



K.L.N. College of Engineering

i'Storm

Department of Information Technology

**PRINCIPAL MESSAGE****THE EDITOR'S DESK**

It is a matter of great pride and satisfaction for K.L.N. COLLEGE OF ENGINEERING to bring out the News Letter 'I'STORM' Released from the Department of Information Technology. The College has made tremendous progress in all areas-academic, non-academics, capacity building relevant to staff and students. The College has achieved another milestone in getting NBA (National Board of Accreditation). I am confident that this issue of Department News Letter will send a positive signal to the staff, students and the person who are interested in the Technical education and Technology based activities. A News Letter is like a mirror which reflects the clear picture of all sorts of activities undertaken by a Department and develops writing skills among students in particular and teaching faculty in general. I congratulate the Editorial Board of this News Letter who have played wonderful role in accomplishing the task in Record time. I express my deep sense of gratitude to Dr.N.Balaji, HOD/IT under whose guidance this Technical work has been undertaken and completed within the stipulated time. Also my heartfelt Congratulations to staff members and Students for their fruitful effort. With Best Wishes.

PRINCIPAL
Dr.A.V. RAMPRASAD

It gives me immense pleasure to note that response to this newsletter of our department 'I'STORM' has been overwhelming. The wide-spectrum of articles in different sections gives me a sense of pride that our students and professors possess creative potential and original thinking in ample measures. Each article is entertaining, interesting and absorbing. I applaud the contributors for their stimulated thoughts and varied hues in articles contributed by them. Commendable job has also been done by the Editorial Board in planning for and producing the Newsletter. My congratulations to the team who took the responsibility for the arduous task most effectively. I am hopeful that this small piece of technical work shall not only develop the taste for reading among students but also develop a sense belonging to the institution as well.

H.O.D (I.T)
Dr.N.Balaji

NEWS LETTER EDITORIAL BOARD**EDITOR-IN-CHIEF:**

Dr.N.Balaji (HOD/IT)

STAFF-INCHARGE:

Mrs.N.Nandhini (AP2)

STUDENT EDITORS:

- K.R.Pradeep(Final year)
- S.A.Abishek(Final year)
- C.V.Shanthi(Final year)
- R.Sandhiya(Final year)

OUR COLLEGE :

Vision

To become a Premier Institute of National Repute by Providing Quality Education, Successful Graduation, Potential Employability and Advanced Research & Development through Academic Excellence.

Mission

To Develop and Make Students Competent Professional in the Dynamic Environment in the field of Engineering, Technology and Management by emphasizing Research, Social Concern and Ethical Values through Quality Education System.

OUR DEPARTMENT:

Vision

To emerge as a centre of excellence through innovative technical education and research in Information Technology.

Mission

To produce competent information technology professionals to face the industrial and societal challenges by imparting quality education with ethical values.

Program Educational Objectives

The Educational Objectives of Information Technology Program represents major accomplishments that we expect from our graduates to have achieved three to five years after graduation. More specifically our graduates are expected.

- 1. To excel in industrial or graduate work in information technology and allied fields.*
- 2. To practice their professions conforming to ethical values and environmental friendly policies.*
- 3. To be able to have an exposure in emerging cutting edge technologies and adapt to ever changing technologies.*
- 4. To work in international and multi - disciplinary environments.*

Program Specific Outcomes

- 1. Ability to apply the fundamentals of mathematics, science, engineering, information and computing technologies to identify, analyze, design develop, test, debug and obtain solutions for complex engineering problems.*
- 2. Ability to select and apply appropriate modern tools and cutting edge technologies in the field of Information and communication to meet the industrial and societal requirements with public health and safety considerations.*
- 3. Ability to analyze the multidisciplinary problems and function effectively in various teams for developing innovative solutions with environmental concerns and apply ethical principles in their career.*
- 4. Ability to acquire leadership and communication skills to manage projects and engage in lifelong technical learning to keep in pace with the changes in technologies.*

Program Outcome

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change

ICON OF THE MONTH

Arthur c' Clarke



Sir Arthur Charles Clarke, CBE, FRAS (16 December 1917 – 19 March 2008) was a British science fiction writer, science writer and futurist, inventor, undersea explorer, and television series host.

