Mechanical Engineering Students' Association (MESA)

The Mechanical Engineering Student Association (MESA) is the premier body of Mechanical Engineering department in KITSW and is formed out of voluntary enthusiasm and extreme passion of its students to discover the deepest knowledge of their interests.

Under the extraordinary guidance of Head of the department, faculty and with their unconditional and invaluable support, students here in the association improve their every skill and strive with an obsession of carving their capabilities to perfection and mastery.

The executive council of MESA is constituted for the academic year 2020-21. The following are the office bearers nominated for various positions of MESA.

Dr. K. Sridhar, Professor & Head, MED
Sri G. Vinod Kumar, Assistant Professor, Faculty In-charge (MESA)
Sri S. Anil Kumar, Assistant Professor, Faculty In-charge (MESA & ISTE)

S.No	Position	Section	Name of the Student
1.	President	4M3	K. Sai Charan (B17ME133)
2.	General Secretary	4M1	R. Chandrahaas Sharma (B17ME036)
		4M2	K. Akhil Raja (B17ME061)
		4M3	G. Sriram (B17ME132)
3.	Joint Secretary	3M1	Ch. Manohar Reddy (B18ME004)
		3M2	D. Sathvik Reddy (B18ME066)
		3M3	K. Santhosh (B18ME177)
4.	Public Relations Incharge	4M2	MD. Assad Ullah Sharif (B17ME065)
		3M2	D. Sharon Stephen (B18ME112)
5.	Treasurer	4M1	E. Sreeja Rao (B17ME006)
		3M3	S. Manoj (B18ME163)
6.	Disciplinary Incharge	4M1	P. Gokul (B17ME015)
		3M1	K. Ashish (B18ME024)
7.	Executive Members	4M1	S. Kousalya (B17ME025)
		4M1	G. Nikitha (B17ME028)
		4M2	K. Sri Vathsav (B17ME092)
		4M2	G. Megith (B17ME068)
		4M3	B. Rohith (B17ME139)
		4M3	P. Naga Sai (B17ME136)
		3M1	B. Harshini (B18ME058)
		3M1	A. Venkata Satya Ramanuja Charyulu (B18ME003)
		3M1	R. Sai Charan (B18ME015)
		3M2	P. Jhansi (B18ME085)
		3M2	Nazrin (B18ME108)
		3M2	M. Karthik Yadav (B18ME072)
		3M3	J. Manideep (B18ME126)
		3M3	B Ramya (B18ME166)
		3M3	K. Saiteja (B18ME127)
		2M1	K. Jayanth (B19ME040)
		2M1	K. Pavan Krishna (B19ME019)
		2M1	M. Himanshuka (B19ME013)
		2M2	T. Ravi Teja (B19ME078)
		2M2	A Vishal (B19ME072)
		2M2	Syed Haseeb (B19ME068)
		2M3	B. Kavyasree (B19ME131)
		2M3	K. Abhiram (B19ME141)
		2M3	P. Vaishnavi (B19ME158)

ROLE OF PERSON IN POSITION FOR MESA:

PRESIDENT: He or she is responsible for taking care of the overall activities, events and the members of MESA.

GENERAL SECRETARY: He or she is responsible for the initiating and conducting various events during MESA sessions.

JOINT SECRETARY: He or she is responsible for managing the executive body members of MESA and delegating works to them.

TREASURER: He or she is responsible to maintain the records of events, people attending the events and monetary transactions for the MESA sessions.

PUBLIC RELATIONS IN-CHARGE: He or she is responsible for publicizing the events conducted by MESA and taking photographs and videos for documentation.

EXECUTIVE MEMBER: He or she is responsible for conducting the events and activities of MESA.

Events held under Mechanical Engineering Students' Association for the academic year 2020-2021.

All the activities in **MESA** have been handpicked by the veterans of the department with meticulous efforts put into the design process and the following gives the detail information and schedule of various programs to be conducted in this year.

