



**SRI VASAVI ENGINEERING COLLEGE (AUTONOMOUS)**

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada



**20+**

**SCUD**

**Volume -10 | Issue -3**

**ARSENAL**

**Intresting Articles, Theories  
Snippets , Dept. Galleryv  
Photography and Paintings.**



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(18A81A05D0)



# CONTENTS

CSE MAGAZINE -VOL 10- ISSUE 03



1

TECHNICAL  
ARTICLES

5

SNIPPETS



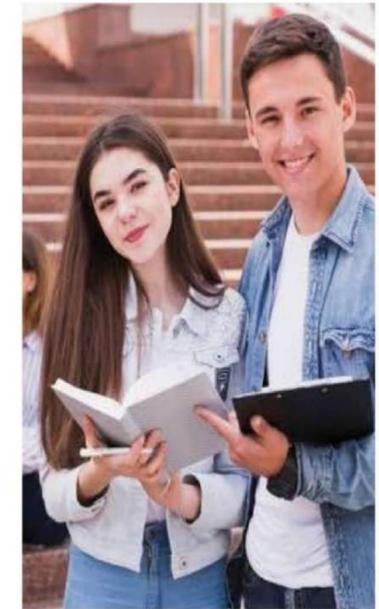
2

DEPARTMENT  
PROGRESS

FDPS  
Workshops  
Seminars  
conferences  
student achievements  
Sahay

4

STUDENT  
CORNER



3

NON TECH  
ARTICLES

6

DEPARTMENT  
GALLERY



# What is GPS System ?

GPS stands for Global Positioning System. It is a satellite based navigation system which allows ground users to determine their exact location, velocity, and time 24 hours a day, in all weather conditions, all over the world. It is maintained and developed by the U.S. Department of Defense, and was basically designed to assist soldiers and military vehicles but after some decades it made accessible to anyone having a GPS receiver. It is widely used to track vehicles and follow the best route from one place to another place by Airlines, shipping firms, courier companies, drivers etc.

## How does GPS work?

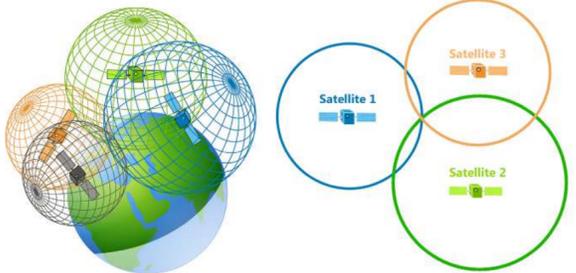
The Global Positioning System (GPS) is a network of about 30 satellites orbiting the Earth at an altitude of 20,000 km. The system was originally developed by the US government for military navigation but now anyone with a GPS device, be it a SatNav, mobile phone or handheld GPS unit, can receive the radio signals that the satellites broadcast.

Wherever you are on the planet, at least four GPS satellites are 'visible' at any time. Each one transmits information about its position and the current time at regular intervals. These signals, travelling at the speed of light, are intercepted by your GPS receiver, which calculates how far away each satellite is based on how long it took for the messages to arrive.

Once it has information on how far away at least three satellites are, your GPS receiver can pinpoint your location using a process called trilateration.

## Trilateration

Imagine you are standing somewhere on Earth with three satellites in the sky above you. If you know how far away you are from satellite A, then you know you must be located somewhere on the red circle. If you do the same for satellites B and C, you can work out your location by seeing where the three circles intersect. This is just what your GPS receiver does, although it uses overlapping spheres rather than circles. The more satellites there are above the horizon the more accurately your GPS unit can determine where you are.



## GPS and Relativity

GPS satellites have atomic clocks on board to keep accurate time. General and Special Relativity however predict that differences will appear between these clocks and an identical clock on Earth. General Relativity predicts that time will appear to run slower under stronger gravitational pull – the clocks on board the satellites will therefore seem to run faster than a clock on Earth. Furthermore, Special Relativity predicts that because the satellites' clocks are moving relative to a clock on Earth, they will appear to run slower. The whole GPS network has to make allowances for these effects – proof that Relativity has a real impact.

## How GPS system works?

GPS is a system. It's made up of three parts: satellites, ground stations, and receivers. Satellites act like the stars in constellations—we know where they are supposed to be at any given time. The ground stations use radar to make sure they are actually where we think they are. A receiver, like you might find in your phone or in your parents car, is constantly listening for a signal from these satellites. The receiver figures out how far away they are from some of them. Once the receiver calculates its distance from four or more satellites, it knows exactly where you are. Presto! From miles up in space your location on the ground can be determined with incredible precision! They can usually determine where you are within a few yards of your actual location. More high-tech receivers, though, can figure out where you are to within a few inches! ,The ancient sailors of history would be flabbergasted by the speed and ease of pinpointing your location today.

## Why GPS is Important?

GPS includes space-base satellites, computers and receivers which provide your location information in every weather conditions anywhere at any time in the world. It was originally made for the US military to locate their troops in deserted areas and forests. GPS technology is also used by the general public for finding road directions. They get warning regarding traffic situations and thus can make use of alternative routes if needed. These devices are installed inside the car which guide drivers to a certain destination. Stolen items can be recovered easily with the help of GPS technology. Another essential use of GPS is to keep track of people and valuable belongings. You will be safer when you install a tracking device to your hand phone, as family members would be able to know your whereabouts when needed. As technology continues to progress, GPS will continue to have new and more valuable applications in our everyday life.

## Applications :

1. Painting or Artwork Security ,
2. Prevention of Car Theft ,
3. Taking Care of the Elderly
4. Police and Private Detectives ,
5. Hiking ,
6. Protect Women ,
7. Camping lovers
8. Company Vehicle Fleet Tracking ,
9. Tracking of Pets

## Advantages of GPS System:

- Helps to Find Location - Makes Navigation Easier - Tracking Vehicles and Employees

## Disadvantages of GPS System:

- System Issues**  
You cannot completely depend on GPS navigation devices as they rely on satellites. Hence it is not suitable for use in outdoor areas with interference.
- Reliability**  
As in the case of every electronic devices, running out of charge is an issue with GPS units.

**"GPS are everywhere. They are in cars. They were even in the half-tracks that, initially at least, were going to make the ground invasion in Kosovo possible."** - Paul Virilio

**Kuna Kiran Maruthi  
19A81A0528**



# Virtual Reality

## The Birth of Virtual World

### How Brands Have-Integrated AR & VR In Their Digital Marketing Strategy?

As technology advances, those desires change and a brand must keep pace with those changes. Augmented reality (AR) is an emerging trend within marketing and sales strategies, one that allows brands to give their customers unique experiences with the convenience of tapping into their mobile devices. Brands are integrating this technology in their Digital Marketing strategies to offer the audience “a feel of what they can expect from the product or service they are buying” & additionally, AR/VR also provides an innovative edge to their marketing efforts. Here’s how these brands have utilised AR/VR in their marketing campaigns.

### Samsung VR | A Moon For All Mankind VR

Samsung, in collaboration with NASA created an immersive 4D lunar gravity VR experience for a campaign to provide participants an actual moon landing experience on VR created moon. Users step into a flight suit and harness whilst wearing a Gear VR headset. They then immerse themselves in a visual and physical experience that recreates a moon mission This is probably the most realistic moonwalking experience out there! Samsung’s design team and NASA’s Active Response Gravity Offload System (ARGOS) team worked to make this sensation as accurate as possible by mapping to the actual partial gravity experience of walking on the moon.

### What Is Virtual Reality And How Is It Going To Change Our Future?

You’ve definitely heard of Virtual Reality or ‘VR’ – but you might think it’s just a bit of fun for avid gamers playing with VR games or VR apps. So, what exactly is virtual reality?

Whilst there are plenty of fun examples of virtual reality games – whether that’s virtual roller coasters, snooker, or even space exploration, virtual reality has so much to offer across healthcare, business and even marketing.

What about a surgeon operating on you from another country with the help of a colleague holding the scalpel for a VR experience with real life results?

Or if you could experience your dream wedding in the virtual world, before you’d even spent a penny on flights?

Perhaps through a VR simulator you can try your hand at the trickiest parts of space exploration, or experience something that you would never do in your wildest dreams – like scaling a building!

### What is the difference between virtual reality and augmented reality?

It’s a strange time to be alive when we now have three kinds of reality – normal reality (complete with grumpy spouse and athlete’s foot), virtual reality and augmented reality. What are the differences?

It’s key to see virtual reality as a fully synthetic world, and to understand that augmented reality overlays virtual 3D graphics onto our real world (think Pokémon Go) literally augmenting the way we see our everyday life. Virtual reality in contrast helps users feel like they are actually experiencing various activities.

