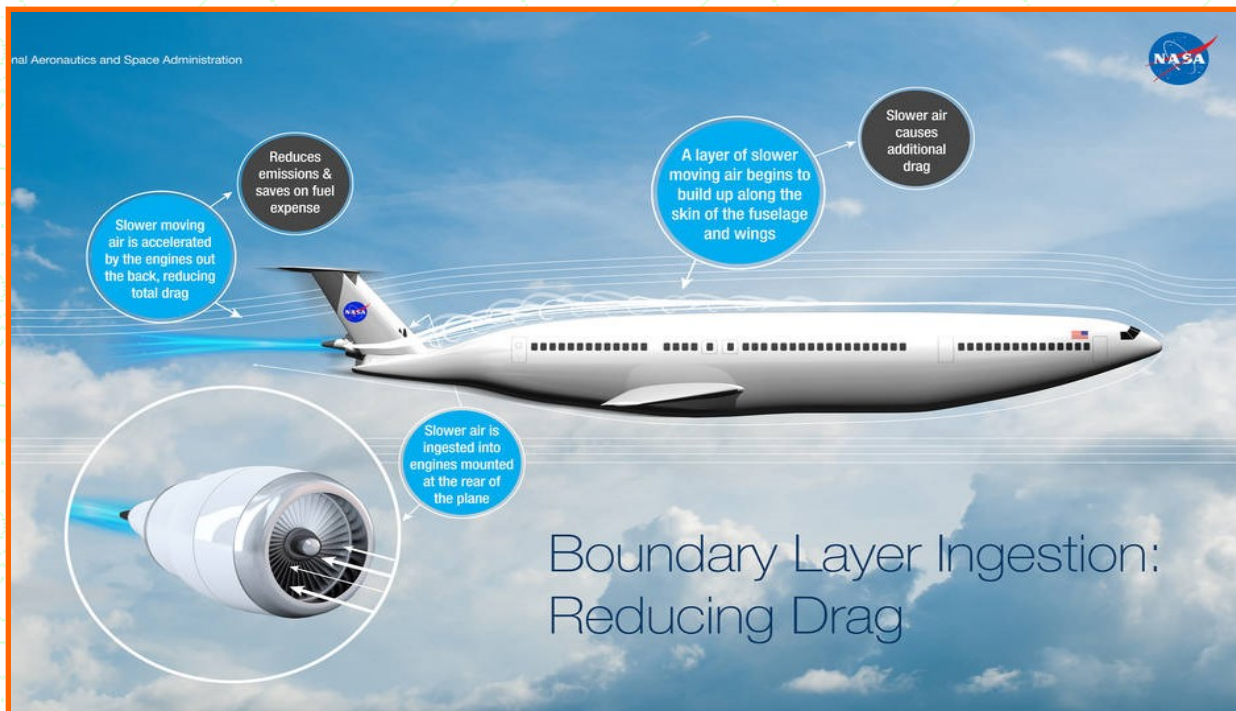


H.O.D 'S MESSAGE

With the semester coming to an end, I am happy to observe that it was a fruitful semester in terms of student activities under the enthusiastic SAC club and AMARA association. The one day workshop by 'Centre of Excellence', VTU, Belagavi, was the center of attraction of this semester, which I am sure will be extremely beneficial to the student community.

It is the right time for the students to take a break from extra curricular activities and re dedicate themselves, focussing on studies for the upcoming semester exam. I wish all the students very best for their semester exams. Highlight of this issue is an article on GATE -2018 which provides useful tips for the final year students appearing for GATE -2018. I congratulate the team AK-SHIPTH for presenting two wonderful issues this semester and I appeal them to think beyond boundaries for further improvement of this e-news letter.



“You are, absolutely, the Creator of Your Experience”

Inside this issue:

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**You Are Absolutely
The Creator Of
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All physical beings who are now present on the Earth came into this experience wanting these things like **Growth** otherwise you wouldn't be here, and **Joy**, upliftment of self and others, and all possible because of your never endings, always present, individual **Freedom**.

While all of us having basic intensions for physical experience, there is a wide variation in the degree that you are wanting them. Some of us have intense, passionate wanting for them, whereas others are not feeling it so strongly.

We all came to forth into this body, into this environment of Earth, by our powerful wanting.

As we made the decision to emerge here into this physical dimension, recognized this Earth plane as a place of existence of great diversity and belief. We know that Earth plane is the perfect plane for deliberate CREATING.

