# DEPARTMENT OF ELECTRONICS & INSTRUMENTATION ENGINEERING (Established:1981)

# REPORT ON "SUMSHODHINI'21" 27-29 JANUARY 2022



# KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE , WARANGAL WARANGAL -506 015

(An Autonomous Institute under Kakatiya University, Warangal)

#### KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL

# (An AUTONOMOUS Institute under Kakatiya University - Warangal) **DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING**

#### **ABOUT THE HOST DEPARTMENT:**

The Department of Electronics and Instrumentation Engineering was established in the year 1981, with an intake of 30 students and subsequently it increased to 60. The Department has strength of 14 faculty members, all the faculty members hold PG Degree, out of which 4 faculty members are doctorate's ,10 faculty members are pursuing Ph.D.

The students fared well in national level competitive exams like GRE, CAT, GATE, TOFEL etc.., and most of them are pursuing their higher studies in premier and prestigious institutions like IITs, NITs, IIMs and many reputed Universities abroad.

The students of the department conduct various programs in the students Association, "Electronics and Instrumentation Engineering Association" every week, which is scheduled as a part of academic program. This includes activities like Group discussions, JKC activities, Mock interviews, and many other activities which help students to excel in their soft skills and organizing capabilities.

#### **TECHNICAL EVENTS:**

- 1. WORKSHOP: Industrial IoT
- 2. PPT Presentation
- 3. ENIGMA
- 4. Placement heat 3.0
- 5. CONC3NTR1X
- 6. Tech Maze
- 7. Quiz Wizards

#### **Workshop: IoT Makeathon**

Kits Warangal has organised SUMSHODINI'21 an yearly technical symposium, virtually this year with proper covid precautionary measures. As part of it, Department of Electronics and Instrumentation Engineering (EIE) has organised a workshop on Industry 4.0 with a title of Industrial IoT.

The term Industry 4.0 was coined by German Government which indicates use of Internet of Things in manufacturing industry. Sometimes it is also known as Industrial Internet of Things (IIoT). It refers to the fourth industrial revolution. The first industrial revolution was the mechanization of production using water and steam power; it was followed by the second industrial revolution which introduced mass production with the help of electric power. The third industrial revolution was the use of electronics and IT to further automate production.

The training program discusses the application of the Industry 4.0 development for integration of all intelligent and communicable assets distributed in the physical world over

internet (Internet of Things) and the related extensions in manufacturing industry (Industrial Internet of Things and Industry 4.0).

Industry 4.0, termed as the fourth industrial revolution, refers to total computerization of manufacturing (smart factory). Industry 4.0 is a collective term used for a no.of contemporary technologies and concepts such as Automation, Data exchange, Lean manufacturing, etc., all put together for value chain organization. Industry 4.0 consists of network of Cyber-physical Systems. (manufacturing processes), Internet of Things (Machines), and Internet of Services (cross organizational services). The driving principles are: Interoperability, virtualization, decentralization, real-time capability, and modularity among manufacturing industries.

Industry 4.0 is based on the technological concepts of cyber-physical systems, the Internet of Things and the Internet of Services. It facilitates the vision of the Smart Factory.

Advanced embedded technologies or "cyber-physical systems" foster intelligent **machine-to-machine (M2M)** communication, creating an Internet of Things. This will change a conventional industrial production to connected, intelligent manufacturing through smart factories, products, and services.

#### **Industrial IoT Workshop**



Industrial IoT Workshop poster for SUMSHODHINI'21

# Why to attend our Courses?

- The idea is that sometimes you have to take a break from the "work" of your work to sharpen your skills. A dull axe won't cut a tree nearly as effectively as a sharp one.
- Learn new information from the expert.
- Allow time for creativity by getting away from your daily routine and working "on" your domain instead of "in" your domain. □
- Brainstorm your ideas and get immediate feedback. □
- Hear the information you might know already but from a different angle from a different speaker so that you have an even better understanding of the topic
- Discover there's more to know even if you think you knew it all.
- Learn something that changes your life (in a good way!)□
- & because it's fun...□

# What student will learn after attaining the Course?

- Get new product or service ideas by hearing about needs in your industry.
- Receive large volumes of usable content within a compressed amount of time.
- Intensive exposure to a topic through presentations and discussions led by experts.
- Confidence and motivation for rising and participating in different events that improves the personality of a student.
- Develop a connection that might help you with future employment.