## Why and how is Virtual Reality used nowadays?

Whilst Sony launched its PlayStation VR (PSVR) game console in 2016, the gaming market for VR hasn’t been as big as anticipated. CCP Games who make the space MMO game EVE: Online and a VR spin-off game EVE: Valkyrie have opted out of VR development for the next few years stating in an email to Engadget that ‘they will continue to support VR games but will not be making material VR investments until we see market conditions that justify further investments beyond what we have already made.’. If you think VR hasn’t got legs based on this news from the gaming market alone, you’d be dead wrong – the really exciting stories have been coming out of everyday applications for VR. Facebook has announced Oculus Go – a standalone headset that will be released in 2018; would be the most accessible VR experience ever and they intend, eventually, to have one billion people into VR.

## What is the future of Virtual Reality?

When it comes to marketing and advertising, you can bet that anything purchased by Facebook for \$2 billion (Oculus Rift) will definitely start to creep into our lives as marketers look to connect with consumers through virtual reality marketing and virtual reality experiences! According to a survey by L.E.K. Consulting, as many as 80% of consumers who consider themselves early tech adopters ‘are interested in using VR to enhance their shopping experience’. It’s a trend that retailers are keen to move with and in October 2017 Walmart’s e-commerce CEO Marc Lore said that in the next decade he sees ‘a future where consumers can experience in-store interactions via VR in their homes.’ IKEA has already started trialing a virtual test kitchen and Mastercard and Swarovski have put their efforts into a VR shopping app that lets shoppers browse, learn about and purchase items.

## Virtual Reality- The Future Is Here!

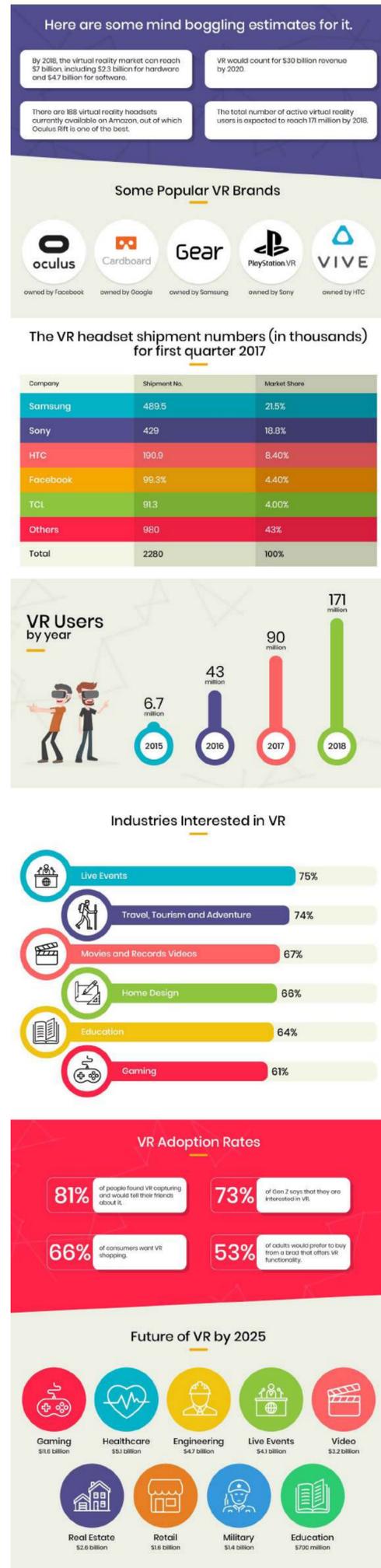
The virtual reality (VR) business kept on creating throughout the following couple of decades, yet offer was restricted to just the most driven specialists and early connectors because of the cost of parts, and the PCs that fuelled them.

The tech world can’t quit discussing VR because of the most recent wearable tech items; VR is more open than any other time in recent memory. In any case, however regularly traded, VR inundates you in an advanced situation you associate with.

VR is well known in computer games, VR influencer and organizer trusts that VR will long be utilized for different purposes. These include further social associations and completely immersive encounters. It’ll be intriguing to perceive how these progressions the way we collaborate with PCs.

We’re simply beginning to break the surface with VR. The development of all-encompassing video and photograph is making it simple to “transport” watchers to places they would never physically be. Despite the fact that VR’s present essential utilize is gaming, it has critical potential for business utilize. Top worldwide tech organizations like Apple, Samsung, Microsoft, Google, IBM, HP, Intel and Foxconn have just put resources into VR.

**G.Naga Chandana**  
**18A81A05D3**

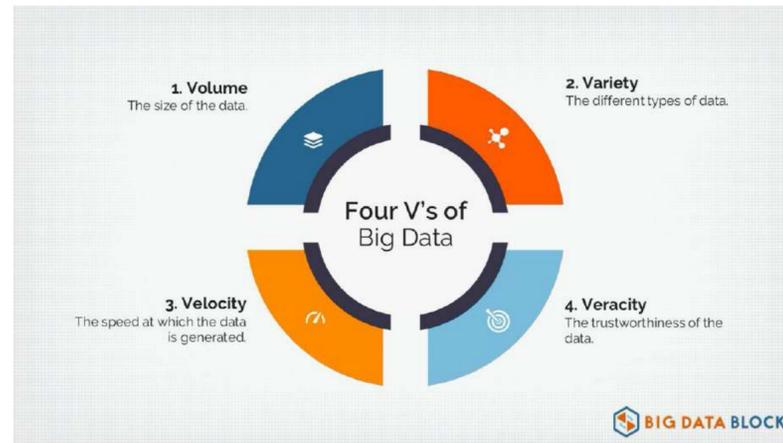




# BIG DATA ?

Big data is a field that treats ways to analyze, systematically extract information from, or otherwise deal with data sets that are too large or complex to be dealt with by traditional data processing application software.

## The 4 V's of Big Data



### VOLUME :

The main characteristic that makes data “big” is the sheer volume. It makes no sense to focus on minimum storage units because the total amount of information is growing exponentially every year. In 2010, Thomson Reuters estimated in its annual report that it believed the world was “awash with over 800 exabytes of data and growing.”

### VELOCITY :

The term 'velocity' refers to the speed of generation of data. How fast the data is generated and processed to meet the demands, determines real potential in the data.

### VARIABILITY :

This refers to the inconsistency which can be shown by the data at times, thus hampering the process of being able to handle and manage the data effectively.

### VERACITY :

Big Data Veracity refers to the biases, noise and abnormality in data. Is the data that is being stored, and mined meaningful to the problem being analyzed.

## Types of BIG DATA

### STRUCTURED

Any data that can be stored, accessed and processed in the form of fixed format is termed as a 'structured' data. Over the period of time, talent in computer science has achieved greater success in developing techniques for working with such kind of data. An 'Employee' table in a database is an example of Structured Data

### UNSTRUCTURED

Any data with unknown form or the structure is classified as unstructured data. Unstructured data is a heterogeneous data source containing a combination of simple text files, images, videos et

### SEMI-STRUCTURED

Semi-structured data can contain both the forms of data. definition in relational Example of semi-structured data is a data represented in an XML file.

**VERACITY :** Big Data Veracity refers to the biases, noise and abnormality in data. Is the data that is being stored, and mined meaningful to the problem being analyzed.



## BENEFITS OF BIG DATA PROCESSING

Businesses can utilize outside intelligence while taking decisions - Improved customer service - Early identification of risk to the product/services, if any BigData Operational Efficiency

### Top technologies

Apache Hadoop , Microsoft HDInsight. , NoSQL. , Hive , Sqoop , PolyBase , Big data in EXCEL.

## DRAWBACKS OF BIG DATA

Lots of big data is unstructured. - Big data analysis violates principles of privacy. - It can be used for manipulation of customer records. - It may increase social stratification.

**"Information is the oil of the 21st century, and analytics is the combustion engine"**

- Peter Sondergaard



**M.DEVI MOUNIKA  
19A81A05G3**



The Internet of Things, or IoT, refers to the billions of physical devices around the world that are now connected to the internet, all collecting and sharing data. Thanks to the arrival of super-cheap computer chips and the ubiquity of wireless networks, it's possible to turn anything, from something as small as a pill to something as big as an aeroplane, into a part of the IoT. Connecting up all these different objects and adding sensors to them adds a level of digital intelligence to devices that would be otherwise dumb, enabling them to communicate real-time data without involving a human being. The Internet of Things is making the fabric of the world around us more smarter and more responsive, merging the digital and physical universes.

