

**DEPARTMENT OF MECHANICAL ENGINEERING**

**MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY**

Kalitheerthalkuppam, Puducherry – 605 107

**2016-2017**



***VIBRANT***

***An Annual Magazine of Mechons...***

**VOLUME 1**

# VIBRANT

## An Annual Magazine of Mechons...

### VISION:

*“The Mechanical Engineering Department aspires to be acclaimed globally for renowned education and research to accelerate well qualified engineers who are creative, entrepreneurial and flourishing in advanced fields of engineering and research.”.*

### MISSION:

**Higher Order Thinking:** *To assure quality education to the students and broaden their profession to make them globally competent Mechanical Engineers.*

**Continuous learning:** *Nurturing vital state of art, research facility to provide students and faculty with outstanding opportunities to discover, illustrate, implement and disseminate wisdom.*

**Competency:** *To develop alliance with world class R&D organizations and Educational Institutions in India and overseas for teaching, research and consultancy services.*

**Entrepreneurship:** *To provide the students with academic environment of excellence, leadership and ethical guidelines needed for lifelong prospective career.*

### ABOUT THE DEPARTMENT

Undergraduate education (UG) course B.Tech in Mechanical Engineering is a comprehensive degree program. The goal of the Mechanical Engineering curriculum is to create a flexible undergraduate educational experience in Design, Mathematics, Modeling, computation, Quality management, Engineering science & humanities.

The Department of Mechanical Engineering has been continuously striving to make progress in Teaching and Research. The Department was started with an intake (UG) of 60 students in 2012 and 120 students from 2015. The Mechanical Department is well equipped with excellent laboratories to make the students to easily understand and study the latest research areas such as computational fluid dynamics, Mechanics of Robot, Aerospace and Defense field, etc and also has separate Department library houses best books in the technical field this vast reservoir of knowledge is a source of constant value addition to the students and faculty members the library's rich in manufacturing, design, metallurgy, drawing and materials science. To enhance the Technical Skills of the students, the Department also organizes various program such Value-added course, Quiz completion, Seminars, Workshops, Industrial visit and Guest lecturers which would make them globally competitive as well as students become an indispensable Engineer and earn the income they deserve.

## **GOALS AND STRATEGIES**

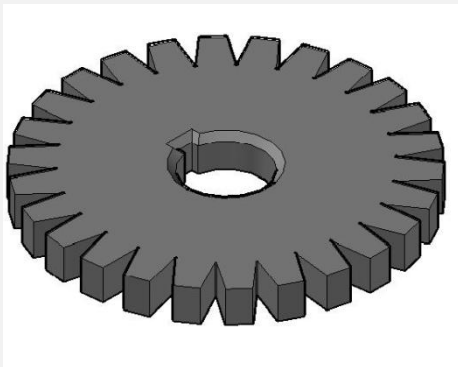
- a. Ensuring the preeminence of learning.
- b. Providing high quality programs that meet the evolving needs of our students, community and sector.
- c. Ensuring scholarly and creative activity.
- d. Making collaboration integral to our core sectors.
- e. Creating an environment where all students have the opportunity to succeed.
- f. Expanding connections and partnerships with our Sectors.

## **Design Competition**

The fruit of Success does not come for free, for you to obtain ,indeed it requires a lot of input work.In our department we conducted the AutoCAD designing competition on this occasion our friend **Mr. ARAVIND.V** from 3<sup>rd</sup> year won the first place and **Mr. PRABATHU.R** from 3<sup>rd</sup> year won second place and they both awarded and appreciated by presenting a pen drive to them and here is the glorifying designs, In this design competition they allow to present a quick and finished design of a isometric objects by this Creativity is allowing our self to make mistakes. Design is knowing which ones to keep. It motivate us to design more and learn more.