# Workshop Session Details: This is a Two Day Workshop, including a total 4 sessions

# Day 1: (Cloud Technology & Big Data)

#### **Session 1:**

- Introduction to different Industrial Revolution
- Introduction to Industry 4.0
- Need of Industry 4.0
- Introduction to Cloud Computing
- Networking Basics
- Characteristics of Cloud Computing
- Types of Cloud Computing
- Cloud Deployment Models

#### **Session 2:**

- What is Big Data?
- What is Hadoop?
- Why Hadoop?
- HDFS(Hadoop Distributed File System)
- Data Science
- Data Visualization in R

# Day 2: (Industrial Internet of Things(IIoT))

#### Session 3:

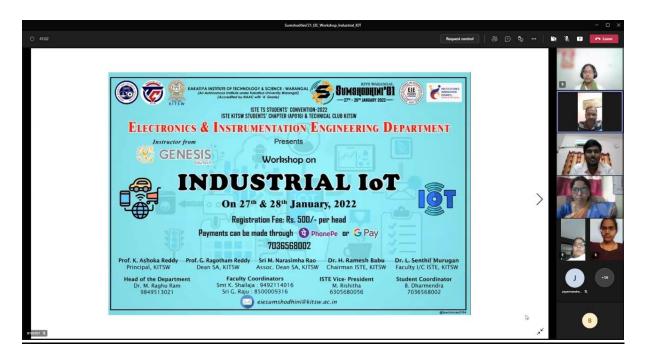
- Introduction to basic of Embedded System & Microcontrollers
- Explanation of Arduino Board & Programming
- Arduino Based programs for interfacing I/O Devices

- Introduction to different sensor like IR Proximity Sensor, Temperature Sensor, Hall Effect Sensor, LDR, Potentiometer, Ultrasonic Sensor etc.
- Project 1: Read sensor values and control multiple electronic devices
- Collecting readings from LM35 temperature sensor to control LED's and Buzzer
- Vary potentiometer value and control DC Motors
- Vary LDR sensor values and control Buzzer
- Interfacing Hall Effect Sensor 

  Interfacing Ultrasonic Sensor
- Interfacing Wi-Fi module with arduino
- Using AT Commands for configuring Wi-Fi Module
- Making advanced system by using cloud for data TX & RX
- Making cloud based control system
- Project 2: Device controlling over cloud on android mobile app
- Monitoring sensor and different data on mobile phone

#### **Session 4:**

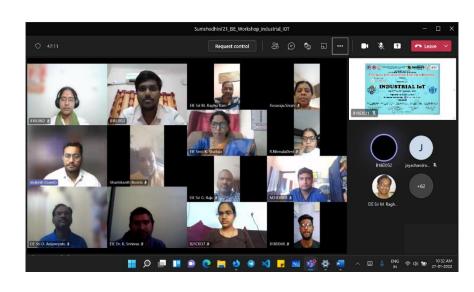
- Project 3: Upload sensor data on Cloud based Service
- Establishing connection between WiFi module and Cloud Services
- Connecting electronic devices to Internet
- Plot and read sensor data anywhere in the World
- Project 4: Control industrial system using Android Smartphone
- Connecting Android Smartphone to Internet
- Sending data from Android Smartphone to Internet
- Receiving data and controlling system and sending acknowledgement
- Designing Application for mobile



Dr.M. Raghu Ram Garu, Head of Electronics and Instrumentation Engineering Department delivering inaugural speech.



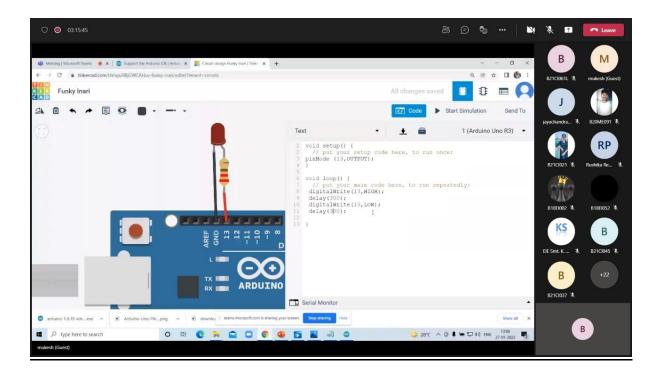












#### **Registration fee**

Rs.500/- per head.

Conducted virtually on 27th & 28th December through Microsoft teams.

Inauguration of Department workshop through Microsoft teams.

#### **Faculty Co-ordinator**

Smt.K.Shailaja Garu

Sri.G.Raju Garu

#### **Student Co-ordinator**

Banna Dharmendra

#### Resource person

Mr. Mukesh S. Choudhary

Number of participants: 36

The students were mostly from 2<sup>nd</sup> of ECI, 3<sup>rd</sup> years of E&I kitsw.

The workshop completed successfully with great positive feedbacks from both the participants and trainers as well.