### How does IoT work?

An IoT ecosystem consists of web-enabled smart devices that use embedded systems, such as processors, sensors and communication hardware, to collect, send and act on data they acquire from their environments. IoT devices share the sensor data they collect by connecting to an IoT gateway or other edge device where data is either sent to the cloud to be analyzed or analyzed locally. Sometimes, these devices communicate with other related devices and act on the information they get from one another. The devices do most of the work without human intervention, although people can interact with the devices -- for instance, to set them up, give them instructions or access the data. The connectivity, networking and communication protocols used with these web-enabled devices largely depend on the specific IoT applications deployed. IoT can also make use of artificial intelligence (AI) and machine learning to aid in making data collecting processes easier and more dynamic.

### Why is IoT important?

The internet of things helps people live and work smarter, as well as gain complete control over their lives. In addition to offering smart devices to automate homes, IoT is essential to business. IoT provides businesses with a real-time look into how their systems really work, delivering insights into everything from the performance of machines to supply chain and logistics operations. IoT enables companies to automate processes and reduce labor costs.

It also cuts down on waste and improves servicedelivery, making it less expensive to manufacture and deliver goods, as well as offering transparency into customer transactions. As such, IoT is one of the most important technologies of everyday life, and it will continue to pick up steam as more businesses realize the potential of connected devices to keep them competitive.

### IoT benefits to organizations

The internet of things offers several benefits to organizations. Some benefits are industry-specific, and some are applicable across multiple industries. Some of the common benefits of IoT enable businesses to:

- monitor their overall business processes
- improve the customer experience (CX)
- save time and money
- enhance employee productivity
- integrate and adapt business models
- make better business decisions
- generate more revenue.



## Applications

### Healthcare

One of the hottest topics in the economy relates to the cost of healthcare. A substantial part of this involves the use of technology for improving longevity, quality of life and, of course, reining in healthcare costs. Among the technology domains are medical technology devices for diagnostics, medical procedure assists and delivery of medications and services. A high cost area is providing healthcare at the lowest cost point of service. All of these are directly taking advantage of the use of IoT technology to improve outcomes and reduce costs.

### Agriculture

Statistics estimate the ever-growing world population to reach nearly 10 billion by the year 2050. To feed such a massive population one needs to marry agriculture to technology and obtain best results. There are numerous possibilities in this field. One of them is the Smart Greenhouse.

A greenhouse farming technique enhances the yield of crops by controlling environmental parameters. However, manual handling results in production loss, energy loss, and labor cost, making the process less effective.

A greenhouse with embedded devices not only makes it easier to be monitored but also, enables us to control the climate inside it. Sensors measure different parameters according to the plant requirement and send it to the cloud. It, then, processes the data and applies a control action.

### Robotics

Robotics are not new in healthcare and, in many cases, the current crop of robotics already use integrated, smart, connected IoT technology to monitor system performance, provide human assisted control and to gather and process health sensor data. In 2020, it should be expected that the range of robotic assisted capabilities will expand and become increasingly sophisticated and intelligent.

### Transportation

The IoT can assist in the integration of communications, control, and information processing across various transportation systems. Application of the IoT extends to all aspects of transportation systems (i.e. the vehicle, the infrastructure, and the driver or user). Dynamic interaction between these components of a transport system enables inter- and intra-vehicular communication smart traffic control, smart parking, electronic toll collection systems, logistics and fleet management, vehicle control, safety, and road assistance In Logistics and Fleet Management

**“The Internet of Things has the potential to change the world, just as the internet did. Maybe even more so.”**

**– Kevin Ashton**

**Nikhitha Manepalli  
19A81A0532.**



**1) Details of faculty attended FDPs, Workshops, Seminars, Conferences etc., outside the college as well as in the college:**

**(a) Conferences: 02**

S.No.	Name and Designation of the Faculty	Name of the conference Attended	Paper Entitled	Location	From	to
1	Dr.O. Sri Nagesh	National Conference on Productivity, Quality, Reliability, Optimization and Computational Modeling (AICTE Sponsored)	Comparative Analysis of Mod-Ecdh Algorithm with various Algorithms	SRKR Institute, Bhimavaram	18.12.2019	20.12.2019
2	Dr.V. S. Naresh	National Conference on Productivity, Quality, Reliability, Optimization and Computational Modeling (AICTE Sponsored)	Secure Dynamic Interactive Blood Bank based on Cognitive Computation	SRKR Institute, Bhimavaram	18.12.2019	20.12.2019

**2a) Important Visitors to the Department: 05**

S.No	Name of Eminent Guest	Organization	Date(s) of Visit
1.	Shri Srikanth K	Senior Consultant, Deloitte consulting India pvt Ltd.	29-12-2019
2.	Shri Ranga Potluri	Senior TPM, Amazon Dev center India Ltd	29-12-2019
3.	Dr. E Suresh Babu	NITW	27-12-2019
4.	Mr. Surya Kotha	CEO of XLENZ	11-12-2019
5.	Dr. Ravi K Gujjula	Chief General Manager (Technical Universities & Engineering Colleges) : APSSDC, Andhra Pradesh	11-12-2019

**2b) Workshops/FDPs/Seminars etc. conducted by the Department to the students: 08**

S.No	Date	Event Name	Name of the Eminent Guest	Audience	No of Students participated
1.	24-02-2020 to 29-02-2020	A Six day Workshop on Advanced AR & VR	Mr. Anil Kumar Alla and Team from EDURIDGE	III CSE	70
2.	11.02.2020	Guest Lecture on Application of Artificial Intelligence & Product Demo	Mr. Hari Munnangi, President , SVS IT Services INC, Toronto, Canada	IV B.Tech II SEM CSE	148
3.	01-02-2020	Guest Lecture on Docker and Containers	Mr. Srikanth Perumbuduri, Principal Software Engineer, Arcserve India Software Solutions, Hyderabad	II CSE	207
4.	31.12.2019	“Application Stacks (golang, kafka, mongodb”	Mr. Ramji Raju Kammila, Senior Software Engineer, Cisco Systems Pvt. Ltd.	III CSE	198
5.	29-12-2019	Business Transformation and Role of IT	Shri Ranga Potluri , Senior TPM, Amazon Dev center India Ltd. & Shri Srikanth K, Senior Consultant, Deloitte consulting India pvt Ltd.	III CSE	198
6.	27-12-2019	Block Chain Technology (Future of Trust)	Dr. E Suresh Babu, NITW	III CSE	207
7.	13-12-2019 to 14-12-2019	A Two day Workshop on AR & VR (Level-I) (Batch-II)	Mr. Anil Kumar Alla and Team from EDURIDGE	III CSE	35
8.	11-12-2019 to 12-12-2019	A Two day Workshop on AR & VR (Level-I) (Batch-I)	Mr. Anil Kumar Alla and Team from EDURIDGE	III CSE	35

**4) Papers Published/ Presented In Conferences: 01**

S.No.	Name of the faculty	Title of Paper	Title of Conference	Proceedings details ( ISSN No., Page no., Dates, Month & Year)	SCI/ Scopus / UGC
1.	Dr.D.Jaya Kumari	Pentatope Based Elliptic Curve Encryption for Privacy and Protection of Multimedia Data	International Conference on Automation, Signal Processing, Instrumentation & Control (iCASIC 2020)	February 26 <sup>th</sup> & 27 <sup>th</sup> 2020, VIT, Vellore.	Scopus

## 5) R&D activities/initiatives taken-up:

(a) The following AICTE -AQIS Projects applied on 30.12.2019

- MODROB - Aspiring Institutions
- STTP – Short Term Training Program
- RPS – Research Promotion Scheme

## 6) Under Department Association SCUD the following events are conducted:

S.NO	Academic Year	Name of Event	Date	Organized by	Total No. Of events(Technical & Non-Technical)	Total No of students Participated	Winners
1.	2019-2020	HackOverFlow 2K19	December 20 <sup>th</sup> &21 <sup>st</sup> 2019	SCUD	34	170	20

## 7) Student Achievements

### a) Internships: The following students are undergoing Internship.

S. No	Student Name	Roll Number	Title	Name of the Industry	Duration
1.	Pavani Sai Sirisha Ethakota	16A81A05J1	Software Development Intern	SERVICENOW	06.01.2020 to 31.05.2020
2.	P.Durga Swathi	16A81A05L3		SERVICENOW	06.01.2020 to 31.05.2020
3.	T.L.Sowmya	16A81A05B6		SERVICENOW	06.01.2020 to 31.05.2020
4.	G.Y.V.S.P.Navya	16A81A0588		SERVICENOW	06.01.2020 to 31.05.2020
5.	V.L.S.Prasanna	16A81A05C0		SERVICENOW	06.01.2020 to 31.05.2020
6.	B.V.L.R.Anjali	16A81A05C6	Software Quality Intern	SERVICENOW	06.01.2020 to 31.05.2020
7.	T.Amareswari	16A81A05B5		SERVICENOW	06.01.2020 to 31.05.2020