Few words from the winner,

*“ Hi guys I am Prabathu.R from 3<sup>rd</sup> year thank you for presenting me this award I am so glad to get this award and I dedicate this award to my faculties and supporting friends and I wish my seniors to conduct many activities like this thank you ....”*



**Mr. ARAVIND.V**



**Mr. PRABATHU.R**

Appreciation is a wonderful thing. It makes what is excellent in others belong to us as well.

## Articles

### INDIAN ECONOMY:

India is today one of the six fastest growing economies of the world. The country ranked fourth in terms of Purchasing Power Parity (PPP) in 2001. The business and regulatory environment is evolving and moving towards constant -improvement. A highly talented, skilled and English-speaking human resource base forms its backbone.

The Indian economy has transformed into a vibrant, rapidly growing consumer market, comprising over 300 million strong middle class with increasing purchasing power. India provides a large market for consumer goods on the one hand and imports capital goods and technology to modernize its manufacturing base on the other.

An abundant and diversified natural resource base, sound economic, industrial and market fundamentals and highly skilled and talented human resources, make India a destination for business and investment opportunities with an assured potential for attractive returns.

Far-reaching measures introduced by the government over the past few years to liberalize the Indian market and integrate it with the global economy are widely acknowledged.

The tenth five year plan document targets a healthy growth rate of 8% for the Indian economy during the plan period 2002 - 07.

### Economy development of India:

Economy is one of important factors decides the development of a country. Economy development of country is not only development of that country's government but also it involves the economy development of each individual of a country. The economic development in India followed socialist-inspired politicians for most of its independent history, including state-ownership of many sectors; India's per capita income increased at only around 1% annualized rate in the three decades after its independence.[1] Since the mid-1980s, India has slowly opened up its markets through

economic liberalization. After more fundamental reforms since 1991 and their renewal in the 2000s, India has progressed towards a free market economy. India's GDP growth during January–March period of 2015 was at 7.5% compared to China's 7%, making it the fastest growing economy. During 2014–15, India's GDP growth recovered marginally to 7.3% from 6.9% in the previous fiscal. During 2014–15, India's services sector grew by 10.1%, manufacturing sector by 7.1% & agriculture by 0.2%. Indian Economy Grows at 7.6 & 7.1 in FY 2015-16 and FY 2016-17 Respectively as Major Reforms had Been Taken Place like Demonetization and Implementation of GST in FY 2016-17 the Economic Growth has Been Slow Down in 2017-18 as it is Expected to Grow at 6.7 and Forecasted to Rebound by 7.4%. In 2018-19. India ranks second worldwide in farm output. Agriculture and allied sectors like forestry, logging and fishing accounted for 18.6% of the GDP in 2005, employed 60% of the total workforce and despite a steady decline of its share in the GDP, is still the largest economic sector and plays a significant role in the overall socio-economic development of India. India is the largest producer in the world of milk, cashew nuts, coconuts, tea, ginger, turmeric and black pepper. It also has the world's largest cattle population (193 million). It is the second largest producer of wheat, rice, sugar, groundnut and inland fish. It is the third largest producer of tobacco. India accounts for 10% of the world fruit production with first rank in the production of banana and sapota, also known as chiku. India is tenth in the world in factory output. Manufacturing sector in addition to mining, quarrying, electricity and gas together account for 27.6% of the GDP and employ 17% of the total workforce. India ranked 100 on the Ease of Doing Business Index in 2017, compared with 147 for Pakistan, 77 for People's Republic of China, 145 for Nigeria, 125 for Brazil, and 72 for Indonesia. India's labor force is growing by 2.5% every year, but employment is growing only at 2.3% a year. Official unemployment exceeds 9%. Regulation and other obstacles have discouraged the emergence of formal businesses and jobs.

India consumes the second-largest amount of oil in the Asia-Pacific region behind China. The combination of rising oil consumption and fairly unwavering production levels leaves India highly dependent on imports to meet the consumption needs. As economic reforms picked up pace, India's GDP grew five-fold to reach US\$2.2 trillion in 2015 (as per IMF estimates). India's GDP growth during January–March period of 2015 was at 7.5% compared to China's 7%, making it the fastest growing economy. India is one of the most populous countries in the world with a population in excess of 1.2 billion. India has sustained rapid growth of GDP for most of the last two decades leading to rising per capita income and a reduction in absolute poverty. Per capita incomes (measured in US \$) have doubled in 12 years. India has followed a different path of development from many other countries. India went more quickly from agriculture to services that tend to be less tightly regulated than heavy industry. That said there are some emerging manufacturing giants in the Indian economy.

India is a good case study to use when discussing the problems that persist when a country cannot rely on adequate critical infrastructure such as roads, railways, power and basic sanitation. India wants to build \$1 trillion worth of infrastructure in the next five years but the government expects the private sector to fund half of it – this is unlikely! Poor infrastructure hurts the Indian economy. India's growth has been impressive in recent years but this is a country whose development is hampered by endemic structural problems. India requires significant investment in infrastructure, manufacturing and agriculture for the rapid growth rates of the last fifteen to twenty years to be sustained. Above all the development of Indian economy is only on the hands of youngster. The educational institutions should come forward to encourage, supports the students to start up their own business by both financially and technically. The present Indian government had taken various steps for the benefits of students under the schemes such as stand up India and made in India.

“Don't take rest after your first victory because if you fail in second, more lips are waiting to say that your first victory was just luck.”

By  
A.P.J Abdulkalam

This is the article written and expressed by N. Srinivasan III year Mechanical engineering and he showcased his expression through his words.

### Drawing Competition

*A drawing is simply a line going for a walk*

*I prefer drawing to talking. Drawing is faster, and leaves less room for lies.*

In our case “DRAWINGS”

We have conducted a drawing competition in our department of mechanical engineering the winners of the competition are,

**Mr. Samuel vijayakumar** – 1<sup>st</sup> prize

**Mr. Ravi teja.V** – 2<sup>nd</sup> place

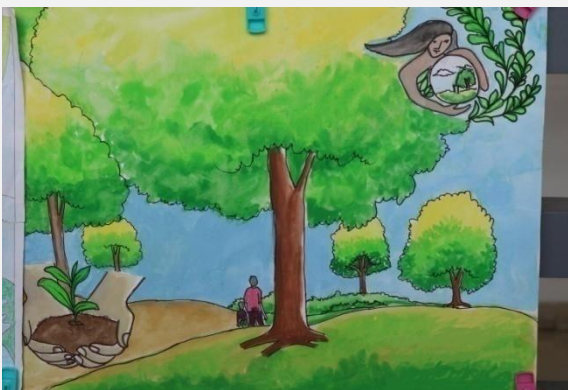
*They responded to the competition's themes of “GLOBAL WARMING AND TREE PLANTATION” by creating something that reflects the life of a community under construction, in all senses.*

#### **A FEW WORDS FROM THE WINNERS**

*“Hi guys we are Samuel vijayakumar and V. Raviteja from the mechanical department we are also one of them and passionate about drawing and paintings that sometimes we don't even know what we were drawing but we draw. We were very fond of drawing classes in our school days. Those were the days when we used to draw some stuff on the last page of our notebooks while the teacher was teaching some other subject. For us, Drawing and Painting is something that we can't live without.”*



SAMUEL VIJAYAKUMAR



V. RAVITEJA

### **SPORTS MEET (2016-2017)**

“Winning isn’t everything, but it beats anything that comes in second.”

We can say sports as forms of competitive physical activity played by the people through casual or organized participation. It helps everyone to improve and maintain physical ability and skills. It is a way of entertainment to the participants. Sports are generally played as a contest between two competitive sides with attempt to exceed other.

Our mechanical engineering department is taking care among us to develop the sports talents and also encouraging the students to take part in various sports competitions.

**Mr. N. Rajdjrathename** participated in a global cricket event and secured 2<sup>nd</sup> place in it which was conducted by all India tournament at Bangalore.