Perhaps the question that is most often asked by physical man is, "why am I here?"

We would answer that question in simple terms in this way:

“Only a part of you is here. And that apart of you that is currently focused into this physical dimension and into this physical body is focused for the joy of the experience. For the experience of doing more, having more and being more.”

There is not an ending to GROWTH. There is not an ending to the continual accumulation of experiences, and those experiences would help us in each of time.

Enterprise was initially to be named Constitution, but fans of the TV show *Star Trek* ran a successful write-in campaign to change the name.

- You have not come forth, in this one life experience, only to gain worthiness to something greater.
- You are not here being tested: you, pitted against a bitter world, to see if you are strong enough or behave enough or willing to do without enough for greater things later.

Expect problems and eat them for breakfast.

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VENKATESH A R

**In 1970, the Apollo
13 lunar landing
was aborted after
an oxygen tank
exploded.**

Akshipth

**A goal is a dream with a
deadline.**

Page 2

- You have not come forth as unknowing students, looking for an all knowing teacher to point the way.
- You have not come forth to climb the rungs of a ladder, to be offered a great reward at the height of your climb.
- You are the eternally living creator who is exhilarated by the experience of life.
- You have applied eternal, infinite laws, and that has resulted in your emergence into the body, and into this time and space.

In short, you have come forth into this time and space because to seek this physical life experience and because you know that through chewing upon the data of this specific physical experience, which is understanding and pleasure will be added to you.

The abundance or poverty, sickness or health that comes to you is not doled out by another as reward or punishment for that which you are living.

The experience of life is not assigned to you, testing your skills or ability or worthiness. There are not such non-physical intelligence offerings or withholding blessings by the virtue.

You get what you get because of the thoughts that you think and corresponding feelings offered in the moment of your thought. You are the one attracting, inviting, and creating all things into your life experience.

You cannot feel one way and think and speak another, and expert to receive what you are thinking or speaking.. Because the way you feel influences what you are attracting. When you feel fat, you cannot attract slim! When you feel poor, you cannot attract rich!

When you think of something you do not want, cancer... for example.. and you feel the negative emotion that you term "fear", you have harmony.. and that cancer is on its way into your experience.

When you think of something you do want perfect health.. for example.. and you feel the positive emotion of "peace or joy", you have harmony.. and that perfect health is on its way into your experience. It is important that you be sensitive to the way that you are feeling so that you know when you are attracting what you do not want, and then it is important to stop the negative attraction.

**Aishwarya Laxmi
(4SN15AE031)**

Without hard work, nothing grows but weeds.

Shoot for the moon and if you miss you will still be among the stars.

Automation In Aviation

An aircraft landed safely is the result of a huge organizational effort required to cope with a complex system made up of humans, technology and the environment. The aviation safety record has improved dramatically over the years to reach an unprecedented low in terms of accidents per million take-offs, without ever achieving the “zero accident” target. The introduction of automation on board airplanes must be acknowledged as one of the driving forces behind the decline in the accident rate down to the current level. Nevertheless, automation has solved old problems but ultimately caused new and different types of accidents. This stems from the way in which we view safety, systems, human contribution to accidents and, consequently, corrective actions. When it comes to aviation, technology is not an aim in itself, but should adapt to a pre-existing environment shared by a professional .

What is automation?

“The technique of controlling an apparatus, a process or a system by means of electronic and/or mechanical devices that replaces the human organism in the sensing, decision-making and deliberate output”

Besides being applicable to these functions, automation has different levels corresponding to different uses and interactions with technology, enabling the operator to choose the optimum level to be implemented based on the operational context

These levels are:

1. The computer offers no assistance; the human operator must perform all the tasks;
2. The computer suggests alternative ways of performing the task;
3. The computer selects one way to perform the task and
4. Executes that suggestion if the human operator approves, or
5. Allows the human operator a limited time to veto before automatic execution, or
6. Executes the suggestion automatically then necessarily informs the human operator,
7. Executes the suggestion automatically then informs the human operator only if asked
8. The computer selects the method, executes the task and ignores the human operator.

It does not matter how slowly you go as long as you do not stop.

God always gives His best to those who leave the choice with him.

Why automation?

Two main reasons led to the decision to adopt on board automation: the elimination of human error and economic aspects. The first element stems from the general view where by human performance is regarded as a threat to safety. As such a topic would require a paper in itself, it is more appropriate to briefly mention some references for students eager to investigate the topic thoroughly. The second element is easier to tackle since we can even quantify the real savings related to, say, lower fuel consumption. According to IATA estimates, “a one per cent reduction in fuel consumption translates into annual savings amounting to 100,000,000 dollars a year for IATA carriers of a particular State”. (ICAO,1998).

Aside from fuel, the evolution of on board technology over the years has led to a dramatic improvement in safety, operational costs, workload reduction, job satisfaction, and so forth. The introduction of the glass cockpit concept allows airlines to reduce maintenance and overhauling costs, improve operational capabilities and ensure higher flexibility in pilot training.

Automation issues:

Although automation has improved the overall safety level in aviation, some problems tend to emerge from a new way of operating. A special commission was set up in 1985 by the Society of Automotive Engineers to determine the pros and cons arising from flight deck automation. Nine categories were identified: situation awareness, automation complacency, automation intimidation, captain's command authority, crew interface design, pilot selection, training and procedures, the role of pilots in automated aircrafts.

Automation has undeniably led to an improvement in flight safety. Nevertheless, to enhance its ability to assure due and consistent help to pilots, automation itself should be investigated more thoroughly to determine whether it is suitable in terms of human capabilities and limitations, ergonomics, cognitive suitability and instrument standardization, in order to gradually improve performance.

By,

Adhithya (5th Sem)

Your brain uses 20% of the total oxygen and blood in your body.

It only takes 6 minutes for brain cells to react to alcohol.

Always do your best. What you plant now, you will harvest later.

Progress is man's ability to complicate simplicity.

Noise Doppler-shift Measurement of Airplane Speed

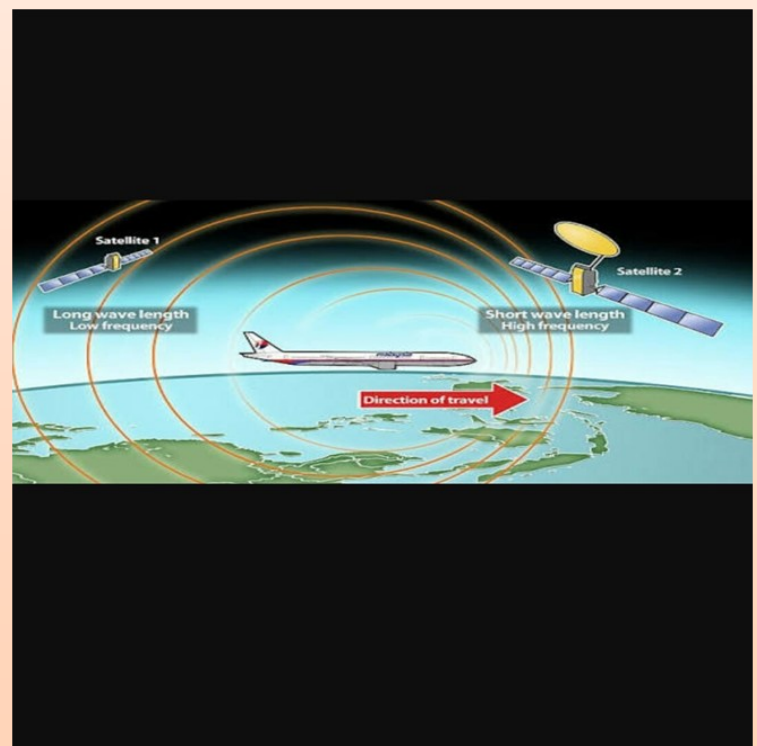
While out measuring the distance and speed of airplanes using trigonometry and sound of intensity, a further option is to measure the speed of airplanes using Doppler shift. (however, ensure that students develop a good conceptual understanding of the Doppler effect before pursuing this activity).

Simple fast Fourier transform (FFT) Analyzer can be obtained freely through mobile device apps or probe ware companies. Allow students to first hear the Doppler effect of aircraft as they pass by. Then, use an FFT analyzer to determine the average frequency of the observer, is near the observer, and as it goes away from the observer.

-Mainuddin(7th sem)

Originally, BMW was an aircraft engine manufacturer.

Three primary frequencies should be identified in the FFT profile frequency when coming toward, frequency when directly above/beside the observer, and frequency when leaving. Although this pattern can be observed in fig as a kind of stair step graph, different FFT analyzers will represent these values in different ways. Using these frequencies, apply the Doppler shift equation to estimate the speed of the source.



The essence of all beautiful art, all great art, is gratitude.

Shoot for the moon and if you miss you will still be among the stars.

