark: "When you care enough to give a card mass-produced by a Corporation."

Ritz crackers: "Tiny, edible plates."

CliffsNotes: "They're still going to know you didn't read the book."

Gillette: "We're just going to keep adding blades."

ChapStick: "You'll misplace it before the tube's empty."

Hot Pockets: "Every bite is a different temperature."

Source: [honestslogans.com](http://honestslogans.com)

### **A Few Grams More**

Instagram is just Twitter for people who go outside.

@JoshGondelman

### **Clean Your Plate**

The closest I've been to a diet this year is erasing food searches from my browser history.

@PaulyPeligroso

### **Antisocial Media**

Hate to break it to you, Facebook, but the entire Internet is already a Dislike button.

@JoshGroban

### **Router-stiltskin**

I put so much more effort into naming my first Wi-Fi than my first child.

@1followernodad (Sophia Benoit)

### **Duper Man**

I wonder if Superman ever put glasses on Lois Lane's dog and she was like, "I've never seen this dog before. Is this a new dog?"

@Robfee

### **The Worst Page in The Dictionary**

Just found the worst page in the entire dictionary. What I saw was disgraceful, disgusting, dishonest, and disingenuous.

@sixthformpoe

### **The Past, Present and Future...**

The past, present, and future walk into a bar. It was tense.



## He's Hysterical!

A neighbor finds a young boy sitting on the stairs crying. "What's the matter, honey?" she asks him.

"It's my father," the boy says, sobbing. "He hit his finger with a hammer."

"Then why are you crying?" she says.

"Because first I laughed!" he answers.

## A Pessimist's Predicament

As they leave the courthouse, a lawyer turns to his grim-faced client and says, "Janez, what's wrong? You were acquitted."

"I know, but now I'm really in trouble," says Janez. "I just rented out my apartment for three years."

## Job Security

Reddit.com asked workers: What is rule number one in your profession? Here's what came back:

Plumber: "Don't chew your fingernails."

Roofer: "You are fired before you hit the ground."

Camp counselor: "Don't lose the kid."

Scuba diver: "If it moves, it wants to kill you."

Photographer: "Take the lens cap off."

## The Human Cannonball

The human cannonball tells the circus owner he is going to retire.

"But you can't!" protests the boss. "Where am I going to find another man of your caliber?"

## Harry Potter Sequels

After J. K. Rowling announced that she might write a Harry Potter sequel—he was last seen as a married dad—The Week asked its readers to predict the title of the next book. Here's what they divined:

*Harry Potter and the Goblet of Fiber*

*Harry Potter and the Prisoner of Ask-Your-Mom*

*Harry Potter and the Financial Portfolio of Doom*

*Harry Potter and the Sorcerer's Kidney Stone*

*Harry Potter and the Quest to Buy a House in the Hogwarts School District*

*Harry Potter and the Quidditch Mom*

## Party Time

My mother asked me to hand out invitations for my brother's surprise birthday party. That's when I realized he was her favorite twin.

## The Definition of Fame

Three guys are talking about what constitutes fame. The first guy defines it as being invited to the White House for a chat with the president.

“Nah,” says the second guy. “Real fame would be if the red phone rang when you were there, and the president wouldn’t take the call.”

“You’re both wrong,” says the third. “Fame is when you’re in the Oval Office and the red phone rings, the president answers it, listens for a second, and then says, “It’s for you.”

## Good Eulogy

The pastor asks his flock, “What would you like people to say when you’re in your casket?”

One congregant says, “I’d like them to say I was a fine family man.”

Another says, “I’d like them to say I helped people.”

The third responds, “I’d like them to say, ‘Look! I think he’s moving!’”