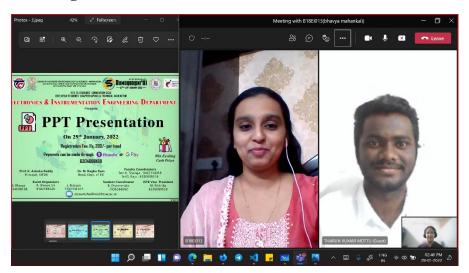
#### **TECHNICAL PAPER PRESENTATION:**

**Venue: MS Teams** 

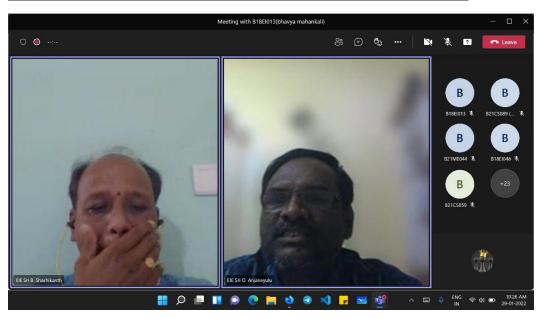
Time: 10 a.m. to 3 p.m.

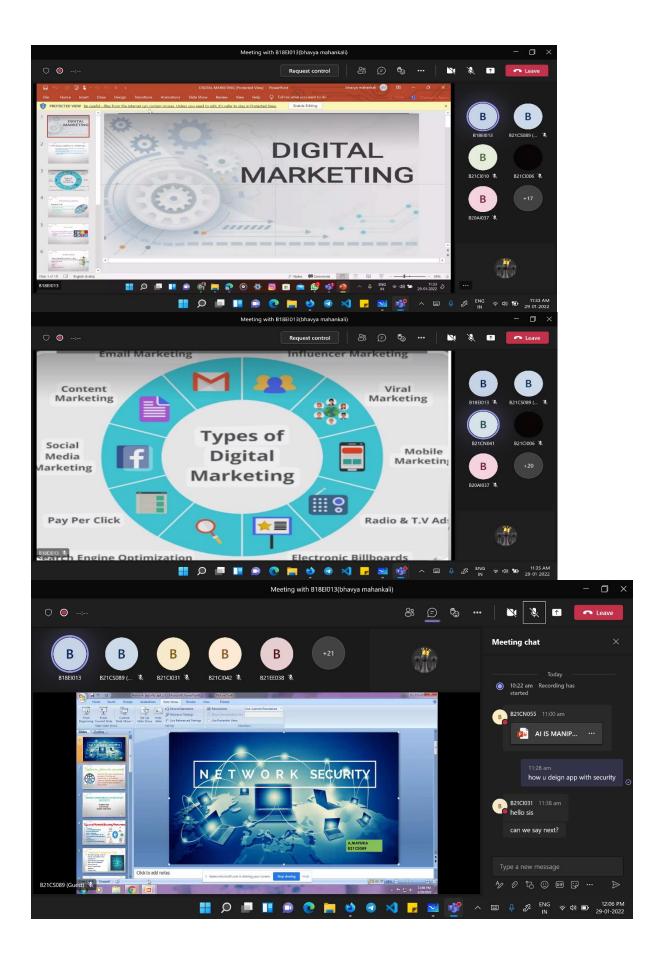
The Technical Paper Presentation event hosted a total of 13 teams from varied engineering backgrounds, with an emphasis on the branches of Civil, Electronics, Electrical and Mechanical Engineering. The panel of judges from our Department Mr. O. Anjaneyulu sir & Mr. Shashikanth sir. The diverse panel of judges ensured a fair, unbiased representation of the various branches of engineering. The event commenced at 10 a.m. after the felicitation of the judges, with the participating teams eager to present their ideas and innovations. It was indeed a sea of brilliance, as team after another came forward armed with incredible, original prototypes, research papers and advancements. Fielding question after question by the judges, the participants displayed their undying thirst for knowledge, whilst showcasing their immense interest and the astonishing amount of effort and research put into each of their individual presentations.

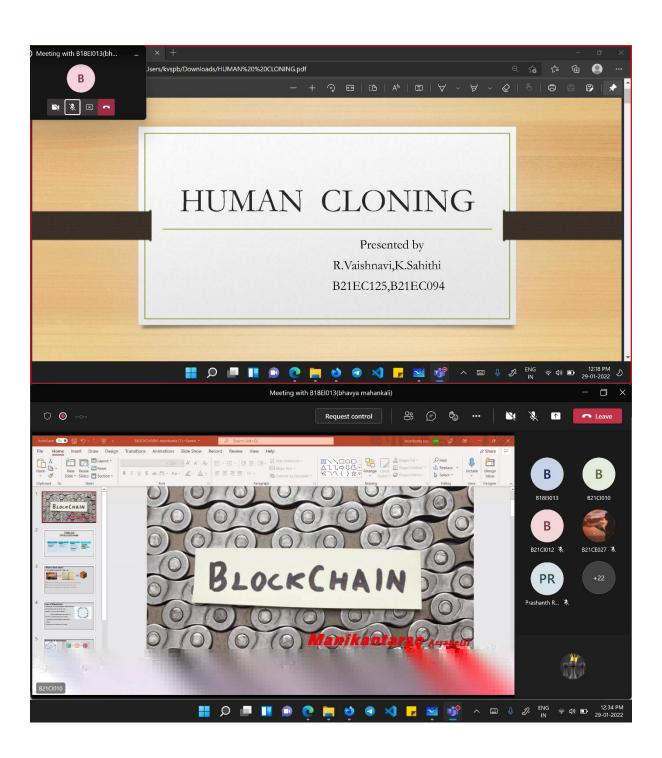
**REG Fee:** 200/- Per head **No. of registrations**:50