## b) Extra Curricular Activities :

S.No	Roll Number	NAME OF THE STUDENT	NAME OF THE EVENT	Month-Date
1.	18A81A05G9	T.Durga Prasad	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
2.	18A81A05N5	Surya Kamal Vardhineedi	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
3.	18A81A05J2	G Sri Lokesh	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
4.	18A81A05I3	B.Manikanta	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
5.	18A81A05N7	Y.Bala Anuhya	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
6.	18A81A05M7	S Lalitha	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
7.	18A81A0559	Y Harika	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
8.	18A81A0522	K Priyadarshini	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
9.	18A81A0534	M V K Praharshitha	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
10.	18A81A05J0	Gadde Likhitha Sai	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
11.	18A81A05N8	V Pujitha	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
12.	18A81A0523	Hanish Chandra	Tech Talks at MIRACLE	12-12-2019 - 13-12-2019

13.	18A81A0578	KANTAMANI BHAVYA SRI	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019
14.	18A81A05M4	S Priyanka	Tech Talks at MIRACLE DIGITAL SUMMIT	12-12-2019 - 13-12-2019

**TECHNICAL EVENTS ATTENDED BY STUDENTS IN 2019-20**

S.No.	Regd. No.	NAME OF THE STUDENT	NAME OF THE EVENTS	COLLEGE	Date
1.	17A81A0516	G VASUDEVA RAO	TECHNICAL QUIZ, CODING	SRI VASAVI ENGG. COLLEGE	10-01-2019 TO 11-01-2019
2.	17A81A0598	R AKANKSHA	TECHNICAL QUIZ, CODING	SRI VASAVI ENGG. COLLEGE	10-01-2019 TO 11-01-2019
3.	18A81A05G3	P ROHITH	IDEATHON IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
4.	18A81A05D0	G DINESH SRINIVAS	IDEATHON IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
5.	18A81A05E3	K TARUN DEEPAK	IDEATHON IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
6.	18A81A05F1	M PRAVEEN VARMA	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
7.	18A81A05D5	G BRHMA TEJA	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019

8.	18A81A05H1	T BHARGAV	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
9.	19A85A0506	S HEMANTH REDDY	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
10.	16A81A0533	M SURENDRA REDDY	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
11.	16A81A0596	K SAI ROHITH	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
12.	18A81A05H7	V YUVARAJ	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
13.	18A81A05G3	ROHITH PRAGALLAPATI	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
14.	18A81A05E9	ASWINI MAMIDISETTY	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
15.	18A81A05G6	SAI NAMMI	RELAY CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
16.	18A81A05H7	V YUVA RAJ	CRYPT YOUR MIND IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
17.	18A81A05K4	K UMA SASANK	CRYPT YOUR MIND IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
18.	18A81A05H3	BHANUTEJA VANIMIREDDY	CRYPT YOUR MIND IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019

19.	18A81A05D5	G BRAHMA TEJA	CRYPT YOUR MIND IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
20.	18A81A05G3	P ROHITH	DAZZLE CODING IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
21.	17A81A05C6	DODDA SATISH	CODE CHAMPS IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
22.	18A81A05E8	J MATHA SAI	CODE CHAMPS IN VALIANT 2K19	VISHNU INSTITUTE OF TECHNOLOGY	20-12-2019 TO 21-12-2019
23.	17A81A05D6	K SAI LAKSHMAN	TECHFLET 2K20	S.R.K.R EMGINEERING COLLEGE	10-02-2020 TO 11-02-2020

**WORKSHOPS ATTENDED BY STUDENTS IN 2019-20**

S.No	Regd.No.	NAME OF THE STUDENT	NAME OF THE EVENT	Month-Date
1.	17A81A05E2	M YESWANTH	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019
2.	18A81A05C1	A KAMESH	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019
3.	18A81A05F4	M SRI CHARAN	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019
4.	17A81A05F6	B UTTEJ	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019

5.	17A81A05D3	G VINAY KUMAR	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019
6.	17A81A05G4	Y PURN SAI	ENTREPRENEURIAL IDEATION IN E-SUMMIT HELD AT IIT BHUBANESWAR	01-02-2019 TO 02-02-2019
7.	19A85A0503	KASUKURTHI AVINASH	IOT WORKSHOP BY ETHICAL EDUFABRICA AT IIIT HYDERABAD	08-02-2020 TO 09-02-2020

**c) Co-Curricular Activities(Inter College Level):05**

S.No.	Roll Number	Name of the Student	Name of the event	Venue	Duration	Team Position
1	18A81A0538	N.Seshasai	Shuttle Badminton	Srm university, chennai	16-12-2019 to 20-12-2019	Participated
2	16A81A05F5	K.Aparna Lakshmi	Seniors Statemeet throw ball	Nalanda high school, Vijayawada	21-12-2019 to 22-12-2019	Participated
3	17A81A0564	E.Anusha	Seniors Statemeet throw ball	Nalanda high school, Vijayawada	21-12-2019 to 22-12-2019	Participated

8) **Sahaya:** As part of Sahaya the following list of events are conducted:

S.No	Date	Service Activity Details	Venue
1.	06/02/2020	The team of SAHAYA donated Rs. 5201 (five thousand two hundred and one only) to <b>Ms. Vijaya Lakshmi</b> (one our student's (16A81A0594) schoolmate)	Sri Vasavi Engg. College, TPG
2.	11/01/2020	The team of SAHAYA donated Rs. 9170 (Nine thousand one hundred seventy only) to <b>MRS. G. JHANSI</b> (mother of <b>G Siva Prasad 16A81A0424 of IV year BTech ECE</b> )	Sri Vasavi Engg. College, TPG
3.	18/12/2019	The team of SAHAYA donated Rs. 10000 (Ten thousands only) to Ms. G Pavani suffering with chronic liver disease.	Sri Vasavi Engg. College, TPG

9) **Placements:** The following students have been placed so far in the A.Y:2019-20.

S.No.	Roll Number	Name of the Student	Company	Number of Jobs Offered
1.	16A81A0528	M.BHANU SRI	HCL	1
2.	16A81A0536	PALETI BHAVANI	HCL	1
3.	16A81A0579	DASARI PAVANI	HCL	1
4.	16A81A0581	DEVARAKONDA BHARATHI	HCL	1
5.	16A81A05A1	MEDURI SRI MAHI	HCL	1
6.	16A81A05A6	NARAYANA BHAGYA LAKSHMI	HCL	1

7.	16A81A05B0	PACHIPULUSU.ROSHINI	HCL	1
8.	16A81A05B4	RUDRARAJU HEMA BINDU	HCL	1
9.	16A81A05D6	GRANDHAM BALLYARADHITHA	HCL	1
10.	16A81A05F5	KOTTA APARNA LAKSHMI	HCL	1
11.	16A81A05G5	PALAPARTHI VENKATA MOUNIKA	HCL	1
12.	16A81A05G8	PARIMI YAMINI SARASWATHI	HCL	1
13.	16A81A05H8	VARADA SAI DURGA NEELIMA ALEKHYA	HCL	1
14.	16A81A05L0	NALLURI NAGA DEVI LAKSHMI KATAKSHAM	HCL	1
15.	16A81A05M6	SADHANALA LAVANYA RUPA SRI	HCL	1
16.	16A81A05N3	VAKACHARLA CHANDRA VEERA LAKSHMI MOUNIKA	HCL	1
17.	16A81A0597	KUCHIPUDI BHAGYASREE	HCL,IBM	2
18.	16A81A0583	GALAVILA TEJA	HCL,L&T,VIRTUSA	3
19.	16A81A05L3	PENTAPATI DURGA SWATHI	HCL,SERVICE NOW,WEB SYNERGIES (INDIA)PVT. LTD.	3
20.	16A81A0561	AINAPUDI SAI LAKSHMI	HCL,TCS NINJA	2
21.	16A81A05A0	MEDURI HIMASRI	HCL,TCS NINJA	2
22.	16A81A05M8	SHAIK AMMAJI	HCL,TCS NINJA	2
23.	16A81A05C0	VELAGALA LAKSHMI SUNANDA PRASANNA	HCL,TCS NINJA,SERVICE NOW,WIPRO	4
24.	16A81A0538	DIVYA SRI	HCL,TECH MAHINDRA	2