GATE Preparation tips for upcoming exam: GATE 2018

This article gives you some tips and helps regarding the next/upcoming GATE examination i.e. GATE 2018. This will help to any young aspirant engineering student to get a good score in any GATE exam. Read this article to get more about GATE exam preparation tips.

Introduction and Importance of GATE examination

GATE stands for Graduate Aptitude Test in Engineering. GATE an entrance exam which is mandatory in IIT (Indian Institute of Technology), IISc (Indian Institute of Science) and NIT(National Institute of Technology) and it is sometimes preferable to other state engineering colleges for entry to master level programs like Master of Technology (M. Tech.) and Master of Engineering (M. E.).

So, a candidate with good GATE score is considered to be most eligible for higher education as well as a for job. Recently 'Navratna companies' or some PSU (Public Sector Units) like Bharat Petroleum Corporation Limited (BPCL), NTPC Limited (National Thermal Power Corporation), Hindustan Petroleum Corporation Limited (HPCL), Bharat Electronics Limited (BEL), Gas Authority of India Limited (GAIL), Indian Oil Corporation Limited (IOCL), Heavy Engineering Corporation Ltd (HECL), and many more have made GATE qualification mandatory for first stage of interview for hiring. So, now it is almost mandatory for every engineering graduate. Due to this change, GATE is now one of the highly sought examinations across India for any engineer.

Details about GATE 2018

Graduate Aptitude Test in Engineering (GATE)-2018 will be conducted all over India by IIT on behalf of MHRD (Ministry of Human Resource Development). The GATE 2018 exam is likely to be held in the second week of February by IIT-Guwahati. Always remember, GATE is conducted every year on second Saturday/Sunday of February. Mostly the mode of the exam will be online.

GATE exam pattern

GATE exam consists of 100 marks paper which will consist of two sections according to the nature of questions asked. One section involves engineering questions and other will involve General Aptitude. The questions will be of a short numerical type or theoretical type. The short numerical is having either one or two marks and the theoretical question will have one marks. Also, GATE considers 'negative marking'. You will lose 1/3 mark for each wrong answer for one mark questions. And 2/3 marks for each wrong answer for two marks questions.

We should not give up and we should not allow the problem to defeat us.

We relish news of our heroes, forgetting that we are extraordinary to somebody too.

How to prepare for the GATE?

Below I have given some GATE preparation tips which might help every candidate of GATE who is going to appear for next GATE exam. If you are applying for the first time, it is very necessary to follow each and every tip mentioned below. Chanakya said that 'It is better to learn from other's experience rather than the first experience it with ourselves'. So, these tips will be helpful while appearing for the first time in GATE exam or for will improve your score or aptitude in GATE compared to previous years.

1. Technical tips for GATE exam

Study the syllabus

The first step to start preparation for GATE is to study the complete syllabus of your specialization. If you are in Aeronautical Engineering, you should download the syllabus for GATE - Aerospace Engineering (AE) and try to study the syllabus. Here study means which are the subjects you need to study well, which subject's syllabus involves 'numerical' and which involve only 'theoretical stuff'? If you are still a graduate student and want to give GATE exam in future, you should first compare the subject's GATE syllabus with the syllabus of your curriculum of your university. You should pay more attention to those topics which are common. Thus, you can start preparing for the GATE in well advance and you will get plenty of time for nice GATE preparation.

Solve previous year GATE papers

You should first check which type of questions are asked in GATE exam and this can only possible if you study or solve the previous year GATE papers. Download the previous year GATE papers and check all the papers w.r.t. each subject in GATE syllabus and determine which subject are most important for GATE. Thus, you can do smart preparation of GATE otherwise 20-30 subjects are hard to study for GATE. You should do smart preparation instead of hard preparation! Normally GATE exam asks those question which is most related to master's program. So, you can understand which subject is important. For Aerospace Engineering, Aerodynamic subject, Propulsion subjects, Aircraft Stability and Control subjects, etc.. are most important.

If you have skipped some content during your graduation, try to read it first from class notes rather than wasting time in reading same what you already know. If you are still in under graduate study, cultivate habit of preparing class note or subject note keeping GATE in mind. The note taking will help you to do revision very easily in last few days before GATE.

A creative man is motivated by the desire to achieve, not by the desire to beat others.

Be sure you put your feet in the right place, then stand firm.

2. Non-technical tips for GATE exam

One should always remember following these tips for every exam.