S. No	Name of the Event	Organized Under	Resource Person/Judges	Date(s)	No. of participants
1.	Aeromodelling of Drones	Jointly organized ISTE and MESA KITS WARANGAL	Mr. Sayanth K S Ezinith Education LLP, Navi Mumbai	11 December, 2020	92
2.	Paper Presentation	Jointly organized ISTE and MESA KITS WARANGAL	Sri S. Ramesh Sri K. Kishor Kumar Sri S. Sripathy Ms.V. Laxmi Priyanka Sri V. Rajesh Dr. Shakuntala Ojha	12 December, 2020	33
3.	Poster Presentation	Jointly organized ISTE and MESA KITS WARANGAL	Sri P. S. S. Murthy Sri M. Anil Kumar Dr. E. Ramesh Sri D. Sammaiah Sri V. Pradeep Dr. T. Manoj Kumar	12 December, 2020	27
4.	Techmela	Jointly organized ISTE and MESA KITS WARANGAL	Sri S. Chandramouli Dr. G. Sai Kumar Sri V. Srikanth Sri. P. Anil Kumar Sri C. Naresh	12 December, 2020	31
5.	JAM	Jointly organized ISTE and MESA KITS WARANGAL	Dr. G. Srinivasa Rao Dr. MD. Sameer Sri B. Ravi kumar Sri P. Sreedhar Ms. G. Sumithra	12 December, 2020	35

			Sri J. Laxman Sri A. Hari Kumar Smt. P. Anitha Sri V. Rakesh Dr. M. Omprakash		
6.	Ideathon	Jointly organized ISTE and MESA KITS WARANGAL	Sri J. Laxman Sri A. Hari Kumar Smt. P. Anitha Sri V. Rakesh Dr. M. Omprakash	12 December, 2020	31
7.	Techwiz	Jointly organized ISTE and MESA KITS WARANGAL	Sri Ch. Karunakar Dr. G. Srinu Sri V. Prasanna Ms. P.Divya Sri B. Srinivasa Reddy	12 December, 2020	34

AEROMODELLING OF DRONE– WORKSHOP

Workshop Description:

Have you ever wondered how the miraculous machines called Drone to leave the surface and explore the unknown? Do you want to learn how they are designed? Look no further, because as part of Sumshodhini'20 the Mechanical Engineering Department brings you a one day workshop on "AEROMODELLING OF DRONE" to introduce you to the world of aerial systems. A total of 92 students attended the workshop and e-certificates distributed to the participants through online.


Topics to be covered:

1. Introduction to Aerial Robotics.
- Type of Aerial System.
- Future Applications of Aerial Robots
- Market & Economy of Aerial Systems.

2. Introduction to Components
- BLDC Motors.
- Electronic Speed Controller (ESC).
- Flight Controllers.
- Radio System.
- Battery.
- Power Distribution.