		PASUMARTHI		
25.	16A81A0518	CHERLAMCHERLA VASANTHA LAKSHMI	<b>HCL,TECH MAHINDRA</b>	2
26.	16A81A0531	MALLAVARAPU LAKSHMIDURGA	<b>HCL,WEB SYNERGIES(INDIA)PVT.LTD.</b>	2
27.	16A81A05M5	SABBELLA LAKSHMI KEERTHI	<b>HEXAWARE</b>	1
28.	16A81A05N0	TAKASI NEELIMA NAIDU	<b>HEXAWARE</b>	1
29.	16A81A0506	BATTULA JAYASREE	<b>IBM</b>	1
30.	16A81A0530	MADHURIMA MAJETI	<b>IBM</b>	1
31.	16A81A05E8	KALNEEDI YAMINI SAILAJA	<b>IBM</b>	1
32.	16A81A0552	THOTA LAKSHMI SUDEEPTHI	<b>INFOSYS</b>	1
33.	17A85A0502	GANUSULA ROJA RANI	<b>INFOSYS-SE</b>	1
34.	16A81A0513	GADUGOYYALA H V V SATYANARAYANA	<b>INFY-TQ</b>	1
35.	16A81A0563	ALLURI SAISWETHA	<b>INFY-TQ</b>	1
36.	16A81A0590	JAMPANA SAILAJA	<b>INFY-TQ</b>	1
37.	16A81A05A2	BHANU VENKATA MANIKANTA MOTUPALLI	<b>INFY-TQ</b>	1
38.	16A81A0582	DUDE NAVEEN KUMAR	<b>INFY-TQ,MPHISIS,TCS NINJA</b>	3
39.	16A81A05B9	VEGIRAJU KALYAN VENKATA RAMA SUNIL VARMA	<b>INFY-TQ,MPHISIS,TCS- CODEVITA</b>	3
40.	16A81A0576	CHORAGUDI VENKATA MANIKANTA MANOHAR	<b>INFY-TQ,MPHISIS,TCS- NINJA,WIPRO</b>	4
41.	16A81A0570	BALAGAM SATYA NAGA DURGA	<b>INFY-TQ,TCS CODEVITA</b>	2

		BHAVANI		
42.	16A81A0586	GELLI SRI LOHITH	<b>INFY-TQ,TCS CODEVITA</b>	2
43.	16A81A05M1	PUTTA PAVAN	<b>INFY-TQ,TCS CODEVITA</b>	2
44.	16A81A05N5	VARDHINEEDI MAHALAKSHMI	<b>INFY-TQ,TCS CODEVITA,AMAZON</b>	3
45.	16A81A0505	B.VIHITHA	<b>L&amp;T</b>	1
46.	16A81A0520	KARPURAPU VISWA SAI	<b>L&amp;T</b>	1
47.	16A81A0543	SNEHITHA PENUGONDA	<b>L&amp;T</b>	1
48.	16A81A0580	DATTI.NAGA HARI KEERTHANA	<b>L&amp;T</b>	1
49.	16A81A05E9	KAMISSETTY GANESH KUMAR	<b>L&amp;T</b>	1
50.	16A81A05F9	MAREEDU KRISHNA RAO	<b>L&amp;T</b>	1
51.	16A81A05G3	NEELI USHACHINMAISAI	<b>L&amp;T</b>	1
52.	16A81A05H6	J V SATYA PRAKASH UPPALA	<b>L&amp;T</b>	1
53.	17A85A0504	P V V N D S S B VALLI	<b>L&amp;T</b>	1
54.	16A81A0503	B.YAMINI SESHAKALA	<b>MPHISIS</b>	1
55.	16A81A0507	CH LAKSHMI BHAVANI	<b>MPHISIS</b>	1
56.	16A81A0508	CH.LAKSHMI SUDEEPA	<b>MPHISIS</b>	1
57.	16A81A0526	K.CHAITANYA LAHARI	<b>MPHISIS</b>	1
58.	16A81A0534	MANDAPAKA PAVAN KUMAR	<b>MPHISIS</b>	1
59.	16A81A0537	PASALA ACHYUTHA DIVYA	<b>MPHISIS</b>	1
60.	16A81A0539	PATHAN SALMA BEGUM	<b>MPHISIS</b>	1

61.	16A81A0572	BETHA KAMALA	<b>MPHASIS</b>	1
62.	16A81A05C2	BANDI DEVI SUREKHA	<b>MPHASIS</b>	1
63.	16A81A05D2	EPPILI HEMA LATHA	<b>MPHASIS</b>	1
64.	16A81A05D4	GOLUGURI SUBBAREDDY	<b>MPHASIS</b>	1
65.	16A81A05F1	RAMYA SRI	<b>MPHASIS</b>	1
66.	16A81A05F4	KOMMURI NAGA SRIDEVI DIVYA	<b>MPHASIS</b>	1
67.	16A81A05G2	MUTTA JNANA MANI MEGHANA	<b>MPHASIS</b>	1
68.	16A81A05I1	ADDAGALLA PAVANI	<b>MPHASIS</b>	1
69.	16A81A05I3	ALAPATI RAMA DURGA	<b>MPHASIS</b>	1
70.	16A81A05J7	KADULURI SATYASRI	<b>MPHASIS</b>	1
71.	16A81A05K3	KONDA SAI VINAY	<b>MPHASIS, TCS NINJA,WIPRO</b>	3
72.	16A81A05B6	THONTA LAKSHMI SOWMYA	<b>MPHASIS, TCS-CODEVITA,SERVICE NOW</b>	3
73.	16A81A05H9	VELAGALA MEGHANA	<b>MPHASIS,IBM</b>	2
74.	16A81A0541	PEDAPUDI PRANEELA	<b>MPHASIS,IBM,WIPRO</b>	3
75.	16A81A05A3	MYLAVARAPU SONIKA	<b>MPHASIS,TCS NINJA</b>	2
76.	16A81A05M9	SHAIK SABEEN	<b>MPHASIS,TCS NINJA</b>	2
77.	16A81A0588	GRANDHI YAMINI VENKATA SAI PADMA NAVYA SRI	<b>MPHASIS,TCS NINJA,SERVICE NOW</b>	3
78.	16A81A05L6	PERUMALLA RUPA SAI GAYATHRI	<b>MPHASIS,TCS-CODEVITA</b>	2
79.	16A81A05L8	PRATHI MADHU ANNAPURNA	<b>MPHASIS,TCS-CODEVITA</b>	2
80.	16A81A05B5	TANUKU AMARESHWARI	<b>MPHASIS,TCS-CODEVITA,SERVICE NOW</b>	3
81.	16A81A05N4	VARADA NAVYA SRI	<b>MPHASIS,VIRTUSA</b>	2

		LATHA		
82.	16A81A0527	HEMASUPRIYA MADDU	<b>MPHASIS,WIPRO</b>	2
83.	16A81A0544	PILLALAMARRI SURYA KANTH	<b>MPHASIS,WIPRO</b>	2
84.	16A81A05D1	DAMARAJU LAKSHMI PRASANNA	<b>MPHASIS,WIPRO</b>	2
85.	16A81A05D7	GUDIMETLA YUVA SRI DURGA	<b>MPHASIS,WIPRO</b>	2
86.	16A81A05I5	BODDEDA SRIRAM	<b>MPHASIS,WIPRO</b>	2
87.	16A81A05E4	SRIDEVI JAYAVARAPU	<b>Q-CONNEQT</b>	1
88.	16A81A05K4	LAKKA BHAVANI SHANKAR	<b>Q-CONNEQT</b>	1
89.	16A81A05L5	PERICHARALA PRAJNA DEVI	<b>Q-CONNEQT</b>	1
90.	16A81A0510	CHOPPERLA SRI VIJAYA VYSHNAVI	<b>Q-CONNEQT,SUTHERLAND</b>	2
91.	15A81A05N7	V JAVERI SUMANJARI	<b>SUTHERLAND</b>	1
92.	16A81A0593	KARINKI PAVAN KUMAR	<b>SUTHERLAND</b>	1
93.	16A81A05c3	BHEMURI SAI VENKATA GANESH	<b>SUTHERLAND</b>	1
94.	16A81A05G7	PARIMI DEVI NAGA AMRUTHA	<b>SUTHERLAND</b>	1
95.	16A81A05I4	BETHIREDDY VENU DANESWARI	<b>SUTHERLAND</b>	1
96.	16A81A05M2	RAGOLU SAI BALAJI	<b>SUTHERLAND</b>	1
97.	16A81A05M3	SIRISHA RANI RALI	<b>SUTHERLAND</b>	1
98.	16A81A05I2	DUSANAPUDI GITHA SREE	<b>SUTHERLAND,TECH MAHINDRA</b>	2
99.	16A81A05N8	YANDAPALLI PRIYA MANASA	<b>SUTHERLAND,TECH MAHINDRA</b>	2