- First and foremost requirement to clear GATE with good score is determination and perseverance to do well in GATE. Because you will get only one chance to improve your score every year. You need to wait for another year to apply again and improve the score. So, have the determination to do well and try to do serious preparation. Do not appear in GATE exam just for passing. You will stand nowhere if you are having just a GATE score instead of 'Good GATE Score'.
- You cannot wait for the right time for GATE exam preparation. Just do it now. If you wait for right time, that time will never come and you will waste your time just by procrastination.
- When you decide to give GATE, from that moment onward you should think of GATE only. Just think how you will get good or high GATE score? Try to visualize the moment that you got high GATE score. The Law of Attraction (LOA) will help you to do so.
- Yoga and Exercise will keep you charged with positive energy. You can feel the difference once you start doing it. This will keep you positive and improve your self-confidence.
- Always start from the question for which you are confident enough. Do not waste time in thinking more on strange questions.
- Never try to attempt all the questions. If you just attempt few but very correct, you will get high score compared to those who attempt maximum but reach to bottom due to negative marking. Just do best compare to others. Number does not matter but accuracy matters.
- Always make preparation time table for each subject and manage the time accordingly. Do not make so tight schedule that you cannot adhere to it. Just make it flexible.
- Solve practice papers available online and try to improve the score each time.
- Take advice and help of your teachers because they already passed the GATE! You can meet your seniors and parents to get guidance about preparing mentally for the exam.

Do not compare your preparation with others, otherwise, you will lose self-confidently and result in performance too. Everybody has their own way and we cannot judge them by any means.

- Do preparation on a quality level, not on quantity level. Some student says he/she usually read more than 15 hours during exam time. What is the meaning of these 15 hours without any quality reading?

Do I not destroy my enemies when I make them my friends?

No matter how much cats fight, there always seem to be plenty of kittens.

Gate exam Tips for pre-final year students:

In order to get the basic idea of the exam one should try to give the Gate exam in pre final year also so as to get the experience as gate score is valid for two years.

There may be some topics which you will get to study in final year but more than 80% course is actually covered till pre final year.

With positive frame of mind try to solve the question paper of the previous years as to get the precise and analysis.

There is no need to study the topics of final year as it may result in wastage of time and you may cram some wrong concepts when the Exam is approaching.

If one wants to get the idea of the topics then it is advisable to do so, but if there is time and you have finished the revision of the course.

Combined tips for Gate exam:

It is always advised to get the watch and create an exam type scene at your place and track the progress as in what time you solved the whole paper and each day try to reduce the time of paper solving to get accuracy.

Once you get into the habit of solving question paper you will not panic on the exam day and it will be like any other test for you, this in turn will increase your confidence level.

What Next?

Remember that Gate is only a qualifying exam there are lot more details which are to be screened to get an admission in various desirable colleges once you clear it, just like filing the form of various colleges and appearing in their counseling to get an admission according to the rank/percentile which we get.

Master your future:

I am adding few good thought and tips to do well, which in my opinion are important and one should carry these in their mind before appearing for any exam in life.

We are the creator of our own destiny, so it better to focused to make a mark.

A successful person will very well analyze his capabilities and will try to improve and work upon his weakness but to do so it is good to first know where you went wrong.

Success and failure are a part of life and failure is the indication that there is a chance of improvement.

One should never be afraid of failure and should try his or her beat to get the best and work towards the goal continuously.

- Prof. Deepak Raj P.Y

I have always found that mercy bears richer fruits than strict justice.

The ballot is stronger than the bullet.

Aircraft Performance Parameters

Year	1977
Aircrafts(PZL Bielsko)	SZD 41 & SZD 48 Jantar
wingspan(m)	15
Wing area (sq m)	10.66
Aspect ratio	21.1
Empty Weight (kg)	256
We/Wo	0.673684211
Gross Weight (kg)	540
P/W	0.255263158
Rate of sink (m/s)	0.77
Payload (kg)	266



Ms. Pavana naik

Tact is the ability to describe others as they see themselves.

Keep your face always toward the sunshine - and shadows will fall behind you.



By-
YATHIN CP (7th Sem)



By-
POOJA (5th Sem)

When something is important enough, you do it even if the odds are not in your favor.

People who think they know everything are a great annoyance to those of us who do.

ALTIUS 2017

DEPARTMENT OF AERONAUTICAL ENGINEERING CONDUCTED 4 EVENTS ON ALTIUS-2017 UNDER THE BANNER OF SRINIVAS AERO CLUB.

MORE THAN 190 STUDENTS PARTICIPATED IN THESE EVENTS AND THE EVENTS WERE A GRAND SUCESS.



CHARTA PRESENTATION (PAPER PRESENTATION)



AVION EN PAPIER (PAPER PLANE)

No man has a good enough memory to be a successful liar.

The future belongs to those who believe in the beauty of their dreams.

ALTIUS 2017



RUINA INVESTIGATIONAE(AIRCRAASH INVESTIGATION)



FUGA SIMULATOR(FLIGHT SIMULATOR)

It doesn't take a lot of strength to hang on. It takes a lot of strength to let go.

Gratitude is not only the greatest of virtues, but the parent of all the others.

AERO QUIZ



**THE DEPARTMENT OF AERONAUTICAL ENGINEERING
CONDUCTED AERO QUIZ ON 12 OCTOBER 2017 UNDER THE
BANNER OF SRINIVAS AERO CLUB .
OVER 90 STUDENTS PARTICIPATED IN THIS EVENT.**



T-Shirt Designing

**Yathin C P Won prize for designing
the t-shirt for Aero Club 2017.**

Some memories are unforgettable, remaining ever vivid and heart warming!

Change is the end result of all true learning.

TRAINING COURSE ON AEROSPACE AND DEFENCE



Srinivas Institute of Technology, Mangaluru, Automobile and Aeronautical Association (AMARA), Department of Aeronautical and Automobile Engineering and in association with Centre of Excellence in Aerospace & Defence, VTU Regional Centre, Bengaluru organised a talk on Training course on Aerospace & Defence on October 10, 2017.

Mr. Suresh Rao, CEO, Centre of excellence, VTU Regional Centre, Bengaluru was the resource person. He briefed the students and faculties about the importance of Centre of excellence in Aerospace and Defence and also listed the courses conducted by Centre of excellence.

Laughter is the sun that drives winter from the human face.

Nothing is more sad than the death of an illusion.

Technical Talk on Recent Trends in Automobile



Department of Automobile Engineering of Srinivas Institute of Technology, Valachil Mangaluru, organized “Technical Talk on Recent Trends in Automobile”, for 3rd semester Aeronautical students on 27th September 2017 in the Aeronautical class. The technical talk was given by Mr. Varun N. Assistant professor, Automobile Department of Srinivas Institute of Technology. Speaking on the technical talk, he explained basics of automobile engines, information about new technology, safety precautions and recent trends of automobiles.

It's not the size of the dog in the fight, it's the size of the fight in the dog.

When I started counting my blessings, my whole life turned around.
Orientation Program and Aero modelling Workshop to Government High School Students



Srinivas Aero Club, Department of Aeronautical Engineering, Srinivas Institute of Technology, Valachil, Mangaluru organised Orientation program and Aero modelling workshop to the students of Government High School, Koila, Bantwal Taluk on 22/11/2017.

Mr. Deepak Raj, Associate Professor, Department of Aeronautical Engineering conducted the orientation program to students with a topic "After SSLC, what next? How to have a smooth transition to your selected career after SSLC?".

Thirty five students of Aeronautical Department actively participated in this program by actively involving the school students into Aero modelling. Essay competition, Science working models and games were conducted to the school students.

The working of pulse jet engine, flying of Quad copter and RC Aircraft was demonstrated.

The whole event were viewed by Rotary Club and peoples of Koila.

People may hear your words, but they feel your attitude.

We know accurately only when we know little, with knowledge doubt increases.



Jeevith represented VTU inter college yoga competition on 20th sep 2017 held at RLJIT, Doddaballapur.

A person who never made a mistake never tried anything new.

Progress is man's ability to complicate simplicity.



Chandan A.Y represented 'Srinivas Institute of Technology' in 20th VTU State Level Athletic Meet 2k17 held at 'Visvesvaraya technological University', Belagavi and secured 7th place in 21k Half Marathon also 6th place in 5000m race.

A wise man makes his own decisions, an ignorant man follows the public opinion.

It is in your moments of decision that your destiny is shaped.

PLACEMENTS



JEEVITH



BHOOMIKA A.H



SOWMYA DEVANG

Placed In HINDUJA GLOBAL SOLUTIONS

AMARA

**PRESIDENT
KARTHIK BORKAR G**

**ORGANIZING SECRETARY
NAVANEESH N AMIN**

**JOINT TREASURER
PRAVEEN B**

**JOINT SECRETARY
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