3. Assembly of Aerial System.
4. Introduction to Flight Software & Calibration.
5. Flight & Simulation of Aerial Vehicles.
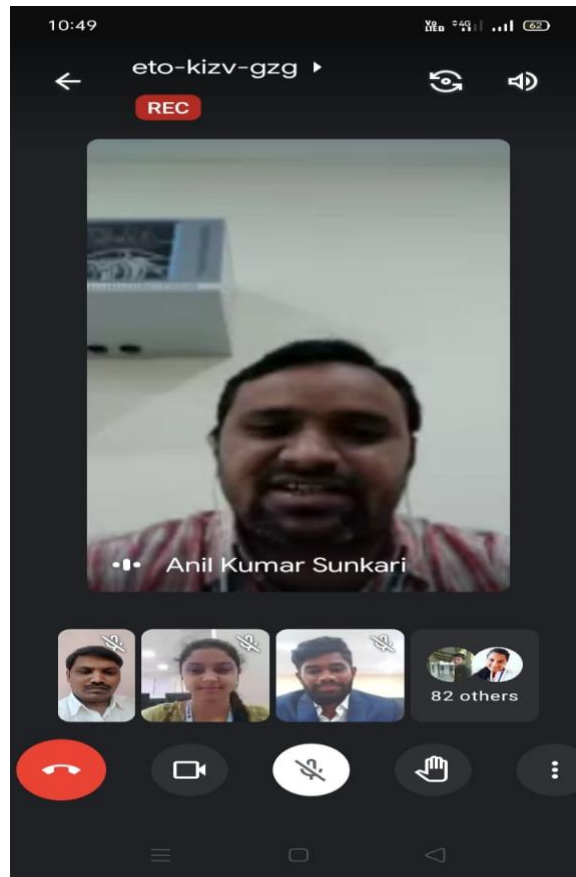
Aeromodelling of Drone workshop inaugural session talk by faculty coordinator on 11 December, 2020
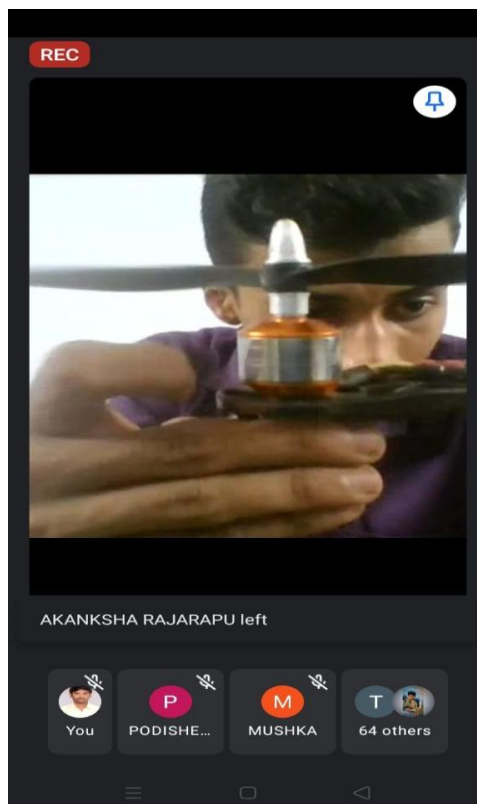
During workshop session interaction to the students by Mr. Sayanth K S, Ezinith Education LLP, Navi Mumbai on 11 December, 2020

The following events were conducted as a part of National Technical Level Fest Symposium Sumshodhini 20 organized by the Mechanical Engineering Student Association (MESA) and ISTE Student Chapter, KITSW during 12 December, 2020.

1) Paper Presentation
2) Ideathon
3) Techmela

4) Poster Presentation
5) JAM
6) Techwiz

Paper Presentation Event Description:

For the paper presentation, only the technical topics are to be selected. Based on the way of presentation and the topic selected the winner of the event is decided. A total of 33 students attended the workshop and e-certificates distributed to the participants through online.