Clarke was born in Minehead, Somerset, England, and grew up in nearby Bishops Lydeard. As a boy, he grew up on a farm enjoying stargazing and reading old American science fiction pulp magazines. He received his secondary education at Huish Grammar school in Taunton. In his teens, he joined the Junior Astronomical Association and contributed to *Urania*, the society's journal, which was edited in Glasgow by Marion Eadie. At Clarke's request, she added an Astronautics Section, which featured a series of articles by him on spacecraft and space travel. Clarke also contributed pieces to the Debates and Discussions Corner, a counterblast to a *Urania* article offering the case against space travel, and also his recollections of the Walt Disney film *Fantasia*. He moved to London in 1936 and joined the Board of Education as a pensions auditor.

Clarke died in Sri Lanka on 19 March 2008 after suffering from respiratory failure, according to

Rohan de Silva, one of his aides. His aide described the cause as respiratory complications and heart failure stemming from post-polio syndrome.

Just hours before Clarke's death a massive gamma-ray burst (GRB) reached Earth. Known as GRB 080319B, the burst set a new record as the farthest object that could be seen from Earth with the naked eye. It occurred about 7.5 billion years ago (roughly equal to half the time since the Big Bang), taking the light that long to reach Earth. It was suggested by Larry Sessions, a science writer for *Sky and Telescope* magazine blogging on earthsky.org, that the burst be named "The Clarke Event". American Atheist Magazine wrote of the idea, "It would be a fitting tribute to a man who contributed so much, and helped lift our eyes and our minds to a cosmos once thought to be province only of gods." Astronomer Phil Plait understood Sessions' sentiment but felt the naming would be unnecessary. "The poetic alignment of the two events is enough for me, to be honest."

A few days before he died, he had reviewed the manuscript of his final work, *The Last Theorem*, on which he had collaborated by e-mail with his contemporary Frederik Pohl. The book was published after Clarke's death.[[] Clarke was buried in Colombo in traditional Sri Lankan fashion on 22 March. His younger brother, Fred Clarke, and his Sri Lankan adoptive family were among the thousands in attendance.

Awards and recognition:

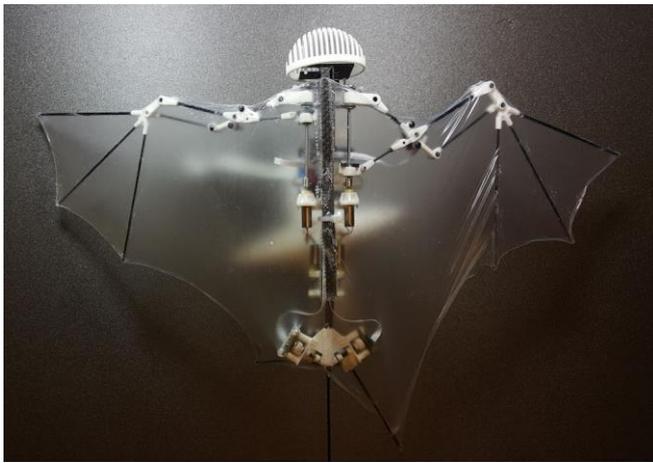
- Clarke won the UNESCO–Kalinga Prize for the Popularization of Science in 1961
- He won the Stuart Ballantine Medal in 1963
- In 1994, Clarke was nominated for a Nobel Peace Prize by law professor Glenn Reynolds

- In 2004, Clarke won the Heinlein Award for outstanding achievement in hard or science-oriented science fiction.
- Sir Arthur Clarke Award, for achievements in space, awarded annually in the United Kingdom.

-J.H.Vaishnavi(II year)

ROBOTICS

Bat-Robot



Pity the lowly humans. They're grounded, and to make matters worse, on two legs instead of four. Bats are the true heroes around here—the only mammals to master powered flight. They're so graceful and helpful, hoovering up all those insects mid-flight.