**Mr. D.Dhamodaran** in the same event secured 3<sup>rd</sup> place in the same competition.

**Mr.V.Karthikeyan** had been participated in national level baseball tournament Pondicherry conducted by Belguam, government of Karnataka

**Mr .M.Jayakumar** and **Mr.V.Karthikeyan** participated in national level sports –cricket and secured as the winner conducted at Sastra University.

**M. Jayakumar** of 3<sup>rd</sup> year as participated in South Indian Inter Engineering Collegiate T-20 and National level sports - cricket on 04/01/2016 to 12/01/2016 and 10/02/2016 to

14/02/2016 hosted by SR Engineering College and won.

**V. Karthikeyan** of 3<sup>rd</sup> year as participated in South Indian Inter Engineering Collegiate T-20 and National level sports - cricket on 04/01/2016 to 12/01/2016 and 10/02/2016 to 14/02/2016 hosted by SR Engineering College and won.

**D. Dhamodaran** of 4<sup>th</sup> year as participated in volley ball hosted by VIT.

#### **STUDENT’S WORDS:**

“We have been working hard for this tournament, practicing for days, we are glorified that we made our institution and our parents proud, and we will work harder to succeed in the upcoming event’s which we are selected “



This is the wonderful occasion were our friend Mr.M.Jayakumar and Mr.V.Karthikeyan as awarded for their performance in cricket champion ship

In our department we have conducted a sports meet in football, the winners of the competition are

Mr. R. Prithiviraj of 2<sup>nd</sup> year has participated in kickboxing on 20/08/16 to 27/08/16 hosted by Indian Association of Kickboxing Organisation and won 3<sup>rd</sup> prize.

S. Naveneeth kumar of 2<sup>nd</sup> year has participated in kickboxing on 20/08/16 to 27/08/16 hosted by Indian Association of Kickboxing Organisation and won 3<sup>rd</sup> prize.

Mr. V. Velmurugan of 2<sup>nd</sup> year has participated in Athletics on 10/11/16 to 14/11/16 hosted by Pondicherry Amateur Athletic Association

Mr. T. Krishnaraj and Mr. K. Kumaresan of 2<sup>nd</sup> year has participated in South Indian Inter Engineering Collegiate t-20 on 03/01/17 to 11/01/17 hosted by SR Engineering college and won.



This is a beautiful occasion were our friends was awarded for best performance in volleyball

## ABOUT VIBRANT

VIBRANT IS A YEARLY MAGAZINE COMPILED AND PUBLISHED AMONG STUDENTS BY THE STUDENTS COMMUNITY IN **MANAKULA VINAYAGAR INSTITUTE OF TECHNOLOGY** FROM THE **DEPARTMENT OF MECHANICAL ENGINEERING**. STUDENTS FROM ALL THE YEARS CAN INDULGE IN INNOVATIVE AND INTERESTED TOPIC RELATED EITHER ENGINEERING RELATED TRENDS OR IN NON TECHNICAL RELATED TOPICS.

STUDENTS CAN EXPRESS THEIR OWN CONFESSION OR ANY OTHER IDEAS THEY CAN GIVE FOR THE DEVELOPMENT OF MECHANICAL ENGINEERING DEPARTMENT AND THE INSTITUTION.

STUDENTS EXTRACURRICULAR AND ALL OTHER STUFFS THAT THEY WERE REALLY INTERESTED AND WANT TO DEVELOP CAN INDULGE IN THIS MAGAZINE AND SHOW CASE THEIR TALENT.

## Chief Editors

ALLEN BRENO.C

Raajan .V.V

SAMUEL VIJAYAKUMAR

## Associate Editors

NIRMAL .S

SELVANAAYAGAM.R

SHRINIVASAN.K

## Contact us

Manakula Vinayagar Institute  
of Technology

Kalitheerthalkuppam, Puducherry – 605 107

Phone : 0413-2643007

Fax : 2643008, 2643014

Website: [www.mvit.edu.in](http://www.mvit.edu.in)