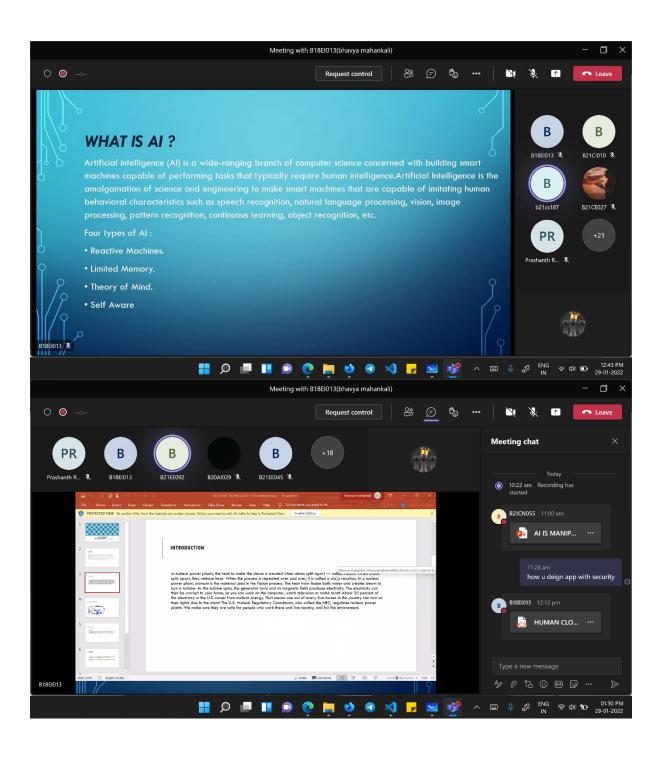


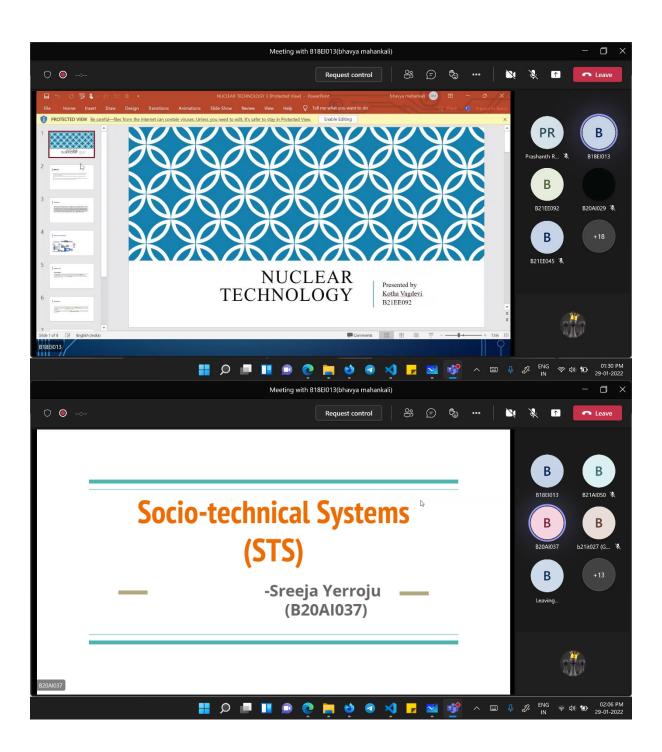














# **Congratulations to the Winners**

- 1. Aishwarya sandya (CSN), KITSW
- 2. Vaishnavi and Sahithi (ECE), KITSW
- 3. Harini and Neethika (EEE), KITSW

# Organised by

M. Bhavya - 6304098188

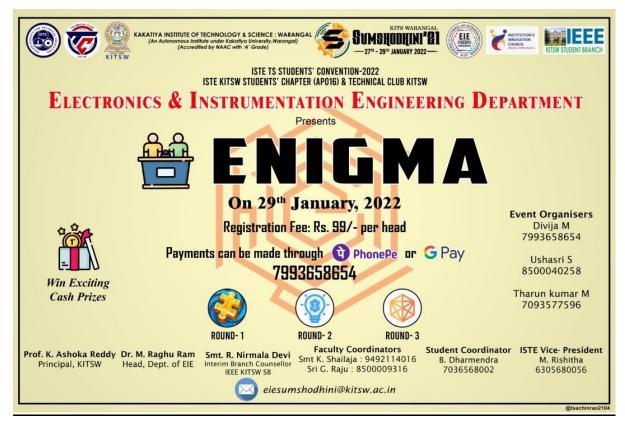
K. Bhavya Sri - 9182498520

J. Prakash - 770239182

# **Faculty Co-ordinator**

Sri O. Anjaneyulu, Associate Professor

Sri.B.Shashikanth, Assistant Professor



#### TITLE: ENIGMA:

As part of SUMSHODHINI'21 the Department of Electronics and Instrumentation Engineering had organized an event **ENIGMA**.