Virtual event images:
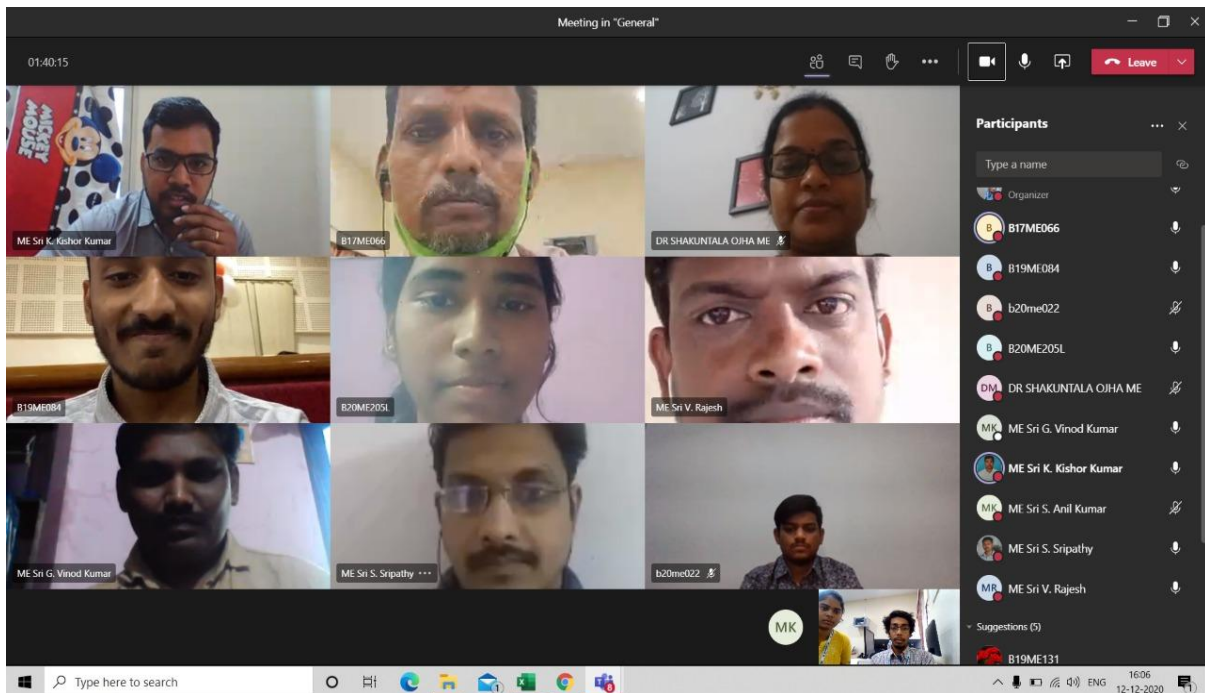
Ideathon Event Description:

This event will be conducted in two rounds.

Round 1

Five real-world problem statements will be given to the participants. Participants with the best possible solution to the given statement will be shortlisted for the second round.

Note:
1. PPT's will be encouraged in round 1.
2. Any other real-world problem statement of your own will also be considered, if the theme is exceptionally good.
3. Time duration for each team is 10 minutes.

Round 2

Shortlisted students of round 1 are eligible for round 2 where, a Problem statement will be given to the participants 2 hours prior to start of 2nd round. Participants with the best possible solution to the given statement will be declared as the winners.
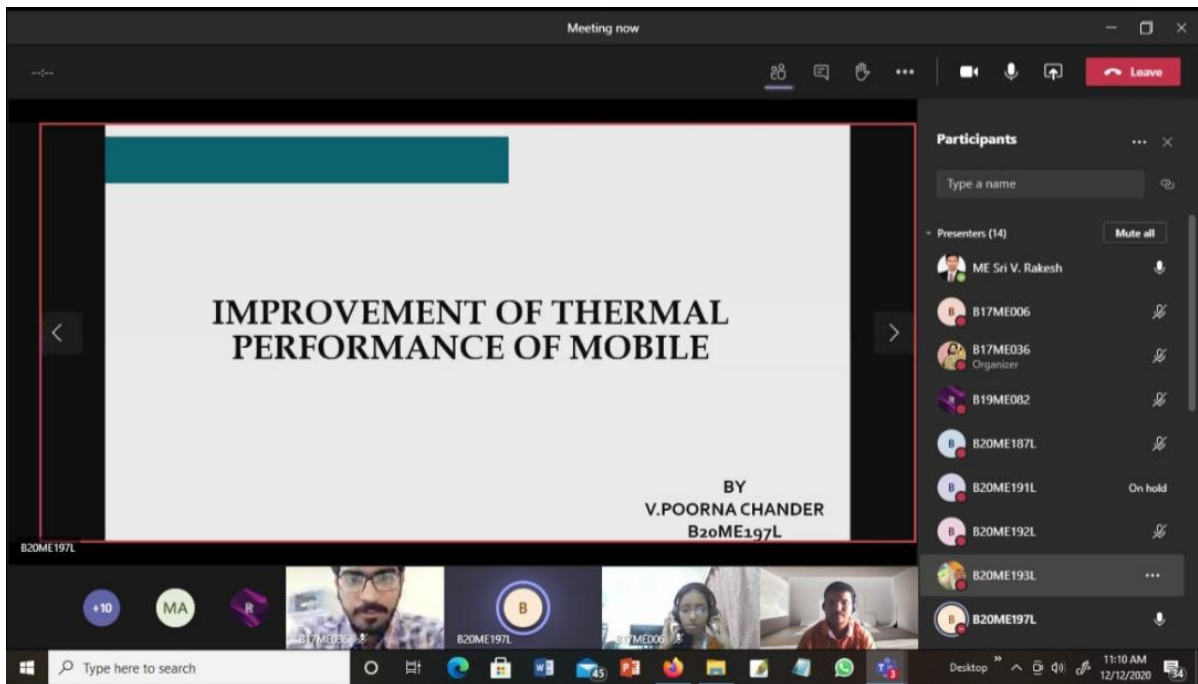
Note:
PPT is not required for round 2