## Change in Weather

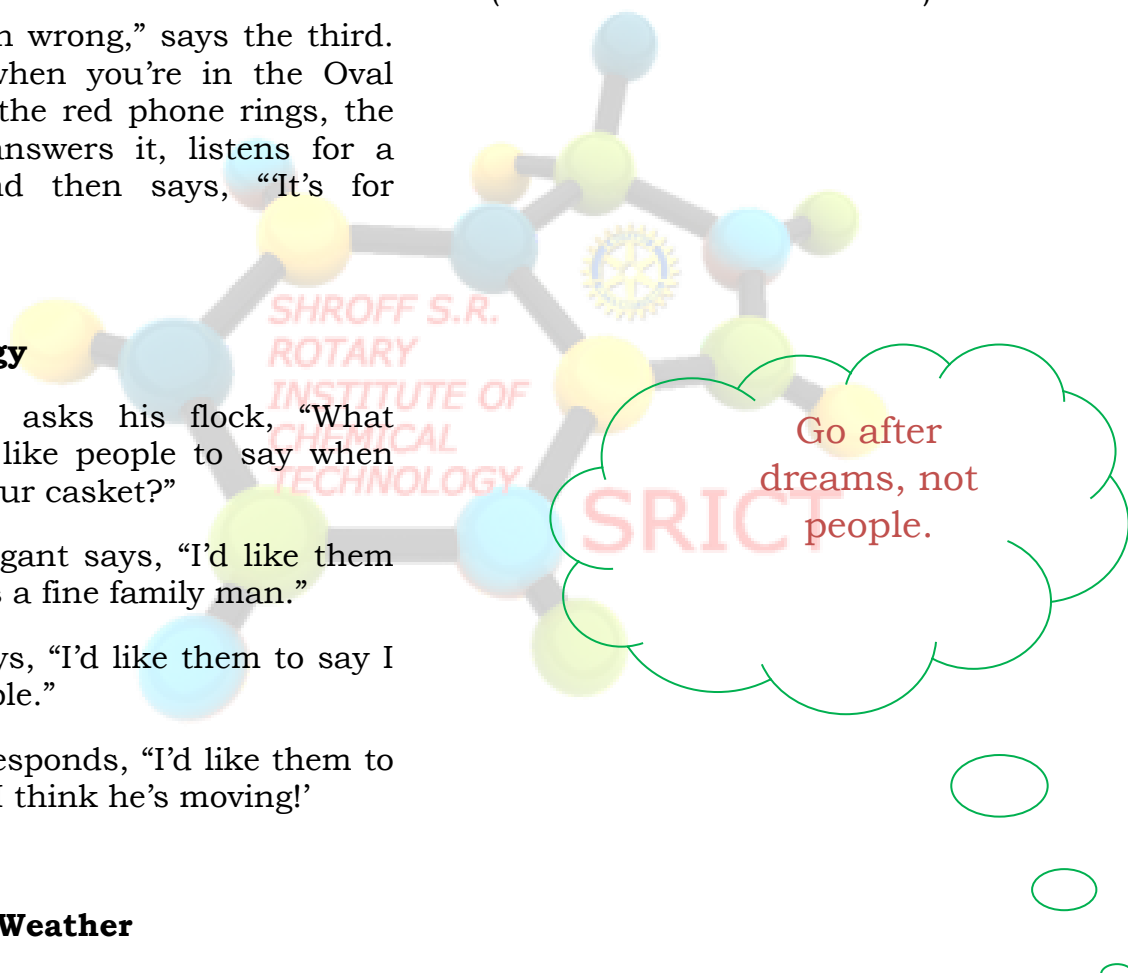
News that her third child was going to be a girl thrilled my cousin, who already had two boys. “My husband wants to call her Sunny,” she told me, “and I want to give her Anna as

her middle name in memory of my mom.”

I thought they might want to reconsider their decision, since their birth announcement would herald the arrival of Sunny Anna Rainey.

## REFERENCE

(Jokes Source: [www.rd.com](http://www.rd.com))



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## NEWS-NATIONAL AND INTERNATIONAL

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[PARTH PRAJAPATI, 5<sup>TH</sup> SEMESTER  
CHEMICAL ENGINEERING]

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### “NATIONAL NEWS”

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#### **1. GST Rollout, late filing allowed for first two months [1<sup>st</sup> July 2017]**



The government reiterated that the nationwide Goods and Services Tax (GST) will be rolled out on July 1 as planned but it will allow companies to file late returns for the first two months so that they can adapt to a new online filing system. Finance Minister who heads the GST Council met in the national capital to discuss the roll out of the Goods and Services Tax on July 1. The next meet of GST Council is expected to take place on June 30 on the eve of the launch, Finance Minister Arun Jaitley said.

#### **2. Gorakhpur tragedy: 30 children die in hospital [12<sup>th</sup> Aug 2017]**



Uttar Pradesh chief minister Yogi Adityanath left for his constituency Gorakhpur where 23 infants died within 24 hours, at city's main government hospital after its liquid oxygen supply was cut since it failed to pay dues to the supplier.

The Uttar Pradesh government suspended the principal of a medical college on Saturday, and the state government denied the deaths at Baba Raghav das Medical College were due to the oxygen supply shortage.

Documents seen by HT indicate that Pushpa sales, the sole supplier of liquid oxygen to the hospital, had been writing

letters regularly to the officials, saying the supply of oxygen could be disrupted if accumulated dues of Rs 68 lakhs were not cleared.

### **3. GDP Growth seen picking Up to 6.6% in Q1 but GST A hurdle: Poll [28<sup>th</sup> Aug 2017]**



The country's economic growth likely accelerated to 6.6% in the quarter just ended, but analysts polled by Reuters are sounding increasingly worried that confusion over the Goods and Services tax (GST) will dampen activity in coming months.

It would leave Asia's third largest economy behind China, which last reported growth of 6.9%, but still among the World's top performing economies.