This event consists of 3 rounds namely

- 1. PRETEST
- 2. MYSTIFY
- 3. BEMUSE

#### **ROUND 1: PRETEST**

It consists of 15 questions in form of quiz with time limit. The topics are of all genres like C language, general, movies, and etc s

#### **ROUND 2: MYSTIFY**

In this round, questions will be displayed regarding logos along with the time limit. Based on scores of round 1 and round 2, segregation is done and highest score participants will be forwarded to round 3.

#### **ROUND 3: BEMUSE**

In the final round, questions based on aptitude and reasoning with time limit of 2 minutes.

#### **Registration Fee:**

Rs.99/- per head

#### **Event Organizers:**

Divija Mahavadi Tharun kumar Mottu Usha Sri Samala

#### **Faculty Co-ordinator**

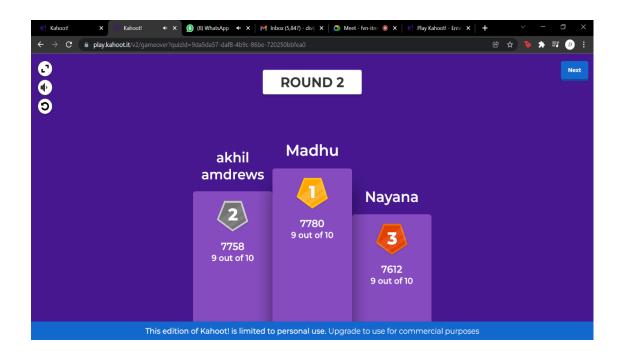
Smt. R. Nirmala Devi Associate Professor [INTERIM BRANCH COUNSELLOR, IEEE KITSW SB] Smt. B. Smitha, Assistant Professor

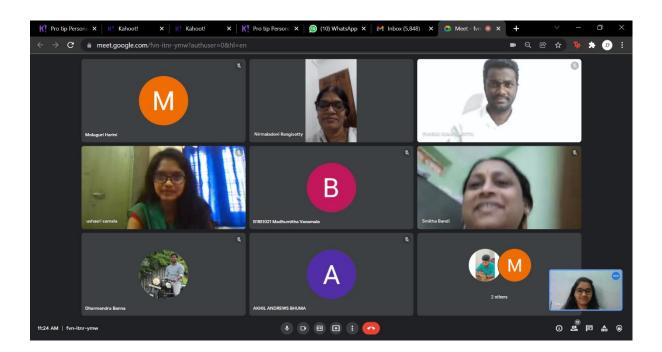
#### Number of Participants: 28 members.

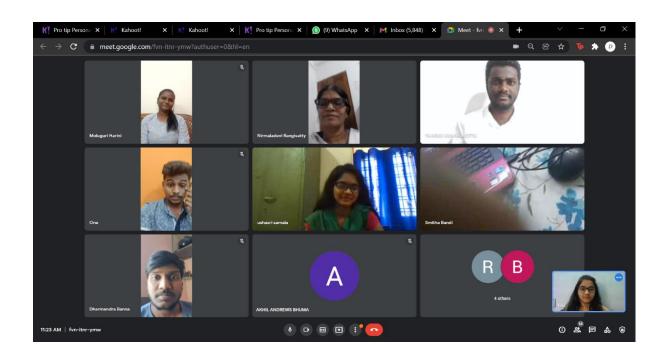
The students from different disciplines like EEE,CSM,CSN,ECI have participated. The Event successfully Completed on 29th Jan by 12:00 PM. Out of all the Registered members the best 3 members were awarded by the IEEE Interim branch counselor Nirmala Devi garu and Smitha garu, and Faculty Coordinators K.Shailaja, G.Raju.