Sample problem statements:
1. Improvement in cold starting of an engine.
2. Improvement of thermal performance of a mobile.
3. Cooling of a room without an external help (ac fan etc...).
4. Method for compensating repulsive force in a gun.

Virtual event images:

Techmela Event Description

This event will be conducted in three rounds.

Round 1:
1. 4 slides will be presented to the participants. Each slide consists of numbered gear (e.g., Gear 1, Gear 2, Gear 3 etc..). Every Participant will be given one opportunity to select a numbered gear and 3 technical questions allocated to that gear will be asked.
2. Time limit to answer each question is 30 seconds.
3. Participants who answered at least 1 of the 3 questions correctly will be shortlisted for round 2.

Round 2: Jumbled word

Shortlisted students of round 1 are eligible for round 2 where,

1. A description of 5 mechanical components will be given. Participants must identify the machine components/ mechanical part based on the description.
2. First letter of each machine component obtained from the given description is a 5-letter jumbled word.
3. Solve the jumbled word (The obtained word will also be a machine component/ mechanical part).
4. Participants who give the correct solution for the final jumbled word in least time will be shortlisted into the final round.

Round 3: Rapid fire

1. Participants must select one topic from the given 3 topics.
2. Questions will be asked from the selected topic and time limit for each participant is 1 minute 30 seconds.
3. In the given time, participants with highest number of correct answers will be declared as winners.

Virtual event images:
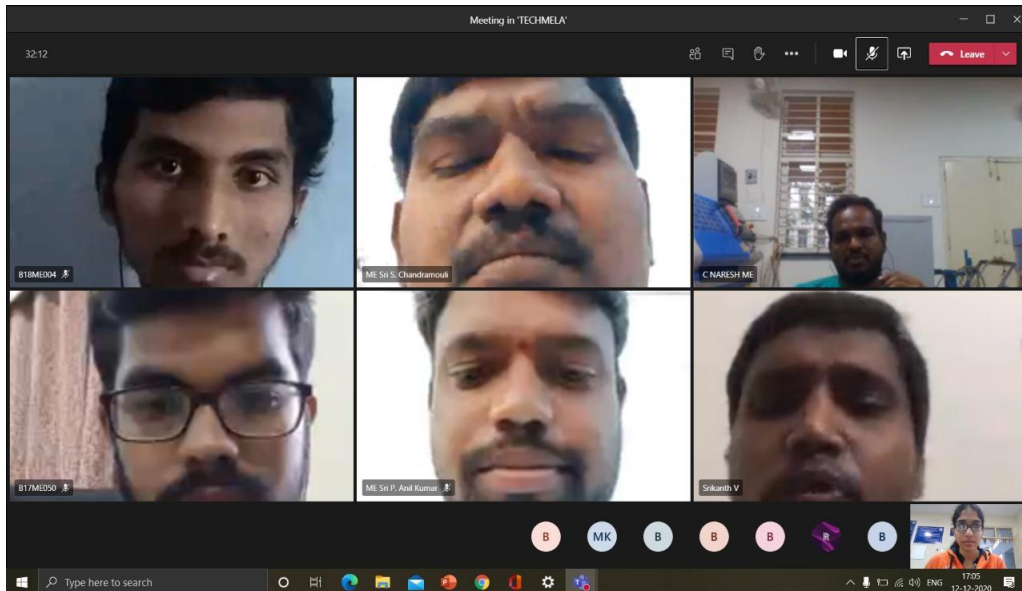
Poster Presentation Event Description:

For the poster presentation, 10 themes will be given to the participants. The poster should be drawn on a A4 sheet or a drawing sheet. Any types of coloring are encouraged. Participants with the best poster and explanation will be the winners of the event.

NOTE:
- The poster is mandatory.
- Only one poster is allowed per participant.
- Any other mechanical related theme of your own will also be considered if the theme is exceptionally good.
- The themes will be given prior to the event and the poster can be drawn once the themes are given.
- The time duration for each participant for presentation is 10 minutes.

Virtual event images:
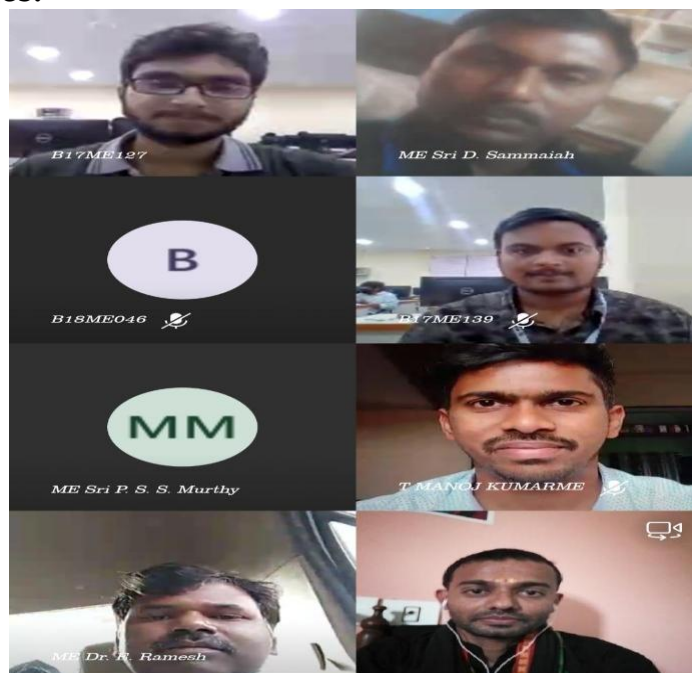
Just A Minute Event Description:

JAM is an event in the technical world conducted in order to know the capabilities of a participant, such as spot thinking, speaking skills and so on, so that the participant is evaluated accordingly. Here in this event conducted for Sumshodhini 2020, there will be two rounds which are to be conducted among the registered participants which will involve their speaking skills in the first round and reading skills (for 1st year participants) or design interpretational skills (for 2nd, 3rd, 4th year participants). The rounds are described below with the sample topics for each round.

Round 1:

  i.   Each participant will be allotted to a topic which will be based on the lucky pick.
  ii. The participant will be given 1minute to think about the topic, 1 minute to interpret it, and 30 seconds to conclude it.
  iii. The marks will be allocated to the participants in the following way,
       a) 5 marks for thinking (i.e., no participant must try to collect data via any other means such as by searching in web browser, etc.). To verify it the video must be turned on. **Note:** Network problem, etc. reasons must not be mentioned.
       b) 10 marks for speaking skills.
       c) 5 marks for conclusion.
  iv. The participants who scored a minimum mark (which will be decided according to percentile) will be qualified for the second round.