100.	16A81A0522	KOMMIREDDY SIVA PRASAD	TCS NINJA	1
101.	16A81A0562	AKKINA LAKSHMI SANDEEPTHI	TCS NINJA	1
102.	16A81A0577	DAMMALAPATI BHANU PRAKASH	TCS NINJA	1
103.	16A81A0598	MADETI HEMASRI	TCS NINJA	1
104.	16A81A05B7	U.SAI ALEKHYA	TCS NINJA	1
105.	16A81A05J6	KADALI KRISHNA SAI VAMSI	TCS NINJA	1
106.	16A81A0535	MOKA LAKSHMI SAILAJA	TCS NINJA,IBM,WIPRO	3
107.	16A81A05J1	ETHAKOTA PAVANI SAI SIRISHA	TCS NINJA,SERVICE NOW,WIPRO	3
108.	16A81A0516	SRI KRISHNA CHAITANYA GHANTASALA	TCS-CODEVITA	1
109.	16A81A0547	VENKATA RENUKAI AH SANAKA	TCS-CODEVITA	1
110.	16A81A0573	BIKKINA DHARANI	TCS-CODEVITA	1
111.	16A81A0594	KARRI MAYURA	TCS-CODEVITA	1
112.	16A81A05A8	N.MUTHYA SRAVANI	TCS-CODEVITA	1
113.	16A81A05C7	CHENNAMSETTI MOUNIKA	TCS-CODEVITA	1
114.	16A81A05L2	VAMSI KIRAN PEDAGADI	TCS- CODEVITA	1
115.	16A81A05M4	S HARSHINI SAI	TCS-CODEVITA	1
116.	16A81A05N6	VASA RAMA LEELA SAI	TCS-CODEVITA	1
117.	16A81A05C6	B.V.L.R.ANJALI	TCS-CODEVITA,SERVICE NOW,WIPRO	3
118.	16A81A0556	VASIREDDY LAVANYA	TCS-CODEVITA,WIPRO	2

119.	16A81A0504	BALUSU RAMYA	TECH MAHINDRA	1
120.	16A81A0532	LOLITHA PRIYA.MANCHI	TECH MAHINDRA	1
121.	16A81A0567	ANUMAKONDA HEMA SRI LAKSHMI	TECH MAHINDRA	1
122.	16A81A05A5	NANDETI SRAVANI	TECH MAHINDRA	1
123.	16A81A05D0	CHITTURI SAI PRASANNA	TECH MAHINDRA	1
124.	16A81A05F8	RAVALI MARADANA	TECH MAHINDRA	1
125.	16A81A05L9	PRATHIPATI SRAVANI	TECH MAHINDRA	1
126.	16A81A0555	VADLAMUDI SWETHA KIRANMAYI	WIPRO,INFOSYS	2
127.	16A81A0528	M.BHANU SRI	HCL	1

# MOM

## Mars Orbiter Mission

### MOM

The **Mars Orbiter Mission** (MOM), also called **Mangalyan**

It is a Space Probe orbiting MARS since 24 September 2014. It was launched on 5 November 2013 by the **INDIAN SPACE RESEARCH ORGANISATION** (ISRO).

It is India's first interplanetary mission and it made it the fourth space agency to reach Mars, after Roscosmos, **NASA**, and the **European space agency**. It made India the first Asian nation to reach Martian orbit and the first nation in the world to do so on its first attempt.

MOM went through a communication 'blackout' from June 2, 2015, to July 2, 2015, because of high Radiation and, 'whiteout' on May 30, 2016, and has been normalized for regular operations.

The satellite battery is designed to handle eclipse duration for only 1 Hour 40 minutes, a longer eclipse can drain the battery beyond the safe limit time. on the **evening of January 17th** All the thrusters were fired for 431 seconds achieving velocity difference of 97.5 m/s. This has resulted in a new orbit for the MOM spacecraft, which completely avoided **longer eclipse**.



The Mars Orbiter Mission probe lifted-off from the First Launch Pad at **Satish Dhawan Space Centre** (Sriharikota Range SHAR), Andhra Pradesh, using a Polar Satellite Launch Vehicle (PSLV) rocket C25 at 09:08 UTC on 5 November 2013. The launch window was approximately 20 days long and started on **28 October 2013**.

5 November 2013



The **MOM** probe spent about a month in Earth orbit, where it made a series of seven apogee-raising orbital maneuvers before trans-Mars injection on **30 November 2013 (UTC)**. After a 298-day transit to Mars, it was put into Mars orbit on **24 September 2014**.



### Mission objectives

Exploration of Mars surface features by studying the morphology, topography, and mineralogy.

Study the constituents of the Martian atmosphere including **methane** and **CO2** using remote sensing techniques.

"MOM completes 1000 Earth days in its orbit, (June 19, 2017) well beyond its designed mission life of six months. 1000 Earth days correspond to **973.24 Mars Sols** (Martian Solar day) and MOM completed 388 orbits."

### Recognition

In 2014, China referred to India's successful Mars Orbiter Mission as the "**Pride of Asia**". The Mars Orbiter Mission team won US-based **National Space Society's 2015 Space Pioneer Award** in the science and engineering category. NSS said the award was given as the Indian agency successfully executed a Mars mission in its first attempt.

An illustration of the Mars Orbiter Mission spacecraft is featured on the reverse of the ₹2,000 currency note of India



### DID YOU KNOW

The plan of MOM was from the kitchen, **BP Dakshayani** (Rocket women of India) taken example of puri swelling concept and implemented how to make the trajectory path of mars with low fuels and high equipment payloads



### Follow-up mission

ISRO plans to develop and launch a follow-up mission called **Mars Orbiter Mission 2 (MOM-2 or Mangalyaan-2)** with a greater scientific payload to Mars in 2024, The orbiter will use aerobraking to reduce apoapsis of its initial orbit and reach an altitude more suitable for scientific observation.

**L ManiSankar**  
**19A81A0529**

# SIX MYSTERIES IN INDIAN HISTORY

V.Bhargavi  
18A81A05H8

History is full of lessons for us, but it also has mysteries for us to solve. Some of these mysteries are recent, others are millennia old – still waiting for answers. In India too, generations of scientists and researchers have grappled with many puzzling stories and events that have left them baffled over the years.

Let's take a look at some of these enigmas, some of which are truly inexplicable and puzzling, to learn more about the mysteries of India. You can play detective of course and leave us an explanation if you solve any in the comment box below – we would be happy to cross them off our list!

## 1. Disappearance of the Indus Valley Civilization

The Indus valley civilisation is perhaps India's most ancient mystery. There are many unanswered questions about this great civilisation that was larger than the ancient Egyptian and Mesopotamian civilisations combined. The secrets behind the identity of the people who created it and their puzzling 4000-year-old Indus pictographic script are yet to be discovered. Also, perhaps the most bewildering fact about this civilisation is that all its major sites went into sudden decline and disappeared more or less simultaneously. There are several theories about why this happened but none of them have been very conclusive



## 2. Son Bhandar Caves of Bihar

Hollowed out of a single giant rock, the Son Bhandar cave of Rajgir in Bihar is believed to be the doorway to the riches of Bimbisara, a Magadhan king who loved hoarding treasures. Son Bhandar literally translates to 'store of gold'. It is said that when Bimbisara was imprisoned by his son Ajatashatru, this is the place where his wife hid the treasure on his orders. Undeciphered inscriptions in the Sankhlipi script found etched on the wall of the western cave, are purportedly the clues to open the doorway. The British once tried to cannonball their way through the supposed doorway, but without success, leaving just a black mark that's still visible



## 3. The Nine Unknown Men

India's very own version of the Illuminati, the mysterious '9 Unknown Men' is believed to be one of the world's most powerful secret societies. According to legend, it was founded by Emperor Asoka himself, in 273 BC, after the bloody battle of Kalinga that took the lives of 100,000. Each of these 9 unknown men had been entrusted with a book of knowledge on different subjects ranging from time travel and propaganda to microbiology and psychological warfare. The actual identities of these 9 unknown men are still a mystery, but it is believed that the secret society, preserved over generations, exists till date



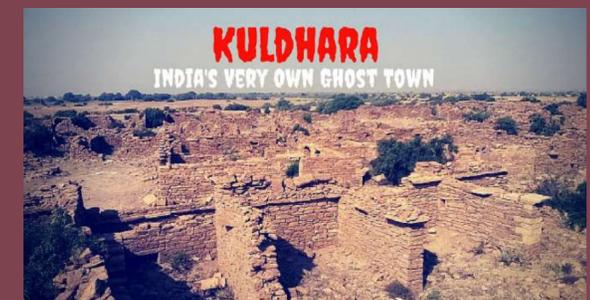
## 4. The 500-year old Mummy of Lama Tenzin

A trek in the Himalayas to the small village of Ghuen in Spiti reveals the eerie and ancient tradition of self-mummification. Here, in a tiny single-room concrete structure, rests a 500-year-old mummy protected by only a thin sheet of glass. The remains of a 15th-century Buddhist monk named Sangha Tenzin, the mummy is remarkably well preserved, with unbroken skin and hair on the head. Sangha Tenzin's body apparently went through a mysterious natural mummification



## 5. The Ghost Village of Kuldhara

Lying 20 km to the west of Jaisalmer, the ghost town of Kuldhara was a prosperous town of Paliwal Brahmins a few hundred years ago. Until one fatal night, when all its 1500 residents left the village without a trace. No one knows exactly why but according to legend, they left the village to escape from the evil ruler Salim Singh and his unjust taxes, and while leaving, they left a curse on the area. It is also said that anyone who tries to stay in the village dies a brutal death and, till date, Kuldhara remains uninhabited



## 6. The Royal Treasure of Jaigarh Fort

Home to the largest cannon on wheels, the Jaivana, Jaigarh fort's history is filled with tales of intrigue and treasures. It is believed that while returning from a successful campaign in Afghanistan, Man Singh, Akbar's defence minister, hid the spoils of war in Jaigarh Fort. In 1977, at the height of the Emergency in India, Jaigarh Fort found itself in the spotlight again when then Prime Minister Indira Gandhi launched a thorough search of the fort on a tip-off that the water tanks hid the Mughal treasure.