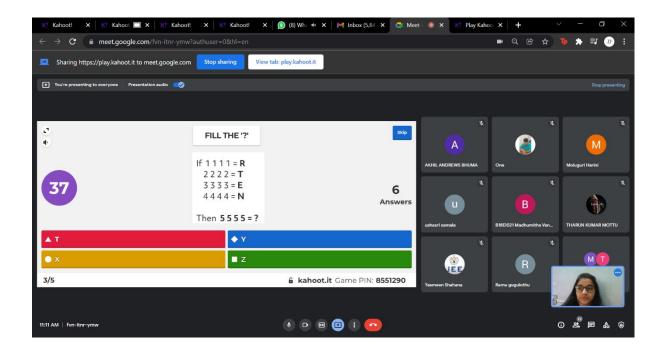
#### **WINNERS:**

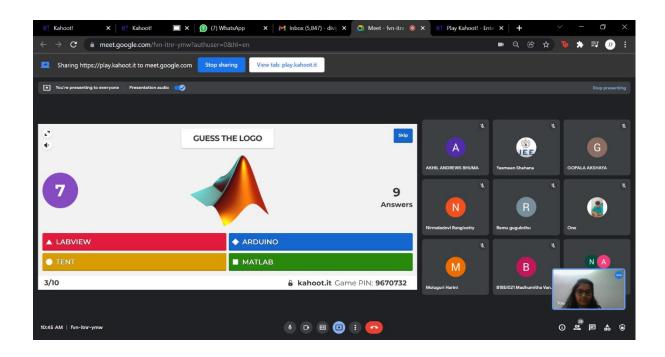
- 1. V. Madhumitha-B18EI021
- 2. B. Akhil- B20CI004
- 3. M. Harini- B21EE045













Placement heat is all about a practical session for placements. It provides a base to know how a person gets placed and what aspects are involved.

This event consists of 4 rounds. 1st is a basic written test it includes aptitude basic MCQS Followed by group discussion, Technical Round(TR), and HR round.

The best thing here is, it gives an experience as our faculty will interview you.

**ROUND 1: QUIZ-TOPPER** 

**ROUND 2: GROUP DISSCUSION** 

**ROUND 3:TECHNICAL ROUND** 

**ROUND AND DETAILS:** 

👉 Round1 - Quiz-Topher 🗐

The questions are related to the Basics of C programming language, Aptitude, and logical reasoning. A google link was posted and duration for attempting 20 questions was 15 minutes.

← Round 2 - Group Discussion

In this round, the people who completed round 1 will be gathered and made into groups. And a topic was given and they need to discuss and share their points. The topic we gave to the participants was "pros and cons of social media".

👉 Round 3 – Technical Round 🔒

Each individual who completed round 2 will be entering into this round. This round is completely on the basic technical part.

← Round 4 – HR Round

In this round, you will be having interaction with the faculty. The best thing here is, you will get an experience because our faculty will interview you.

**DATE ,TIME & VENUE**: The event was conducted on 29th January 2022 in the morning session i.e., from 10:00 am to 1:00pm. Due to covid-19 pandemic the event was carried out in google meet in virtual mode.

#### **FACULTY COORDINATORS**

- 1. Sri. B. Krishna sundeep Assistant professor
- 2. Sri. B.Venu Maheshwar Assistant professor

#### STUDENT COORDINATOR

B. Dharmendra

#### **EVENT ORGANISERS**

- 1. K.vijith
- 2. CH.vaishnavi

- 3. Md.adil
- 4. K.lokesh kumar

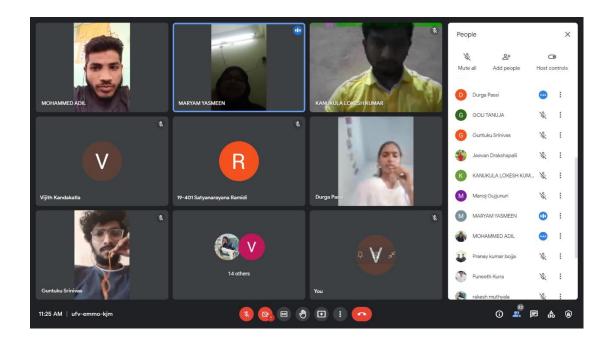
#### **REGISTRATION FEE:**

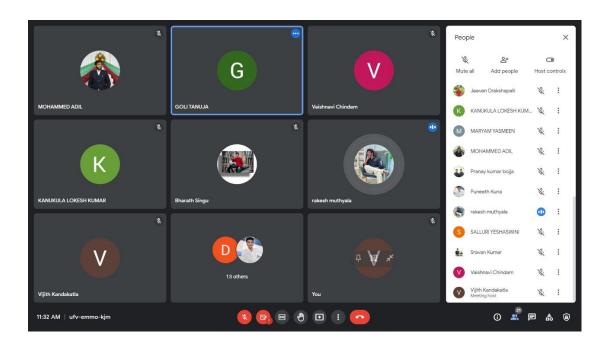
Rs.75/- per head.

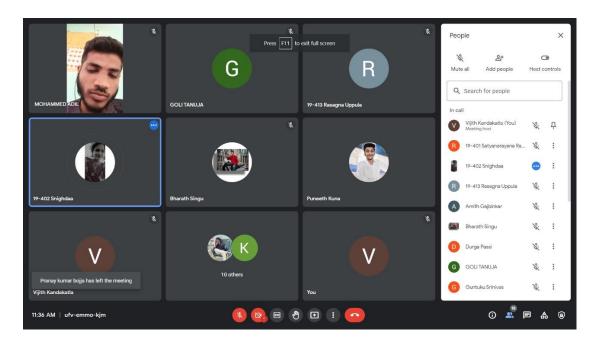
Participation certificates are provided and for winners merit certificates are provided.