It was destined, then, that envious humans would harness the bat's powers in a fantastical new robot, which scientists introduced to the world earlier this week. Although the Bat Bot, or B2 for brevity's sake, doesn't yet have the greatest of battery lives, it's an impressive feat of engineering with big implications for how designers build the drones of the future.

Birds may be the most numerous fliers, but the bat is an evolutionary marvel. The bones supporting each wing are actually crazy long digits, of all things, covered with a thin membrane. This gives it a flexibility that birds

can't touch, gifting the bat with unbelievable maneuverability to intercept insects on the wing.

That elegance requires some complicated engineering, though. A bat's wings have more than 40 joints, but the researchers whittled that to nine—five of them controlled by mini-motors and four that are merely passive. This is fascinating from an evolutionary perspective: Natural selection settled on a far more complex system, but science was able to simplify things while retaining the functionality.

Beyond maneuverability, a fixed wing also is far more efficient than, say, a quadcopter. "We don't have to run the motors constantly because we can get lift out of the wings, so it can be more energy efficient," says Caltech aerospace roboticist Soon-Jo Chung, one of the bot's developers.

That efficiency and agility could be huge for rescue operations. At the moment, quadcopters don't get along with tight spaces like collapsed buildings. "You have to be able to fly without GPS because you're underground, and you've got a lot of metal and rebar and you don't have a lot of light," says rescue roboticist Robin Murphy of Texas A&M.

But don't expect the bat bots of the future to look exactly like bats. This is about optimal functionality, not perfect mimicry. "One thing maybe is that even if it's a fixed-wing aircraft with a propeller, maybe it can have this folding wing kind of mechanism," says Chung. "So then it could make much sharper turns."

-N.Sivananthan(II year)

SOFTWARE ENGINEERING

Continued Wave Of Everything Natively Mobile:

The responsive Web will continue to not be enough. Companies will continue to move their products and offerings to native mobile apps and consumers will demand that their experience move with them through their devices. I started my purchase on my tablet, but completed the transaction on my phone.

Acceleration of DevOps Adoption:

As I've written about here before, interest in DevOps has exploded this year, and with good reason -- it's an effective software development method that facilitates communication and collaboration between different parts of an organization. This is a trend that I see not only carrying into 2016, but continuing to grow exponentially. As companies become more integrated and continue to move large amounts of data to the cloud, the necessity for DevOps will only increase.

Greater Demand For increased Privacy

Online privacy got a lot of attention this year, and not all of it good. It seemed that no one was exempt from damaging data breaches, from major banks to the now-infamous extramarital dating site Ashley Madison. With the influx of more sites and even apps that are responsible for safeguarding personal information (like Venmo mobile banking and ZocDoc) I expect that consumers will be demanding more efficient safeguard and companies will be charged with making those adjustments -- and fast.

Cloud computing will be a thing of the past

This isn't because the cloud is going away, not by a long shot. Rather, "cloud computing" will simply become synonymous with "computing." There are virtually no businesses that are not using the cloud currently in some capacity. But

those that aren't will need to get on board quickly, as it has become an essential part of not only working with customers, but also managing internal operations.

K.G.Preethi Mai(II year)

WEB TECHNOLOGY

Google Prefers Mobile Friendly Websites

Do you rely on Google to be found on the internet? For many companies Google Search Results are important for their web traffic and lead generation efforts. Search Engine Optimization (being found on page 1 of a google search) has historically relied on content for ranking well. On April 21st, Google is changing the rules and they will be using mobile-friendliness as a ranking element.

“Starting April 21, we will be expanding our use of mobile-friendliness as a ranking signal. This change will affect mobile searches in all languages worldwide and will have a significant impact in our search results. Consequently, users will find it easier to get relevant, high quality search results that are optimized for their devices” Google Webmaster Central Blog As the general use of mobile devices steadily increases, having website content that responds to the device being used, displaying it in a device friendly manner is becoming the standard for businesses today.

Google strives to provide search results that are relevant. In order for a business website to be relevant to Google in today's marketplace, content AND a mobile friendly environment are critical for successful search results. Not sure if your website is mobile friendly – take this test

In order to have a mobile friendly website, you need a content management system with a responsive design feature. Sitefinity CMS is our content management system of choice.