# Cricket Mania in India



**C** An old adage says it all: 'Cricket is a gentleman's game.' The game of cricket in today's world has reached its class through the concerted efforts of players, spectators, ICC and not to mention the respective Boards of Control for Cricket of the cricket-playing nations.

**R** These days a lot of excitement is created over the hosting of a cricket match especially in the case of the One Day International Cricket. Spectators remain glued to the television sets to watch their favourite stars hit a six, play a square cut remove the bails within a second or to the extent of questioning the validity of decision given by the umpire. It is cricket, cricket and cricket all over.

**I** In its present version, the genie of cricket has gone beyond the range of limits of the ages when test matches used to be played between a handful of nations of the by gone era. The One-day Internationals and the new version Twenty-20 matches are pride of the game in this age of competitive cricket. From children to genarians—all take keen interest in the modern version of cricket. The sustained support for the game from all corners of the society has made suddenly the players into stars, who leave no stone unturned to amass wealth and property from the once restricted game of the nobles-cricket—which has now turned into commercial game where lots of money is pumped into for the sake of the game and not for its spirit. Right from the unwell of the roadside joint to the top notch managers of MNCs—everybody is violently mad about the game. It has become a cricket frenzy society wherein the game, the players, the bookies—all have become a part and parcel of cricket. One would be considered odd if one does not talk of cricket these days and the hype into the game has turned it into cricket mania.

**C** The game of cricket is gaining popularity day by day as cricket is becoming a professional competitive game involving a lot of strategy, planning and practice both in domestic and international forms of the-game. Currently, more nations are joining the elite club of cricketing nations which once was a domain of a few cricket-playing nations.

**K** Cricket is not a sport it is more than a religion in india . Not even indian election would matter if ther is a international cricket match Even in normal times India's national TV channels, obsessed with celebrity talks, interviews, reality shows and trivia have little informed discussion on international and intellectual subjects, but with the cricket World Cup being played in south Asia, there is an overkill with cricket talk and walk. In India, Pakistan, Sri Lanka and Bangladesh, there is little but cricket, cricket and more cricket. Because of terrorist attacks on Sri Lankan team in Lahore a few years ago, international cricket matches are not played in Pakistan. But with India and Pakistan going to play on 30th March for a place in the final, people across the border and India are animated and excited. Indian PM Manmohan Singh has invited Pakistan PM Gilani to watch the match in north Indian town of Mohali. That has added further grist to mill. But nothing will come out of the talks on bilateral problems as long as Washington with its massive military and economic aid manipulates Pakistan's policy. Unfortunately India now has an elite totally beholden if not servile to Washington. Yes we can expect some feel good vibes. For problems between the two neighbors see Khurshid Kasuri's Mid-Winter Dreams in New Delhi

## Cricket Commentators

Take for example one Arun Lal and Ravi Shastri, both born perhaps with genetic inferiority complex. Arun Lal is so biased. He is always wishing and willing for the fall of an Indian wicket or a century by the opponents. Ravi Shastri is not much better. No wonder they are favorites of countries playing against India and are called up to do commentary. They are like non-Indian NRIs and non-Indian RIs. Thank God for intelligent former great player-commentator Sunil Gavaskar. Will the BCCI ban Lal and Shastri from Indian matches? Just listen to Australian, English or Pakistani commentators. They are so very patriotic and always praising their side.

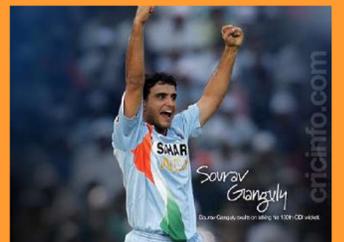
Among the worst foreign commentators is Tony Greig of apartheid South African origin whose commentary against Indian players is almost racist. He has been involved in many unsporting controversies. I recall a major one, when as MCC captain in mid 1970s, before the tour of West Indies; he had declared that he will make the West Indies growl, reminding them of the colonial era. The elegant and brilliant West Indian players said nothing but Tony was welcomed at the pitch with a volley of short pitched fast bouncers around his ears at over 6ft height. He was soon out. A few West Indian players silently escorted him out up to the boundary line towards the pavilion.

A short history ,The British brought the game of cricket to India. Initially only the Parsi community of western India, who were rather close to the British Officials, started playing the game. In course of time the game found favor with the Indian royalty. Some of the Indian Maharajhs even gained favor with the British for their cricketing merits. After India gained Independence in 1947, the British left, but the legacy remained. It did not take long for Indians to make it to the international arena.

Today cricket in India play the role of an adhesive in this land of contrasts and contradiction. At least the Indians from Srinagar to Kochi from Mumbai to Kolkata have something in common! No wonder an ace Indian cricketer is worshipped like a deity. Whether he is from Uttaranchal or Andhra Pradesh from Maharashtra or Arunachal Pradesh , hardly makes any difference. The movie stars...

### 1.Sourav Ganguly

Sourav Chandidas Ganguly, affectionately known as Dada, is a former Indian cricketer and captain of the Indian national team. Ever laststing captain who inspires many OF THE CAPTAINS after him. We miss you 'DADA'. An all time best all rounder. A perfect off side player called him as off side GOD He is wonderful player as well as great Captain in Indian HISTORY. DADA always DADA. Redefining the Indian team after the 1999 debacle The maker of the best team of all time for these three players



### 2.Sachin Tendulkar

Sachin Ramesh Tendulkar is a former Indian cricketer and captain, widely regarded as one of the greatest batsmen of all time. Sachin "the god of cricket;no one can replace him . He is the best. He is the manager, director and producer of Cricker. Got it! .No doubt about it. He is top run scorer in both test's and odi's I think Sachin Tendulkar made over 100 centuries and scored more than 1708 runs and he is a good bowler in cricket. He has taken 5 wickets twice on the Australian Stadium Pert. He is my one of the favorite player.



### 3.Mahendra Singh Dhoni

Mahendra Singh Dhoni, commonly known as MS Dhoni, is an Indian international cricketer who captained the Indian national cricket team. Long live Dhoni... And long live his captaincy... Because he is the only captain who can lead the Indian team to glory... He is a true legend... Dhoni is the best n he will be the best... Noting more to say.. He the best ,The only captain in the world to lift all of ICC trophies! , The only man who can change the game at the last point.. Greatest finisher the game has ever seen and above all a HUMBLE person. :) I am not comparing him with anyone, but still HE IS THE BEST Fulfilled dreams as a captain for India. One of the best wicket keeper in the world. One of the best finisher in the world. And a great human being.



**P.Rohit**  
**18A81A05G3**

# Space Pollution



## -It is this really happening...???

The answer is true.

Our world is progressing tremendously in the field of space research and sciences. In fact our nation is showing its glorious victories in this field. Of course it's exceptionally a sign of development. Until now numerous satellites are launched into this endless space by different countries. These satellites served a lot during their lifespan. But have you wondered where these abandoned parts go thereafter? They simply keep moving in their orbits irregularly for years and years. Some of them may burn in the space itself or crash with our earth surface. They tend to accumulate in the space. Scientists often term this in technical sense as SPACE POLLUTION or SPACE DEBRIS.

Let us look through the definition a bit technically....

Space pollution includes both the natural micrometeoroid and man-made debris components. However we generally use the term POLLUTION to indicate despoiling of natural environment. So here refers to only man-made orbital debris.