The students from different disciplines like EEE,MECH,CSE,ECE,ECI from different colleges: Kamala institute of technology and science ,Vaageshwari college of engineering ,Sreenidhi Institute of science and technology hyderabad,Lovely professional university punjab, Keshav Memorial Institute of technology, Narayanguda Hyderabad and Cristu jyothi Institute of technology.









# No of registrations:41

# PRIZE WINNERS:

1st prize in placement: G Rahul

2ndprize in placement:Durga

3rd prize in placement:Bhavya

#### **Event Name: CONC3NTR1X**



### **CONC3NTR1X EVENT POSTER**

**Venue: Google Meet** 

Date: 29/01/2022

#### **Description:**

In this event we will have a total of three rounds as follows:

- ROUND 1: in this round, we will conduct quiz through an online platform. The quiz
  contains basic business questions in a few formats (like true or false, poll, MCQ, match
  the following type) whoever scores good marks within the time limit will be promoted
  to the next round and others will get eliminated.
- **ROUND 2:** In this round, we will have a few chits in a box and the participants should pick one and based on the chits they will be given a basic business question and the participants should give their idea to solve the given question. He/she will be promoted to the next round depending upon the ideas they present.

•	ROUND 3: we will provide fake currency to each participant. We will display a few items
	which will be rated from (1star - 5 stars) and we will auction those items and
	participants must buy them in the bids. The higher bids offered by participants will own
	the product. Person having more stars in his profile will be declared as winner
	***LIMITED ITEMS ONLY ***

# **Registration Fee:**

Rs.75/- per head.

No. of registrations:27

**Event Organizers:** 

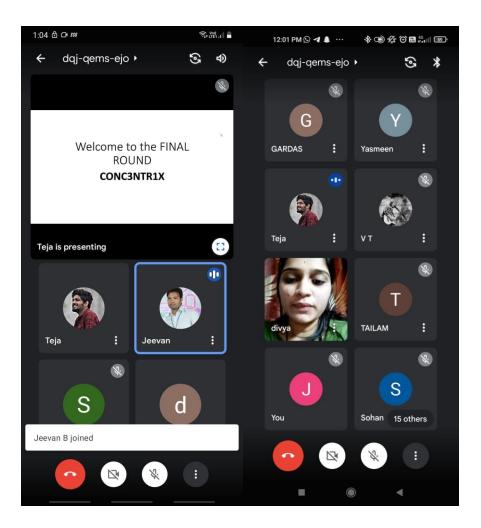
Faculty InCharge/Judge

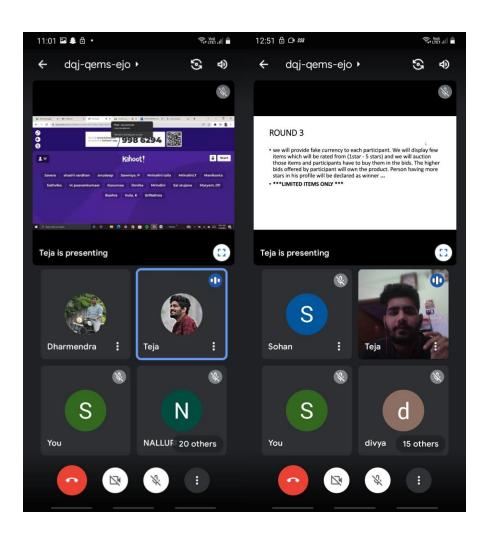
R Teja Phanindra

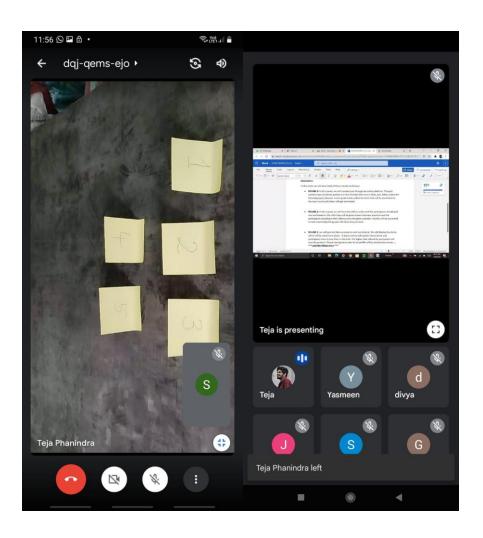
Sri.B. Jeevan

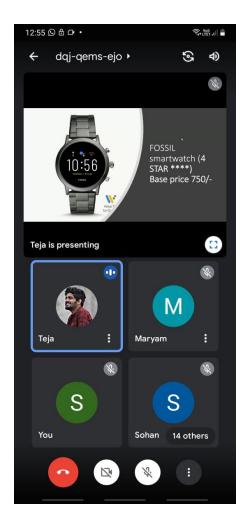
Divya Joshi

Yasmeen









### Winners:

1<sup>st</sup> Prize: Anudeep

**2**<sup>nd</sup> **Prize:** Sai Satvika

**3<sup>rd</sup> Prize:** Soumya



#### **EVENT NAME: TECH MAZE**

**Venue: GOOGLE MEET** 

Date:29-01-22

The event is a technical and entertaining event, It consist of 3 rounds.......