By using Responsive Design, Sitefinity allows a single web experience to be optimized

comparison to the damage that one terrorist can cause. But the choice among different systems is not an easy one: to develop optimal systems one must be able to quantify all costs and benefits and this might be a difficult task. For example, how do we measure the inconvenience for the passengers? Besides the measurable delays during check-in, many other factors play a role: feelings of (in)security, deterrence of potential terrorists,.. It is clear that many problems must be overcome before the potential of data mining can be fully exploited in this area. To our opinion, the problems that are easiest to tackle are the problems of technical nature. We are convinced that further research in this rapidly evolving domain will provide solutions for most of the current restrictions. The problems that are harder to overcome are the ones of social nature because personal freedom is embraced by most people as one of the most-valued principles. Heated (and healthy) debates will continue to discuss the trade-off that must be considered: how much privacy

M.Sakthi Balan(II year)

IoT

7 trends of IoT

IoT is one of the transformational trends that will shape the future of businesses in 2017 and beyond. Many firms see big opportunity in IoT uses and enterprises start to believe that IoT holds the promise to enhance customer relationships and drive business growth by improving quality, productivity, and reliability on one side, and on the other side reducing costs, risk, and theft. By having the right IoT model companies will be rewarded with new customers, better insights, and improved customer satisfaction to mention few benefits. With all this in mind, let's explore some of the trends of IoT impacting business and technology in 2017:

IoT and Blockchain Will Converge

Blockchain is more than a concept now and has applications in many verticals besides

FinTech including IoT. Blockchain technology is considered by many experts as the missing link to settle scalability, privacy, and reliability concerns in the Internet of Things. Blockchain technology can be used in tracking billions of connected devices, enable the processing of transactions and coordination between devices; allow for significant savings to IoT industry manufacturers. This decentralized approach would eliminate single points of failure, creating a more resilient ecosystem for devices to run on. The cryptographic algorithms used by Blockchain would make consumer data more private. In 2017 IoT will converge with Blockchain for better security and privacy opening the door for a new category in applications, hardware, and talents.

IoT Devices and More DDoS Attacks

Forrester thinks that the recent DDoS attack that hit a whopping 1600 websites in the United States was just the tip of the iceberg when it comes to the threat that the connected device poses to the world. That attack confirmed the fear of vulnerability of IoT devices with a massive distributed denial of service attack that crippled the servers of services like Twitter, NetFlix , NYTimes, and PayPal across the U.S. on October 21st , 2016. It's the result of an immense assault that involved millions of Internet addresses and malicious software, according to #Dyn, the prime victim of that attack. "One source of the traffic for the attacks was devices infected by the Mirai botnet". All indications suggest that countless Internet of Things (IoT) devices that power everyday technology like closed-circuit cameras and smart-home devices were hijacked by the malware, and used against the servers.

IoT and Many Mobile Moments

IoT is creating new opportunities and providing a competitive advantage for businesses in current and new markets. It touches everything—not just the data, but how, when, where and why you collect it. The technologies that have created the Internet of Things aren't

changing the internet only, but rather change the things connected to the internet. a More mobile moments (the moments in which a person pulls out mobile device to get what he or she wants, immediately and in context) will appear on the connected device, right from home appliances to cars to smartwatches and virtual assistants. All these connected devices will have the potential of offering a rich stream of data that will then be used by product and service owners to interact with their consumers.

IoT, Artificial Intelligence, and Containers

In an IoT situation, AI can help companies take the billions of data points they have and boil them down to what's really meaningful. The general premise is the same as in the retail applications – review and analyzes the data you've collected to find patterns or similarities that can be learned from so that better decisions can be made.

The year 2017 would see Internet of Things software being distributed across cloud services, edge devices, and gateways. The year would also witness IoT solutions being built on modern Microservices (an approach to application development in which a large application is built as a suite of modular services. Each module supports a specific business goal and uses a simple, well-defined interface to communicate with other modules) and containers (lightweight virtualization) that would work across this distributed architecture. Further, machine-learning cloud services and Artificial Intelligence will be put to use to mine the data that would be coming in from IoT devices.