## What are the causes?

It is actually due to accumulation of waste some of which are caused by human activities. Debris in space is called space junk or orbital debris because they orbit around the earth. They are made up of items such as used up rocket parts, launch vehicles parts, loose fragments from rocket collisions and explosions.

Currently there are 2218 artificial satellites orbiting the Earth...

## How can we stop space pollution?

Some missions focus on dead satellites, aiming to catch them with robotic arms, spear them with harpoons, others suggest to capture the moving objects by using net like structures. Some scientists also suggest to use bomb blasts to break the larger objects into smaller ones; but this would complicate the problem, as the objects will increase in number. Others aim to stick them with adhesive.

## Can we clean up SPACE JUNK?

Meet OSCaR: Tiny Cubesat would Clean Up Space Junk. The little spacecraft would clean up debris on the cheap. Researchers are developing a clean up cubesat called OSCaR (Obsolete Spacecraft Capture and Removal), which would hunt down and de-orbit debris on the cheap using onboard nets and tethers.

**Sri Vangipuram Mahati,  
19A81A0554.**

# Coronaviruses (CoV)



## What is a coronavirus?

Researchers first isolated a coronavirus in 1937. They found a coronavirus responsible for an infectious bronchitis virus in birds that had the ability to devastate poultry stocks. Scientists first found evidence of human coronaviruses (HCoV) in the 1960s in the noses of people with the common cold. Two human coronaviruses are responsible for a large proportion of common colds: OC43 and 229E. The name "coronavirus" comes from the crown-like projections on their surfaces. "Corona" in Latin means "halo" or "crown." Among humans, coronavirus infections most often occur during the winter months and early spring. People regularly become ill with a cold due to a coronavirus and may catch the same one about 4 months later. This is because coronavirus antibodies do not last for a long time. Also, the antibodies for one strain of coronavirus may be ineffective against another one

## Symptoms include:

- sneezing
- runny nose
- fatigue
- cough
- fever in rare cases
- sore throat

## Transmission

Coughing and sneezing without covering the mouth can disperse droplets into the air. Touching or shaking hands with a person who has the virus can pass the virus between individuals. Making contact with a surface or object that has the virus and then touching the nose, eyes, or mouth. Some animal coronaviruses, such as feline coronavirus (FCoV), may spread through contact with feces. However, it is unclear whether this also applies to human coronaviruses. The National Institutes of Health (NIH) suggest that several groups of people have the highest risk of developing complications due to COVID-19.

## COVID-19

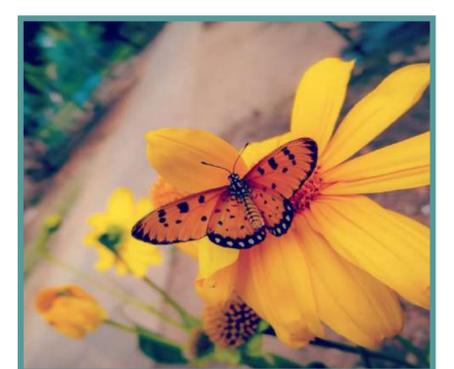
In 2019, the Centers for Disease Control and Prevention (CDC) started monitoring the outbreak of a new coronavirus, SARS-CoV-2, which causes the respiratory illness now known as COVID-19. Authorities first identified the virus in Wuhan, China. More than 74,000 people have contracted the virus in China. Health authorities have identified many other people with COVID-19 around the world, including many in the United States. On January 31, 2020, the virus passed from one person to another in the U.S. The World Health Organization (WHO) have declared a public health emergency relating to COVID-19. Since then, this strain has been diagnosed in several U.S. residents. The CDC have advised that it is likely to spread to more people. COVID-19 has started causing disruption in at least 25 other countries.

The first people with COVID-19 had links to an animal and seafood market. This fact suggested that animals initially transmitted the virus to humans. However, people with a more recent diagnosis had no connections with or exposure to the market, confirming that humans can pass the virus to each other. Information on the virus is scarce at present. In the past, respiratory conditions that develop from coronaviruses, such as SARS and MERS, have spread through close contacts. On February 17, 2020, the Director-General of the WHO presented at a media briefing the following updates on how often the symptoms of COVID-19 are severe or fatal, using data from 44,000 people.

**K.Krishna Bhagvan  
18A81A0581.**

# Student Gallery

Here is the sweet and memorable moments of our friends , seniors and juniors.



**" Things end but memories last forever... "**

# Snippets

## Q #1) What is the process to generate random numbers in C programming language?

Ans) The command rand() is available to use for this purpose. The function returns an integer number beginning from zero(0). The following sample code demonstrates the use of rand().

Code -

```
#include <stdio.h>
#include <stdlib.h>

int main ()
{
    int a ;
    int b ;

    for(a=1; a<11; a++)
    {
        b = rand();
        printf( "%d\n", b );
    }
    return 0;
}
```

Output -

```
1804289383
846930886
1681692777
1714636915
1957747793
424238335
719885386
1649760492
596516649
1189641421
```

## Q #2) Is that possible to add pointers to each other?

Ans) There is no possibility to add pointers together. Since pointer contains address details there is no way to retrieve the value from this operation.

## Q #3) What is indirection?

Ans) If you have defined a pointer to a variable or any memory object, there is no direct reference to the value of the variable. This is called indirect reference. But when we declare a variable it has a direct reference to the value.

## Q #4) What will be the output of the following C code?

```
main()
{
    enum resut {pass, fail};
    enum result s1,s2;
    s1=pass;
    s2=fail;
    printf("%d",s1);
}
```

a) error b) pass c) fail d) 0

Answer: a

Explanation: The code shown above results in an error, stating : storage size of s1 and s2 unknown. There is an error in the declaration of these variables in the statement: enum result s1,s2;

## Q #5) What will be the output of the following C code?

```
#include<stdio.h>
enum sanfoundry { a=1,b };
enum sanfoundry1 { c,d };
int main()
{
    enum sanfoundry1 s1=c;
    enum sanfoundry1 s=a;
    enum sanfoundry s2=d;
    printf("%d",s);
    printf("%d",s1);
    printf("%d",s2);
}
```

a) Error b) 011 c) 110 d) 101

Answer: d

Explanation: The output of the code shown above is 101. This code shows that it is possible to store the symbol of one enum in another enum variable.

## Q #6) What will be the output of the following C code, if the system date is 6/23/2017?

```
#include<stdio.h>
#include<time.h>
int main()
{
    struct tm *local;
    time_t t;
    t=time(NULL);
    local=localtime(&t);
    printf("%d",local->tm_mday);
    return 0;
}
```

a) 6 b) 22 c) 23 d) error

Answer: c

Explanation: tm\_mday returns the day of the month in terms of an integer (date). Hence the output of the code shown above will be 23 (since the system date is 6/23/2017).

## Q #7)The value returned by the library function mktime(), on failure is \_\_\_\_\_

a) -1 b) 0 c) 1 d) -2

Answer: a

Explanation: The library function mktime() converts the date and time into calendar format and returns the value -1 on the failure of this action.

## Q #8)Which of the following is defined under the header file time.h?

a) strnct()  
b) fabs()  
c) iscntrl()  
d) null

Answer: d

Explanation: NULL is defined under the header file time.h, in addition to being defined under many other header files. The function strncat() is defined under string.h. The function fabs() is defined under math.h. The function iscntrl() is defined under ctype.h.

## Q #9)The data structure used to implement recursive function calls \_\_\_\_\_

a) Array  
b) Linked list  
c) Binary tree  
d) Stack

Answer: d

Explanation: The compiler uses the data type stack for implementing normal as well as recursive function calls.

## Q #10)What will be the output of the following C code?

```
#include<stdio.h>
main()
{
    int n,i;
    n=f(6);
    printf("%d",n);
}
f(int x)
{
    if(x==2)
        return 2;
    else
    {
        printf("+");
        f(x-1);
    }
}
a) ++++2 b) +++++2
c) +++++ d) 2
```

Answer: a

Explanation:

When x=6: '+' is printed. When x=5: '+' is printed. When x=4: '+' is printed. When x=3: '+' is printed. When x=2: 2 is printed.Hence the output is: ++++2.

## Q #11)What will be the output of the following C code if the input given to the code shown below is "sanfoundry"?

```
#include<stdio.h>
#define NL '\n'
main()
{
    void f(void);
    printf("enter the word\n");
    f();
}
void f(void)
{
    char c;
    if((c=getchar())!=NL){
        f();
        printf("%c",c);
    } return;
}
a) sanfoundry b) infinite loop
c) yrdnuofnas d) fnasyrdnuo
```

Answer: c

Explanation: The above code prints the reverse of the word entered. The recursive function terminates when getchar() is equal to null.



**Guest Lecture on  
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at CSE Department , SVEC (A) , TPG  
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