#### 1) PICK ME

In round one we will have a wall with 1to10 numbers in we have topics related to subjects, G.K the one who gives more ans in less time will be eligible for the next level

#### 2) DID U KNOW

second round we will be displaying u picture of a indian heritage site u need guess the given site

#### 3) GUESS ME

This is the final round in this they need to guess the name of the character name through the pictography clues (movie,cartoons,mytholagy) who will guess the more ans in very less time will be the final winner

#### Winners details:

1st Prize: 1st: surya prakash

2nd Prize:J.Thanmai

#### Organized by:

\* J.Chinmai\*- 9390812444

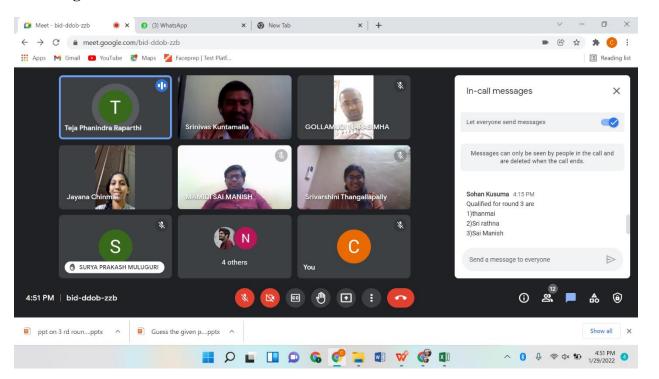
\* T.sri varshini \*- 7075522816

\* k.sohan \*- 7981271258

### **Faculty Incharge:**

Dr. K. Srinivas, Assistant Professor

**REG Fee:** 75/- Per head **No. of registrations**:10







KAKATIYA INSTITUTE OF TECHNOLOGY & SCIENCE : WARANGAL







ISTE TS STUDENTS' CONVENTION-2022
ISTE KITSW STUDENTS' CHAPTER (APO16) & TECHNICAL CLUB KITSW

# **ELECTRONICS & INSTRUMENTATION ENGINEERING DEPARTMENT**



Win Exciting

Cash Prizes

Principal, KITSW

Prof. K. Ashoka Reddy Dr. M. Raghu Ram

# Quiz Wizards

On 29th January, 2022

Registration Fee: Rs. 75/- per head

Payments can be made through O PhonePe or G Pay

8639170345



Head, Dept. of EIE

**ROUND-2** 

**Faculty Coordinators** 

Smt K. Shailaja: 9492114016 Sri G. Raju: 8500009316

Sai Priya 7981142486

Mohammed Abdul Ayman 9951262002

**Event Organisers** 

Sai Teja 7013133626



Student Coordinator ISTE Vice- President B. Dharmendra 7036568002

M. Rishitha 6305680056



eiesumshodhini@kitsw.ac.in

#### TITLE OF THE EVENT: QUIZ WIZARDS

As part of SUMSHODHINI'21 the Department Of Electronics and Instrumentation Engineering had organized an event QUIZ WIZARDS.

**VENUE**: Google meet

**DATE**:29/01/2022

**TIME**:2.00pm to 4.00pm

This event consist of three rounds.

**ROUND1**: PICTURE VISUAL.

ROUND2: VIDEO - AUDIO.

ROUND3: BUZZ.

#### **Round 1: PICTURE-VISUAL**

In this round, the participants can be shown famous persons, inventors, picture or famous paintings. Participants should answer the questions related to that particular concept.

#### **Round 2: VIDEO-AUDIO**

Here we will show few video and audio clips, based on the video or audio played participants should answer the questions.(Audio includes music, voice of famous leaders, videos includes protests, acts etc...)

#### **Round 3: QUICK GUESS-BUZZ**

Finally, it is a buzzer round, atlast we will ask you to draw some logos of famous brands or we ask questions based on current affairs, technology, Logical reasoning, sports etc..,

Registration fee:75/-

#### Organised by:

Saipriya Naragoni

P. Sai Teja Ayman

Abdul

#### **Faculty coordinator/Judge:**

Sri.G.Raju

# **Faculty coordinator:**

Sri.G.Raju

Srimathi.K.Shailaja

Winners: P.Vinay - 1st prize

Chandrasen - 2nd prize