### **4. Lucknow Metro flagged off, it opens to the public. [5<sup>th</sup> sept 2017]**



Lucknow Metro service, to be launched on 4<sup>th</sup> sept by Union home minister Rajnath Singh and Uttar Pradesh chief minister Yogi Adityanath, is the country's most advanced system that comprises state of the art Mass Rapid Transit System (MRTS) and is convenient, safe, reliable, as well as cost effective, officials have said.

"The coaches have the most advanced signaling and train control system called the Communication Based Train Control System (CBTC), which can enable the Metro to virtually operate on a 'driverless' mode," Lucknow Metro Corporation's managing director Kumar Keshav said.

### **5. New super computers to help Predict the sort of rain that hit Mumbai [7<sup>th</sup> Sept 2017]**





India's ability to predict the sort of devastating rainfall that struck Mumbai last week is to get a major boost next year.

The heaviest rainfall since 2005 killed a dozen people in India's financial capital, disrupted stock and bond trading and halted a suburban train network that carries about 8 million people a day. Local residents and civic authorities struggled to cope as most roads were submerged and commuters waded through waist deep floodwater.

## "INTERNATIONAL NEWS"

### 1. Between India and Chins, Who won in doklam? [28<sup>th</sup> Aug 2017]



The ministry of External affairs announced "Expeditious disengagement of border personnel" at Doklam, signaling that the months long standoff at the disputed India-China-Bhutan trijunction has come to an end.

In response to queries on Doklam disengagement, the ministry of external Affairs said, "India has always maintained that it is only through diplomatic channels such matters can be addressed. Our principled position is that agreements and understandings reached on boundary issues must be scrupulously respected".



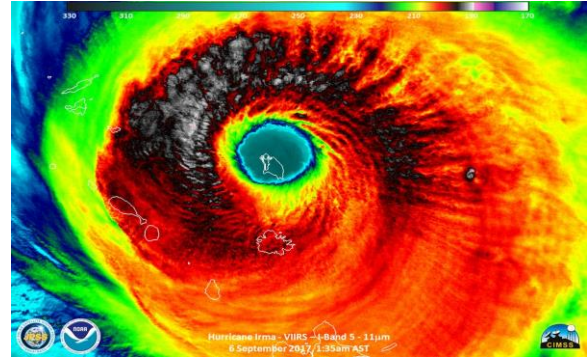
## **2. North Korea conducts 6<sup>th</sup> nuclear test with hydrogen bomb, calls it perfect success. [3<sup>rd</sup> Sept 2017]**



North Korea said it successfully an advanced hydrogen bomb on 2<sup>nd</sup>, marking a dramatic escalation in the isolated state's stand-off with the United States over its nuclear weapons program.

Japanese and South Korea officials said an earth quack detected near the North's test site was around 10 times more powerful than previous detonations, and concluded the North had conducted its sixth nuclear test.

## **3. Hurricane Irma roared in to Caribbean with record force [6<sup>th</sup> Sept 2017]**



Hurricane Irma roared in to Caribbean with record force early morning at 6<sup>th</sup>, its 185 mph winds shaking homes and flooding building on a China of small islands along a path toward Puerto Rico, the Dominican Republic, Haiti, Cuba and likely Florida by the weekend.

The strongest Atlantic Ocean hurricane ever recorded passed almost directly over the island of Barbuda, causing wide spread flooding and downing trees. France sent emergency food and water rations to the French islands of Saint Martin and Saint Barthelemy, where Irma ripped off roofs and knocked out all electricity.

## **4. China Military practices for 'surprise attack' over sea near Korea [7<sup>th</sup> Sept 2017]**



China's air force has carried out exercises near the Korean peninsula, practicing to defend against a 'surprise attack' coming over the sea, Chinese state media said.

The exercises came days after North Korea's sixth, and most powerful, nuclear test fuelled global concern that the isolated nation plans more weapons tests, possibly of a long range missile.

An anti aircraft defense battalion held the exercises early on Tuesday, near the Bohai Sea, the innermost gulf of the Yellow sea that separates China from the Korean peninsula, an official military website said.

## 5. BMW joins Jaguar in boosting electric car models [9<sup>th</sup> Sept 2017]



The German luxury carmaker said that by 2025 it plans 12 all electric models, and 13 hybrid versions. BMW's first electric Mini will be released in 2019. JLR said every vehicle line launched from 2020 will have an all electric or hybrid versions, the first of which would be the Jaguar I-pace, to go on sale in 2018.

BMW's Klaus Fröhlich said: "from 2020 all BMW models will have an electrified version, and there will be a big push to expand the all electric and hybrid models range over the subsequent five years."

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## READERS WRITE

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Any reader can give his/her opinion, suggestions and also put forward any technical articles related to our streams and current areas of industrial development in technical section; any literary articles, or general articles appealing to all readers of Kathan.

Articles of the utmost interest will be selected by the editorial board.

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We look forward to your valuable opinions, suggestions as well as articles for upcoming issues of Kathan.



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