IoT and Connectivity:

Connecting the different parts of IoT to the sensors can be done by different technologies including Wi-Fi, Bluetooth, Low Power Wi-Fi , Wi-Max, regular Ethernet , Long Term Evolution (LTE) and the recent promising technology of Li-Fi (using light as a medium of communication between the different parts of a typical network

including sensors). In 2017, new forms of wireless connections, such as 3GPP's narrowband (NB)-IoT, LoRaWAN, or Sigfox will be tested. Forcing IoT decision-makers to evaluate more than 20 wireless connectivity options and protocols, which is one step in the right direction of having standards for connectivity.

IoT and Talent-Shortage

Organizations launching IoT projects including smart cities and industrial facilities face a tougher time in recruiting talent. Complicating matters is that it remains a challenge to find enough workers to secure the Internet of Things. 45 percent of IoT companies struggle to find security professionals, according to a TEKsystems survey. 30 percent report having difficulty finding digital marketers. In 2017, industrial major vendors will invest in IoT training and certifications and make it part of the mainstream training programs in the tech industry.

IoT and New Business Models

The bottom line is a big motivation for starting, investing in, and operating any business, without a sound and solid business models for IoT we will have another bubble , this model must satisfy all the requirements for all kinds of e-commerce; vertical markets, horizontal markets, and consumer markets. A new business model including sharing cost of devices with consumers, reducing the cost of ownership and making UX less hassle and more joyful. 2017 will see new categories being added to smart markets. One key element is to bundle service with the product, for example, devices like Amazon's Alexa will be considered just another wireless speaker without the services provided like voice recognition, music streaming, and booking Uber service to mention few.

The Road Ahead

The Internet of Things (IoT) is an ecosystem of ever-increasing complexity; it is the next level of automation of every object in our life

and convergence of new technologies will make IoT implementation much easier and faster, which in turn will improve many aspects of our life at home and at work and in between. From refrigerators to parking spaces to smart houses, IoT is bringing more and more things into the digital fold every day, which will likely make IoT a multi-trillion dollar industry in the near future. One possible outcome in the near future is the introduction of “*IoT as a Service*” technology. If that service offered and used the same way we use other flavors of “as a service” technologies today the possibilities of applications in real life will be unlimited. But we have a long way to achieving that dream; we need to overcome many obstacles and barriers at many fronts before we can see the benefits of such technology

ROAD TO SUCCESS

Aptitude Questions:

- 1)India has largest deposit of.....in the world
- gold
 - **mica**
 - copper
 - none of the above
- 2)In the normal human body,the total number of red blood cells.....
- 15 trillion
 - **25 trillion**
 - 20 trillion
 - 30 trillion
- 3) India participated in Olympic Hockey in.....
- 1918
 - 1948
 - **1928**
 - 1938
- 4) If speed of the rotation of the earth increases,weight of the body.....

- Increases
- **decreases**
- remains unchanged
- may increase or decrease

5)In cricket,a run taken when the ball passes the batsman without touching his bat or body is called.....

- legbye
- drive
- **bye**
- bosie

TIMELINE

Founder’s day celebration:

As a part of founder’s day celebration, on 6.1.17 Pottapalayam government school students were given gifts.



Workshop on Network Simulator 2:

A workshop on Network simulator 2 was conducted for final year by Dr.G.Preetha and Dr.S.Shanmuga Priya from Fatima college(Autonomous) on 16-02-2017&17-02-2017.



Guest lecture on Artificial intelligence

A guest lecture on artificial intelligence was conducted for third year students by a professor from TCE on 18-02-2017



Workshop on Raspberry Pi:

A Workshop on raspberrypi was conducted for second year students by Elysium Technologies Pvt.Ltd,Madurai on 20-02-2017& 21-02-2017.



National Level technical symposium:

On 18.02.2017, second year students won IInd Prize at National Level Technical Symposium held at Saveetha Engineering College



Founder's day celebration:

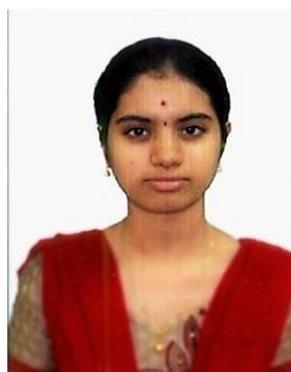
On 08-01-2017, founder's day was celebrated at Otthakadai.