Round 2:

  i.   The qualified participants from round 1 will be given either a paragraph related to technical topics or will be given a design which the participants must analyze and speak about it within the time limit given.
  ii. The time limit of displaying it will be 1 minute 30 seconds only.
  iii. After the time limit expires, the participant must explain the given paragraph or design in his own words.
  iv. The participant will be given 1 minute 30 seconds to explain, and 30 seconds to conclude.
  v.   This round consists of 30 marks, where 10 marks are given for analyzation of data or design, 15 marks for speaking and points considered, 5 marks for conclusion.

Virtual event images:
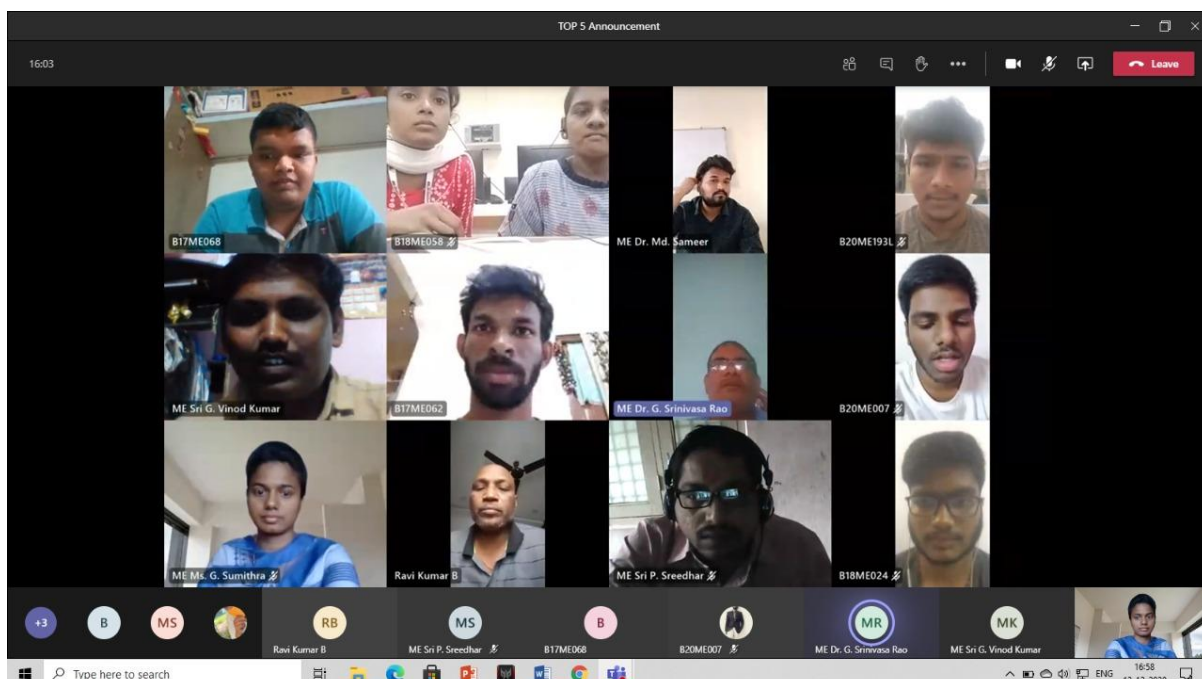
Techwiz Event Description:

Checking the general knowledge of the participants related to the automotive, technical and related subjects mentioned below:

- a. Technologies
- b. Personalities
- c. Places
- d. Vehicle types and specifications
- e. Companies
- f. Logos

Event rules

There are 2 rounds in this event.

Round- 1

- ➢ 5 questions for each member.
- ➢ 5 points for correct answer.
- ➢ 0 For not answered or wrong answer attempt.
- ➢ Each question has 30 sec time limits.

Round- 2

- ➢ 3 or 4 photos will be shown, component or part of any of the photos will be shown, student has to select the parent photo.
- ➢ 10sec time for question visualization.
- ➢ Time limit is 50sec.
- ➢ Two questions will be posed for each member.
- ➢ 2points for correct answer 0 for wrong answer.

Judging criteria

- ➢ Total points in two rounds will be added and top 2 will be selected as winners

Virtual event images: