MITE

Invent Solutions

MANGALORE INSTITUTE OF TECHNOLOGY AND ENGINEERING

ALTITUDES 2.0

QUARTERLY MAGAZINE

2018 | APRIL ISSUE

IT'S ONLY WHEN YOU'RE FLYING ABOVE IT YOU REALIZE HOW INCREDIBLE THE EARTH REALLY IS

DEPT OF AERONAUTICAL ENGINEERING

MITE AURA

DEPARTMENT OF AERONAUTICAL ENGINEERING

CHAIRMAN'S DESK

We understand that by education, we are not just teaching our students but are providing them with a career; highly competent professional career and at the same time how to be wholesome individuals to make them contribute their best in the service of the nation and the world. The students indulging themselves in activities such as publishing a magazine is just helping them grow as better individuals and it makes me glad to know that it is becoming a huge success.

Mr. Rajesh Chowta

VICE CHAIRMAN'S DESK

I consider it my proud privilege to send you my greetings on the occasion of the release of the second edition of "ALTITUDES". Seven years is a very short time span in the life of any branch of any institution in our field of operation; but our tremendous achievements associated in all spheres of activities are very awarding.

Wishing you all the very best.

Mrs. Savitha Chowta

PRINCIPAL'S DESK

It is my great pleasure to know that the second volume of the Aeronautical Department's Magazine "ALTITUDES" is ready to release. Various activities conducted in the esteemed department and achievements of our students are very well presented. I express my whole hearted thanks to all those who have contributed the articles and ensured the quality of the magazine.

Dr. G L Easwara Prasad

HOD'S DESK

It gives me immense joy as the second edition of the departmental newsletter is releasing on 25th of April, 2018. The students are not only a part of the academics but also indulge themselves in various extra-curricular activities and this news letter is just an example of it. I congratulate all the staff and the students for taking the initiative and bringing out this news letter.

Dr. G Purushotham

INSIDE THIS ISSUE:

Painting by Arpitha Holla

DEPARTMENTAL ACTIVITIES

AURA Activity & Fresher's Welcome

"Students, Engineers, Technology - Scram Jet Propulsion"

Mr. Venu G, Sr. Scientist from Propulsion Division, CSIR's National Aerospace Laboratories, Bengaluru

Every year a new batch of Aeronautical Engineering students join our department and every year they are warmly welcomed into the department both formally and informally. Our department flaunts one of the best fresher's welcome throughout MITE. The fresher's day was worth remembering.

As a part of the formal function, a technical talk was organized where Mr. Venu G spoke about 'Students, engineers, technology and SCRAM jet propulsion' on 23rd September 2017 which was a grand success. The speaker spoke to the students and their role in understanding the vast subject of aeronautics taught to them, the role of engineers in the present day, about the advancement in technology and the incipient developments that are going on in the world.

He gave the audience more insight on the criteria required to design an airplane. He lectured about the components of the SCRAM jet and the functions of each of them. He concluded the session with a brief description of NAL.

DID YOU KNOW?

India is the 4th country to carry out the testing of SCRAM Jet engines. The engine flew at supersonic speeds for 300 seconds while cruising at a speed of Mach 6 for 6 seconds!!!

APJ Abdul Kalam Birth Anniversary

“Work experience with Dr. A.P.J. Abdul Kalam”

The chief guest has worked with Dr. APJ Abdul Kalam for 4 years in ISRO. He shared his memories with the students.

On the occasion of Dr. APJ Abdul Kalam’s birth anniversary, the students of the Department of Aeronautical Engineering had the opportunity to witness and interact with Prof. Janardhan Rao who had worked under the guidance of Dr. APJ Abdul Kalam.

The seasoned speaker, Prof. Janardhan Rao who is a retired scientist, ISRO has been involved in many of the researches. He has been awarded many titles from ISRO as well as other reputed organizations.

Prof. Janardhan Rao started off the session by giving excerpts about Dr. Kalam's life and how Kalam started off his career as a scientist. He proceeded by sharing his work experience with Dr. Kalam and other senior scientists in ISRO and how his unnerving leadership qualities and his compassion towards his colleagues went a long way in making him the most loved scientist not only in ISRO but also all over the nation. He orated about numerous missions that he had carried out under the guidance of Dr. APJ Abdul Kalam. The students left the session with renewed and heightened respect for the legend, **'THE MISSILE MAN OF INDIA'.**

SIMPLE AS BREATH

None of the adjectives are enough to portray the contributions, generosity and humility of India's Missile Man, Dr. APJ Abdul Kalam who resides in every Indian's heart. The great man known as the People's President was so down to earth that these rare stories about him will only deepen the respect we have for the legend.

1. Once, Dr. APJ Abdul Kalam rejected the suggestion to put broken glass on the wall of a building that needed protection. Why? Because broken glass would be harmful for birds

2. President Kalam has given up all his life saving and salaries to a trust he founded named PURA (Providing Urban Amenities to Rural areas).

3. Who did President Kalam invite as the "Presidential Guest" to Kerala's Raj Bhavan during his first visit after becoming the President?

- A road side cobbler
- Owner of a very small hotel

And the rest is history...

Technical Talk on Unmanned Aerial Vehicles: Applications, Innovations and Opportunities

"Unmanned Aerial Vehicles, Unmanned Aerial Systems, Submarine Vehicles, UAV Propelling Units, Transfer using UAV Technologies. "

Mrs. Arul Jyothi– Director Executive,
Ms. Krithiga - HR Executive
Mr. Naveen -Research Executive
Ms. Gunasarami - Research Trainee
of Jet Aerospace Aviation Research Centre- Palakkad

On the 19th of February 2018, a technical talk on Unmanned Aerial Vehicle: Applications, Innovations, and Opportunities were conducted by the respected delegates of the reputed "Jet Aerospace".

Jet aerospace which is an advanced non-profit technological forum for researchers and scholars functioning alongside the ministry of skill development and entrepreneurship, government and national skill development co-operation. The effervescent interaction between the dignitaries and students commenced by the director executive of Jet Aerospace- Mrs. Arul Jyothi quoting that "science is all about knowing and engineering is all about doing".

The talk covered a lot of topics which focused on the Unmanned Aerial vehicles, Unmanned Aerial systems, submarine vehicles, UAV propelling units and lots more.

The Jet aerospace research centers are eminent clients to the government Naval bases and even to many reputed private industries. The program, which was a huge success, had definitely left an impact in the mind of all the students.

Last May, Mumbai became the first city to have a margarita pizza delivered via drone. Flying over the traditional lunch delivery system the pizza-drone, which was launched from Francesco's Pizzeria, made sense in a city known for its history of a typical and innovative delivery solutions.

DRDO Lakshya: a target drone used for discrete aerial reconnaissance and target acquisition. It is launched by solid propellant rocket motor and sustained by a turbojet engine in flight.

DRDO Nishant: primarily designed for intelligence -gathering over enemy territory and also for reconnaissance, training, surveillance, target designation, artillery fire correction, and damage assessment. The Nishant has completed its developmental phase and user trials.

DRDO Aura: similar to the Lockheed Martin RQ-170 Sentinel, a stealth drone that will be capable of releasing missiles, bombs, and precision-guided munitions. The details of the Aura project are still, for the most part, classified.

Technical Talks

Trends in Condition Monitoring and its Application in Industries

On 24th February, 2018 a talk by Dr. K P Ramachandran was given on the topic "Trends in Condition Monitoring and its Application in Industries". Dr. Ramachandran Nair, NSS Activist and the senior leader, was one of the founders of NDP. He spoke on the topic of Condition Monitoring and gave a detailed analysis of various advancements in the field and how we as engineers play an important role in the aspects of maintaining machinery and he mentioned a few of his own contributions. He ended the talk with a Q&A session.

Engineering Education in a Flat World

The talk held on 2nd March 2018 by the Aeronautical Department, was given by Dr. Krishna Swami, the dean at the Thomas J. Watson School of Engineering and Applied Science at Binghamton University. A prolific scientist, Srihari is known as an expert in many diverse aspects of electronics packaging. Over the last decade at Binghamton, he has also pioneered research focused on the use of systems engineering principles in enhancing efficiency in healthcare delivery.

His talk included the topics on the efficient use of the Internet for research, to communicate, play games, get news, shop and so on. He urged the students to think outside the box and how sometimes the simplest idea can transform into a million dollar enterprise.

The Application of the Science Manufacturing and Systems Engineering in the Healthcare Industry

The students of the Department of Aeronautical Engineering had the opportunity to witness and organize the technical talk by Dr. Mohammad T. Khasawneh a Professor in the Department of Systems Science & Industrial Engineering (SSIE) at Binghamton University. On the topic "The Application of the Science Manufacturing and Systems Engineering in the Healthcare Industry". The technical talk was rooted on the applications of systems engineering in the healthcare sector. He gave a detailed analysis of the various advancements in the different fields of health care. He ended the session by showing an insight of the limitless possibilities of use of systems engineering in healthcare.

Technical Talk on Aerospace Systems: Development and Prospective

"It's not what you achieve, it's what you overcome. That's what defines your career in ISRO"

Our students had the opportunity to be a part of the technical talk by Prof. Janardhan Rao on the topic "Aerospace Systems Development and Prospective". He is a retired ISRO Scientist who had worked under the leadership of Dr. APJ Abdul Kalam for the development of GSLV.

The talk held on 7th April 2018 was very informative as the speaker shared his experiences in ISRO and also how he joined the ISRO. Further, he briefed about the exciting career opportunities available in ISRO.

The talk went on when the speaker narrated about the detailed working of the satellites and their functions. The program ended in a high note as he gave the information about the future planned missions of India in the space industry.

He also spoke at a length on the types of jobs available at ISRO and the procedures to apply for the same.

The session left a positive impact on the students as they were influenced by the various boons and banes of facing the most challenging field of engineering, aeronautics.

The Farmer's Son

Indian Space Research Organization (ISRO) is a place where anything can be achieved. Born to a farmer in Tarakkanvilai village of Kanyakumari, Dr. Sivan (now the Chairman of ISRO) completed his schooling in Tamil medium Govt. school. A self-made and hard-working person, he taught himself without any guidance from family or attending tuitions; yet he became the first graduate in his family in 1980. Sivan completed his bachelor's course in Aeronautical Engineering from Madras Institute of Technology. After completing a Master's course in Aerospace Engineering from IISC Bengaluru, he joined the ISRO in 1982 and was inducted into PSLV Project. He is specialised in Aerospace Engineering, Space Transportation Systems Engineering, Launch Vehicle and Mission Design, Control & Guidance Design and Mission Simulation Software Design, Mission Synthesis, Simulation, Analysis and Validation of Flight Systems. He was the chief mission architect for successful launch of 104 satellites in a single mission of PSLV.

FACULTY DEVELOPMENT PROGRAMME

Year	Faculty Name	Topic	Organized By	Duration
2017-18	**N Tamilselvam**	Advances in Gas Dynamics and Jet propulsion	Tagore Engineering College Chennai	14-16th December 2017
2017-18	**Yathin K L**	Introduction to Space Flight Mechanics	IIT Bombay	19-23th October 2017
2017-18	**Sujesh Kumar**	Introduction to Space Flight Mechanics	IIT Bombay	19-23th October 2017

FACULTY ACHIEVEMENTS

YOUNG SCIENTIST AWARD (Science and Technology)

For the research on **Space Vehicle Materials & GTE Turbulators** at N L Dalmia Institute of Business and Research-Mumbai. The award was presented by Prof. Dr. D S Chauhan (Board member AICTE&UGC, Multi Patent Holder, Advisor - NASA). and the event was organized by CSERD -Dehradun.

BEST PAPER AWARD

For the paper entitled **Effect of Almandine on Microstructure and Corrosion Properties of Nickel Super Alloy Composite for Aerospace Gas Turbine Application** at ICon-MMEE. The award was presented by Mr. Rajesh Chowta (Chairman - MITE) and the event was organized by MITE, Moodbidri.

GRANTS– ONGOING FUNDED PROJECTS

KCTU- Funding Agency

Investigator- Dr. G Purushotham

Title- Quality Improvement and Upgradation of the Existing Fish Meal and Oil Industries and Extraction of Bio-diesel and Fishnure in Eco-Friendly Environment from their Product.

Grant No- KCTU/R&D/MITE/2017-18/164

Amount- 49.50 lakhs

NPTEL/MOOC - Certification

SL NO	FACULTY NAME	SUBJECT
1	AJITH KUMAR	INTRODUCTION TO THEORY OF VIBRATION STRENGTH OF MATERIALS
2	ANUSOOYA R SHETTY	STRENGTH OF MATERIALS

CAPSTONES OF THE DEPARTMENT

SANJAY M V
8.93 SGPA - 3rd Sem

RAKSHITH T M
8.73 SGPA - 3rd Sem

VISHNU C
9.15 SGPA - 5th Sem

SHWETHA S
8.55 SGPA - 5th Sem

PRIYANKA M
76% - 7th Sem

DINAKAR
74% - 7th Sem

The students of Aeronautical Engineering are not only performing profoundly well in academics, but also while interning in various companies.

Bangalore Aircraft Industries Pvt. Ltd.

Aditya R
S Chandini
Deeksha
Feroz
Lohith Naik
Nikhil J Correa
Rakshitha Nayak
Renol Fernandez
Sheril Ammanna
Sridevi M Bhat
Sudarshan
Wilson U
Samitha Shetty
Prathiksha P

Prathiksha Mohandas
Ambareesh
Jenita Cutinha
Santhosh
Divya Poojary
Vishnu C
Aditya
Sangeetha K
Akhil Sivan
Karthik
Ratan Nayak
Simran Tamboli
Jasmin Momin

PAPER PRESENTATIONS

The goal of writing a paper is to change people's behavior. For instance, to change the way they think about a research problem or to convince them to use a new approach. Here are a few of our students who have done the same.

SL NO	PAPER TITLE	STUDENTS' NAME	VENUE/ ORGANISED BY	DATE
1.	Study and Analysis of modification of main rotor configuration on a Notar Helicopter	Shreyas S. Kammar Shwetha S.	SDSCET, Chennai.	23rd & 24th March 2018
2.	Dual survival by combination of UAV and AUV	S. Chandini	SDSCET, Chennai.	23rd & 24th March 2018

WORKSHOPS ATTENDED

Going beyond the horizons of textbook and making something innovative is certainly a measure to improve an individual in practical terms. Workshops held at regular intervals perform the same motive for a student

International Capsule Workshop on "Life in Space" organized by IARC, Mumbai at Sathyabama Institute of Science and Technology, Chennai

Ajamahil Patel Biradar
Anjum M Channapattana
Ankitha D V
Arpitha Holla S
Clavin Anton Rodrigues
Dane Hubert Saldanha
Darshan Chavan S
Dharshan S R
Divya Poojary
Glenn Shannon Dsouza
Granvil Anush Dsouza
Keerthi Nandhan R
Madhurima R Londhe
Madhusudhan C
Manish P Salian
Manoj Kumar M
Pooja N
Poornachandra S Goudar
Queena Menezes
Rahul Subramanya Balimane
Rakshith T M
Savi Shetty A H
Sequeira Clavin Wilton
Sharanya R
Soundarya J
Stanvil Dsouza
Tejaswini D
Tulaskar Sanjana Damodar
Chethan
Rishab

Workshop on "Armoured Fighting Vehicle" organized by DRDO and "Radar and Communications" organized by ISRO at NIT, Trichy

Ajamahil Patel Biradar
Arpith Jain
Ashwathrama Prabhu k
Dacklen Sundeep Dsouza
Manoj Kumar M
Priyanka Lokesh
R Rithik
T D Teeshma
Vishalakshi T Bandiwad

J– Juliet

TEAM

Aireino meaning Kingdom of Air, diligent students who wanted to create talent and passion they had towards people from the dream world that which started with making RC airplanes, the sky and say, "Now the aero Attending various competitions regarding. water rocket, Aireino has shown

VAYUYANA v.1.0
Workshop on
Aeromodelling

Do you want to join in for the fun? Join Team Aireino?

then follow these steps:

01 Prepare for the interview

02 Attend the interview

03 All the best! The top 15 will be selected

04 Tired of studying? Need a easier way to join

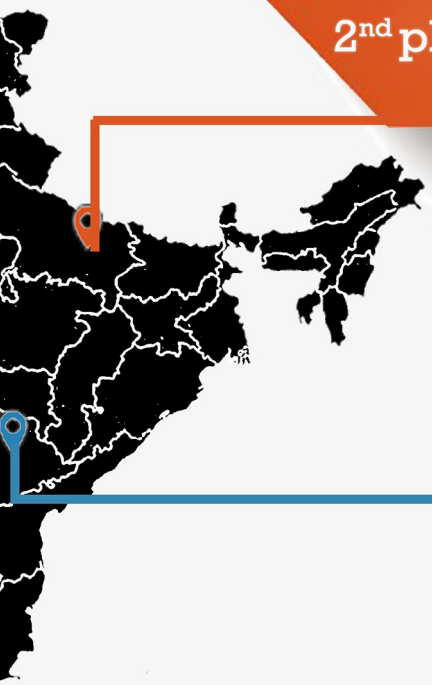
05 Treat the club Manager

NITK Surathkal
Wright Flight - RC Aircraft
3rd Place

AIREINO

is an aero-club started by a group of an opportunity for themselves for the flight. The club was started to snap the theoretical knowledge is not the end. The club made people around the campus look at nautical engineers are really in the sky". R C aircraft, drones, hovercrafts, that "Engineering could be fun".

IIT Varanasi - TECHNEX
2nd place - Drone Tech



NIT Warrangal
TECHNOZION - RC aircraft
5th Place

NITTE Meenakshni
1st Place - Aero Quiz
5th Place - RC aircraft

STUDENT ACHIEVEMENTS

The success of our department has acquired new heights with our latest achievements.

SL NO	NAME	EVENT NAME	ORGANIZATION/ INSTITUTION/	ACHIEVEMENT
1	Mohammad Zain Khan	Wright Flight	NITK, Surathkal	3RD
		RC Plane	NIT, Warangal	5TH
2	Sudarshan	Wright Flight	NITK, Surathkal	3RD
		RC Plane	NIT, Warangal	5TH
3	Prajwal Poojary	RC Plane	NIT, Warangal	5TH
		Aviation Quiz	NMIT, Bengaluru	1ST
4	Vikas N S	Aviation Quiz	NMIT, Bengaluru	1ST
		RC Plane	NIT, Warangal	5TH
5	Keerthi K S	RC Plane	NIT, Warangal	5TH
6	Dinakar	RC Plane	NIT, Warangal	5TH
7	Suman B M	Hovercraft Event	IIT, Varanasi	3RD
8	Prajwal P Poojari	Aviation Quiz	NITTE Meenakshi	1ST
9	Vikas N S	Aviation Quiz	NITTE Meenakshi	1ST
10	Md. Yunus A.B	IGCK - 2017	International competition, IIT Kharagpur	3RD
11	Md. Yunus A.B	ISRO Space Challenge	Student Ambassador of South India	-

SL NO	NAME	EVENT	ORGANIZER/PLACE
1	Suman B M	Drone Technology	TECHNEX-IIT(BHU) Varanasi
2	Keerthi K S		
3	Pratheeka P Shetty		
4	Keerthi K S	La-Trajectorie	
5	Priyanka M		
6	Pratheeka P Shetty	Momentum	
7	Suman B M		
8	Asma Kausar	FFS India-2017	
9	Pooja R	GOKART Design	ISIE, Galgotias University
10	Prathika P Shetty		
11	Varsha S		
12	Sudarshan	RC Plane	NMIT, Bengaluru
13	Mohammad Zain Khan		
14	Dinakar		
15	Keerthi K S		
16	Sudarshan	AVION-E	NIT Warangal
17	Keerthi K S		
18	Mohammad Zain Khan		
19	Prajwal Poojary		
20	Dinakar		
21	Vikas N S		

KPIT SPARKLE 2018

TITLE	STUDENTS	YEAR/ SEMESTER	GUIDE
LIFT ENHANCEMENT OF A WING USING D-B-D PLASMA IMITATED GURNEY FLAPS	SUMAN B M MEGHARAJ PAVAN KUMAR	FINAL YEAR	Mr. SRINATH R

FUNDED PROJECTS UNDER KSCST 41ST STUDENT PROJECT PROGRAMME (2017-2018)

FAULT DIAGNOSIS IN BELT DRIVE TRANSMISSION USING WAVELET SPECTRUM	BALAJI K N AKSHATHA G K UMASHANKAR RAGHAVENDRA	FINAL YEAR	Mr. SUJESH
RENEWABLE ENERGY AUTONOMOUS DRONE FOR AGRO BASED APPLICATIONS	KEERTHI K S PRIYANKA M PRATHEEKA P SHETTY ROHIT BAMBULE	FINAL YEAR	Mr. MANAS JAIN
DESIGN & DEVELOPMENT OF SLATEX GENERATOR	SHUBHAM CHAVAN KEERTHIRAJ SUMA A L	FINAL YEAR	Mr. SRINATH R

MINI PROJECTS

Deviating from the conventional propulsion system our students from the 6th Semester have replicated an electric form of propulsion to be used in Spacecrafts. If supplied with an input of 1-7kW it can give an exhaust velocity of 20-50 km/s.

ION THRUSTERS	VISHNU C WILSON N U RASHMI G RAIKAR SRIDEVI M BHAT SHERIL RACHEL AMMANNA DEEKSHA	SIXTH SEMESTER	Mr. TAMILSELVAM N

IDEATHON PROJECTS

IDEATHON is a benchmark of a new foundation for encouraging entrepreneurship in India. The Department of Aeronautical Engineering is proud to declare that 16 projects were submitted for the IDEATHON, out of which 14 were shortlisted for the second round and it is our immense pleasure to convey that one of the projects headed by Poornachandra had been selected for the final round.

QUADCOPTER IN AGRICULTURE	POORNACHANDRA S GOUDAR MANOJ KUMAR M SYED SHEOAB WAZEER ASHIRWAD ATANOOR	FOURTH SEMESTER	Mr. SRINATH R

PLACEMENTS

The esteemed Aeronautical Department is a home for the success of students and we are proud to present the Placement List of 2017-18.

Placement Co-ordinator: Miss. Anusooya R Shetty

Sl. No	USN	Name	Company Name
1	4MT14AE052	Varsha S	INFOSYS
2	4MT14AE009	Anusha Shetty	SLK SOFTWARE
3	4MT14AE010	Apoorva S Hudedagaddi	SLK SOFTWARE
4	4MT14AE040	Rohit Bambule	Alpha9 Marine Services
5	4MT14AE046	Shubham Chavan	Alpha9 Marine Services
6	4MT14AE024	Keerthi Raj	Alpha9 Marine Services
7	4MT14AE018	Gouthamgowda C S	KPIT CUMMINS
8	4MT14AE003	Ajith Kumar	Silverpeak Global Drive
9	4MT14AE050	Uma Shankar	Silverpeak Global Drive
10	4MT14AE051	Ganesh S V	Silverpeak Global Drive
11	4MT14AE021	Jagadisha V	Silverpeak Global Drive, Diya Drive
12	4MT14AE042	Seema DS	Silverpeak Global Drive
13	4MT14AE043	Shifali Sohan P	Silverpeak Global Drive
14	4MT14AE015	Chaithanya N	Silverpeak Global Drive
15	4MT14AE047	Suma L	Silverpeak Global Drive
16	4MT14AE025	Kushal Gowda J	Silverpeak Global Drive
17	4MT14AE014	Balaji KN	Silverpeak Global Drive
18	4MT14AE020	Harshatha Prakash S	Silverpeak Global Drive
19	4MT14AE004	Akshatha GK	Silverpeak Global Drive
20	4MT14AE046	Shubham Chavan	Silverpeak Global Drive
21	4MT15AE403	Lavanya KG	Mphasis Drive
22	4MT15AE012	Asma Kausar Javeed Khan	Diya Drive

The Department of Aeronautical Engineering actively participated in the inter-branch variety entertainment program held on the 30th of March, 2018. The theme selected for the event was **Navarasa** or the **Nine Emotions of Life.**

Career in Aeronautics

For millennia, humans have watched birds and dreamed of being able to fly themselves. Sometimes it was little more than a daydream, but others genuinely tried to make it happen. People have built wings and jumped from tall towers, often crippling or killing themselves in the process. But that goes to show how desperately people wanted to be able to fly.

Who can have a career in Aero?

Almost everyone, as long as you have a degree in any field of engineering. As aeronautics is an interdisciplinary branch, be it a Computer Science engineer, an Electronics engineer, a Mechanical engineer..... they can have a successful career.

What jobs can you expect in Aeronautics?

The demand for Aeronautical Engineers is increasing day by day due to the rise in demand for faster, safer and cheaper air travel along with the advancements in the field of aeronautics.

Employment Opportunities

- **Airlines**
- **Corporations**
- **Flying Clubs**
- **Govt. owned Air Services**
- **DRDO**
- **Aeronautical Laboratories**
- **Aeronautical Development Establishments**
- **Department of Civil Aviation**
- **Defense Services**

The success of the Aeronautical Department is clearly seen in the excellence of it's students, the knowledge they have acquired and the path they have taken. We feel proud to present to you the notes from our alumni.

"The four years I spent at MITE will always be the most memorable experience for me. I had the privilege of participating and organizing events, volunteering and working on different projects beyond the given syllabus. The faculty were supportive, encouraging and focused on helping us become the best versions of ourselves. MITE laid the foundation for my career in Aeronautics and I am proud to be associated with it."
-Varun Rajaram

"MITE has given me a significant platform during my engineering days which has helped me in becoming not only a good engineer but a better and confident person as well. There has been an immense contribution of the faculties and also management in building my career."
-Parmar Azan

Our alumni have donned not only in the field of technology but also in various other fields. Amit Kamble has performed exceptionally well in the field of cricket. He is a player at the Karnataka State Cricket Academy.

P– Papa

TOP 5 BIGGEST AIRPLANES IN THE WORLD

1

ANTONOV AN-225 (“Mriya”)
Length -84 meters
Wingspan -88.4 meters
Maximum takeoff weight – 6,40,575 kg

2

AIRBUS A380-800F
Length -72.73 meters
Wingspan-79.75 meters
Maximum takeoff weight - 5,90,200 kg

3

AIRBUS BELUGA A300-600ST
Length -56.15 meters
Wingspan- 44.84 meters
Maximum takeoff weight - 47,042 kg

4

BOEING 747 DREAMLIFTER
Length – 71.68 meters
Wingspan -64.4 meters
Maximum takeoff weight - 3,64,563 kg

5

MCDONNELL DOUGHLAS MD-11F
Length -61.62 meters
Wingspan -51.66 meters
Maximum takeoff weight – 2,86,247 kg

TOP 5 LARGEST AIRPORTS IN THE WORLD

(Based on Area)

1. DENVER INTERNATIONAL AIRPORT (US)

Serving over 58 Mil. passengers per year & covers a land over 33500 acres.

2. DALLAS/ FORTWORTH INTERNATIONAL AIRPORT (US)

Serving over 66 Mil. passengers per year & covers a land over 17000 acres.

3. WASHINGTON DULLES INTERNATIONAL AIRPORT (US)

Serving over 22 Mil. passengers per year & covers a land over 13000 acres

4. KANSAS CITY INTERNATIONAL AIRPORT

Serving over 11 Mil. passengers per year & covers a land over 11000 acres

5. SHANGHAI PUDONG INTERNATIONAL AIRPORT

Serving over 66 Mil. passengers per year & covers a land over 10000 acres

LANCET

It was me. I saw her standing across the road from here. She was beautiful with all the purity filled in her eyes. Her hair danced to the music of the wind and the way her fingers passed through them created magic. I could feel the music beats playing from her earrings.

It was me. I saw freedom from here but I was trapped. I was imprisoned but the sunlight kept me alive. I had to spend the rest of my life here, behind the bars but some weird urge to live kept me pushing.

It was me. I saw the child struggling for its life. I saw the mother on the other side who was on her knees on a floor full of salt water begging for the blessing of the one they called 'God'.

It was me who witnessed the best friend saying answers to the one who sat on a bench in the big hall with his pen and papers. I saw the faith he had on the latter as he scribbled something down.

It was me. I saw the trees passing by while I moved along with the fully throttled vehicle. The breeze wrote its stories on me. I felt a spark as a hand passed through me to catch the falling dews from the sky.

It was me! The one who is always covered behind those beautiful drapes of clothing which flies everytime the wind played cheerfully. The clothe brushes my entire body as if I hold its essence of survival. It is I, the spectator of everything and nothing. The one who writes the stories but have no one to read to!

It is me- the WINDOW

-Savi Shetty

- Arpitha Holla S

COLOURS ARE FOR EVERYONE

More than often the girls in the family are either nudged or constantly corrected about the chores they are supposed to be indulging themselves in or to be behaving and dressing in a particular manner that goes well along with their perception of living a life viewed as respectable and livable by society.

Girls are told to have certain limited dream's which perfectly suits the rest of the world but not to them. What if girls could achieve whatever dreams and aspirations they ever had?

Countless individuals have the notion of feminism being negative and destructive due to the fact this movement is only for women and fighting exclusively for women's rights in all the segments of our society.

When female humans come forward and stand up for what they deserve and believe in, the general public takes no second thought in imposing judgments about the women being either too aggressive, demanding or selfish.

When men come out and speak up for equality same goes to them as well. Often considered as weak or less almighty.

Feminism is about fighting for equal rights and equal opportunities of the sexes regardless of caste, race, colour or ethnicity. Feminism is standing up for every individual who is oppressed in the society due to a lot of politically and financially influential hypocrites. A belief which has led to a massive campaign around the globe to fight against the system which fails to appreciate individualism and freedom of choice.

Feminism is spreading the message that the whole homo-sapiens clan is equal and no other gender has come on this planet as more powerful and with additional authority. The core meaning of feminism is that no matter what your gender and cultural identity are, equal rights and opportunities ought to be given to all.

It's time that we make a change in the thinking process that a particular gender is supposed to be doing things or living in a certain way and ensure the norms which are hinged on the century-old age living conventions and customs that had been applied to suit their living conditions from way back.

If you see feminists, it's not about them trying to make women as higher form of beings or trying to gain control over the society. It is a movement with concerning to create awareness amid humankind and to make every individual free of the burden that there's already a way of life decided by the pretentious ideal society.

There is this prevalent misconception that feminism is a widespread protest against men to hurl them off their dominance existence and women demanding extra benefits and privileges from the system without qualifying for the requirements. This grave misunderstanding among the population has led to less informed to show anger and hatred towards those fighting for a greater quality and equal world.

With all the technological advancements and rapid ballooning of civilization that has come into existence within the last decade, even then if we are still unsuccessful in acknowledging equal human rights and aspiring to live in the free world then it is grave and perilous indication that as humankind we are moving backward. Let us all hope for one equal world.

Kavita Tulasimani

EMANCIPATE

I wanna be set free.
I wanna be set free from this wild entice you're holding me from.
I have tried to run away but you pull me like I am the dew on your lotus.
Your name holds the key to the carols in my ears.
Your eyes hold the spark which could light my mind any second and any minute of the dawn!
Your tears hold the power to dig up a pit for my phantom.
My 'jovial' soul belongs to you more than I own it.

Somedays, you become the reason for me to respire and sometimes you make me fall on the floor; and I wanna be set free.
I want to liberate myself from the chains of your smile.
I want to roam about freely without the thought of you making me smile.
I want to abstract myself from you like the waves try to opt out of the ocean.

And here I stay, planning out the ways to get away from you.
Desperately, I fancy the 'happiness and death' I would receive if I had to move away.
And then, imagining the happiness that I'd have if I depart from you,
I smirk at myself realizing that 'you'
are my midnight escape!
And there is no elusion from you!

Savi Shetty

It means a lot!

It began with a coincidence
At first, it made no real sense
But still grew out to be the best
Then you grow in size and jest
And yet you try to stick together
Thinking you could keep it forever
Now the pitch of life increases
It now gradually decreases
You desperately try to hold on it
You want to enjoy its every bit
By then it will be too late
It might be among the things you hate
Then one fine day when you are lonely
When all seasons seem gloomy
You'd wish you had it with you
You'd even want to start it anew
But now it's a little too late
Even though the time is passing at its slowest rate
The only that remains of it is its memories
It'll not be forgotten by you most certainly
Now I leave it to you
To find out what 'It' means.

-Dacklen D'Souza

ಯಾರೂ ಒಳ್ಳೆಯವರಲ್ಲ, ಯಾರೂ ಕೆಟ್ಟವರಲ್ಲ

ಯಾರೂ ಒಳ್ಳೆಯವರಲ್ಲ... ಯಾರೂ ಕೆಟ್ಟವರಲ್ಲ...
ಭಯವೇತಕೆ, ಇದರಲ್ಲೇನು ಸಂಕೋಚ
ಅವರವರಲ್ಲೇ ಗೊಂದಲ
ಕೆಟ್ಟವರೆಂದು ಯಾರೂ ಹೇಳಿಕೊಳ್ಳಲ್ಲ
ಒಳ್ಳೆಯವರೆಂದು ಎದೆ ತಟ್ಟುವರು... ಈ ಮಾನವರು...!

ಎಲ್ಲರೂ ಒಳ್ಳೆಯವರಾದರೆ ಈ ಲೋಕ ಸ್ವರ್ಗ
ಯಾವುದೇ ಗೊಂದಲ, ಭಯವಿರುವುದಿಲ್ಲ
ಪೋಲಿಸ್ ಠಾಣೆ, ನ್ಯಾಯಾಲಯ ಬೇಕಾಗಿಲ್ಲ
ನಿರ್ಭಿತರಾಗಿ ಬದುಕುವರು
ಬದುಕಲು ನೂರಾರು ಆಸೆಗಳನ್ನು ಇಟ್ಟುಕೊಂಡಿರುವರು... ಈ ಮಾನವರು...!

ಒಳ್ಳೆಯವರಲ್ಲಿ ಒಂದು ಗುಂಪು, ಒಂದು ತಾರತಮ್ಯ
ಕೆಟ್ಟವರಲ್ಲಿ ಒಂದು ಗುಂಪು, ಒಂದು ತಾರತಮ್ಯ
ಇಬ್ಬರಲ್ಲೂ ವ್ಯತ್ಯಾಸವಿದೆ
ಎರಡೂ ಒಂದಾದಾಗ ಈ ಜೀವ ಸಾರ್ಥಕ
ಇದನ್ನು ಸರಿ ಮಾಡಲು ವಿಫಲ... ಈ ಮಾನವರು...!

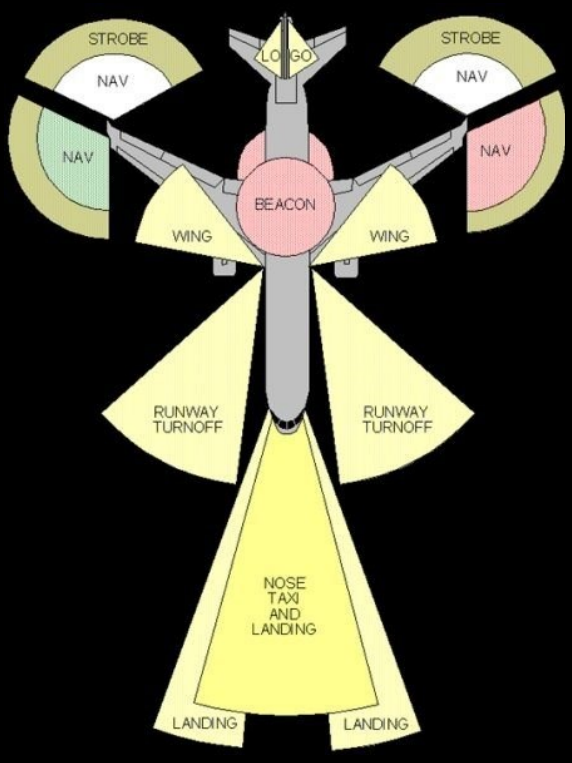
ಮಾನವನಲ್ಲಿ ಮಾತ್ರ ಒಳ್ಳೆಯದ್ದು, ಕೆಟ್ಟದ್ದೂ
ಪ್ರಾಣಿ ಪಕ್ಷಿಗಳಲ್ಲಿ ಇಲ್ಲವೇ ಇಲ್ಲ
ಈ ಜೀವನ ಸುಂದರ, ಎಲ್ಲಾ ದೈವ ಸಂಕಲ್ಪ
ಈ ಜೀವ ಸಾರ್ಥಕವಲ್ಲದಕ್ಕೆ ದುರಾಸೆ ಏಕೆ, ಎಲ್ಲರೂ ಒಳ್ಳೆಯವರೆಂದೇ
ಭಾವಿಸಿ ಅದನ್ನರಿತು ಜೀವನ ನಡೆಸಬೇಕು... ಈ ಮಾನವರು...!

ದೈವ ಕೊಟ್ಟ ಈ ಜೀವ
ದೈವದ ಕೈಯಲ್ಲಿ ಈ ಜೀವ
ಜೀವ ಅಂತ್ಯ ಕಾಣುವ ಮೊದಲು ಒಳ್ಳೆಯದೊಂದು ಉಳಿಸಿಕೊಂಡರೆ ಉಳಿಯುತ್ತೆ
ಕೆಟ್ಟದ್ದೂ ಶಾಶ್ವತವಲ್ಲ ಒಳ್ಳೆಯದು ಚಿರಾಯು
ಅದನ್ನರಿತು ಬದುಕಬೇಕು... ಈ ಮಾನವರು...!

ಮಧುಸೂದನ್ ಸಿ.

Ever wondered what those lights on an airplane are..? To be precise there are 8 different lights on an airplane.

- Above the front landing gear is the take-off and landing light.
- On the underbelly is the anti-collision or the beacon light.
- Mounted on the right and left wing tips are green and red lights respectively and a white light on the tail. These are the navigation lights.
- A bright white blinking light on the wing tips that blink 3 times per second and one on the empennage which blinks twice per second are the strobe lights that show that the aircraft is in action.
- Perched on the root section on the leading edge of the wing that lights up the engine and the wing surface is the wing scan light that helps the pilot to make sure that the plane is de-iced.
- Fixed to the horizontal stabilizer of the plane is the logo light that lights up the logo on the vertical stabilizer.
- Just below take-off and landing lights the runway exit light that lights up the runway exits that aid the pilots.
- The engine lights assists the crew to get a visual on the engine.



TROUBLE YOUR THOUGHTS

REBUS

A puzzle in which words are represented by combinations of pictures and individual letters.
For instance:

Answer: Top Secret

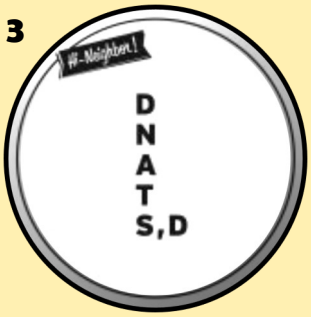
1

Answer: _____

2

Answer: _____

3



Answer: _____

4

Answer: _____

5

Answer: _____

6

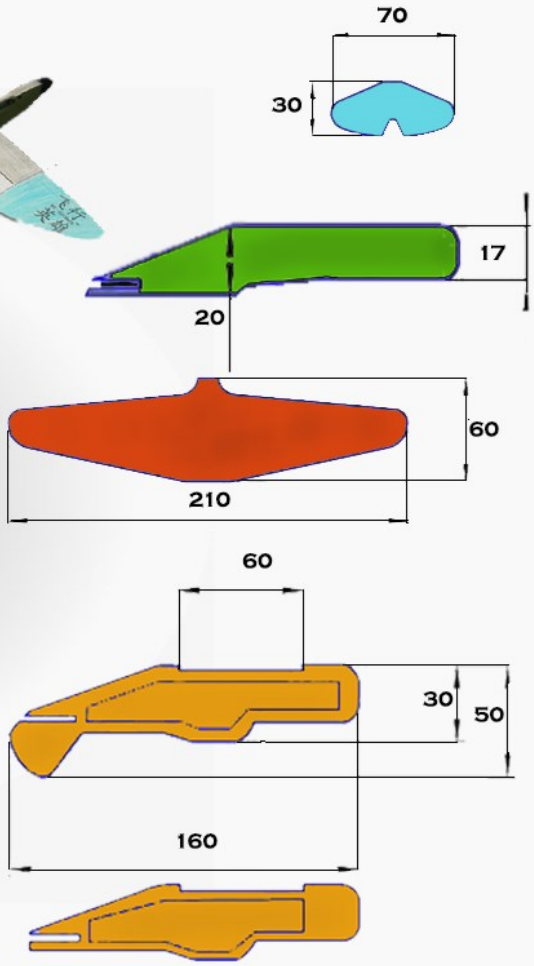
Answer: _____

Did you notice the page numbers of this edition have been replaced with Phonetic Names. These names assigned to individual alphabets avoid confusion and provide better communication with the Air Traffic Control.

Answers: 1. Advice **2.** Comfortable **3.** Stand-up Comedy
4. Metaphor **5.** Income Tax **6.** Think Before You Speak

D.I.Y GLIDERS

1. FIND A PLACE TO SIT, TAKE A DEEP BREATH. RELAX !
2. STILL TIRED? PUT ON THE EAR PLUGS !
3. STILL NOT RELAXED, YOU ARE NOT READY FOR THIS FOLLOW STEPS 1,2
4. GRAB A CARDBOARD SHEET, MARKER, CUTTER AND SOME GLUE
5. MARK ALL THE DIMENSIONS AS PER THE SKETCH
6. JOIN ALL THE PIECES TOGETHER, THERE YOU HAVE IT ! THE GLIDER



NOTE : PLEASE BE CAREFUL WHILE USING BLADE, DONT TRY TO BE NINJA

-Vikas (8th Sem)

Still not satisfied?

Then probably you should just leave the planet!! And this is how you do it...

This entry automatically adjusts itself to apply to the planet you are currently on. If the information below is not applicable to the planet on which you currently find yourself, then you are on the wrong planet and should rectify that at your earliest convenience.

1. Phone NASA. Their phone number is (713) 483-3111. Explain that it's very important that you get away as soon as possible.

2. If they do not cooperate, phone a friend you might have in the White House- (202) 456-1414- to have a word on your behalf with the guys at NASA.

3. If you don't have any friends in the White House, phone the Kremlin (Ask the overseas operator for 0107-095- 295-9051). They don't have any friends there either (at least, none to speak of), but they do seem to have a little influence, so you might as well try.

4. If that also fails, phone the Pope for guidance. His telephone number is 001-39-6-6982, and I gather that his switchboard is infallible.

5. If all these attempts fail, flag down a passing flying saucer and explain that it's vitally important you get away before your phone bill arrives.

(An excerpt from the *Hitchhiker's Guide to the Galaxy*)

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"Your wings already exist. All you have to do is fly!

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