PLACEMENT DETAILS



Arunkumar MR
IVTL
Tech Mahindra



Praveena B
TCS



**Gayatri T
Vuram
Technologies**



**Abirami S
Soft Square**



**Karthick Babu
AV
Azureiken
Neyamo**



**Karuppasamy B
Soft Square**



**Rajkamal M M
OFS
Sutherland
Global Services**



**Sivasankari K
Amphisoft**



**Amal Leo S
Aspire Systems
Tech Mahindra**



**Nisha B
Sutherland
Global Services
Cogzidel
Technologies**



**Krithiga B
Sutherland
Global Services
Tech Mahindra
IDBI Federal
Life Insurance**



**Niranjana B
Sutherland
Global Services
Hatsun**



**Sivaranjini R
Sutherland
Global Services
IDBI Federal
Life Insurance**



**Nandhini Devi M
Sutherland
Global Services**



**Vandana Sri K R
Sutherland
Global Services**



**Giridharan S
Sutherland
Global Services
Tech Mahindra**



**Sophiya K
Sutherland
Global Services**



**Ilakkiya M
Sutherland
Global Services
IDBI Federal
Life Insurance**



**Maheema L
Cogzidel
Technologies**



**Ramanathan B
Cogzidel
Technologies**



**Sathiya Priya S
Hinduja Global
Services**



**Sowmiya K G
Hinduja Global
Services**



**Rajeswari R
Hinduja Global
Services**



**Samsritha T J
Hinduja Global
Services**



**Lavanya P
Hinduja Global
Services**



**Sinega K
Hinduja Global
Services**



**Swathika T
Hinduja Global
Services**



**Priya
Hinduja Global
Services**



**Afrah A
Tech Mahindra**



**Aishwarya K
Tech Mahindra**



**Aswini M B
Tech Mahindra**



**Vasantha
Lakshmi P
Tech Mahindra
IDBI Federal
Life Insurance**



**Jaman S
Tech Mahindra**



**Sivakaran G
IDBI Federal
Life Insurance**



**Madhubala R
IDBI Federal
Life Insurance**



**Hephziba Joy
IDBI Federal
Life Insurance**

	Mohanapriya K J Ethnus
	Guna Sekaran S Silicon Technologies
	Nandhini R S E-Care India

HEAD COUNT OF STUDENTS PLACED IN FINAL YEAR

(2013-2017)

Company name	Count
TCS	1
IVTL	1
Aspire system	1
Vuram Technologies	1
Neeyamo	1
Soft Square	2
Amphisoft	1

Sutherland Global Services	10
IDBI Federal Life Insurance	7
Ethnus	1
E-Care	1
Silicon Technologies	1
Tech Mahindra	9
HGS	9
Hatsun	1
Cogzidel	3
Azureiken	1
Total	51

OUT OF THE BOX

நேசித்தல்

தாயை நேசித்துப் பார்நல்ல மகனாவாய்

தந்தையை நேசித்துப் பார்நல்ல நண்பனாவாய்

நண்பனை நேசித்துப் பார்நல்ல உறுதுணையாவாய்

ஆசிரியரை நேசித்துப் பார்நல்ல மாணவனாவாய்

நாட்டை நேசித்துப் பார்நல்ல தலைவனாவாய்

குருவை நேசித்துப் பார்நல்ல சீடனாவாய்

காதலியை நேசித்துப் பார்நல்ல காதலனாவாய்

உன்னை நேசித்துப் பார் அப்போது தான் நல்ல மனிதனாவாய்.

-R.Saravanan(II year)

Life

Be not afraid of life.

Believe that life is worth living,

Your belief will help create the fact

-O.B.Sangeetha(II year)

Drawing



V.Divya(II year)



V.Divya(II year)

Suggestions and Feedback Contact:
klnceitsig@gmail.com