

# LAKSHYA 2K18

## **Department of Mechanical Engineering**

## **SUMMARY REPORT**

Tonnes of knowledge, lots of interactions, loads of fun, heaps of happiness, who would forsake a day of Euphoria? In the midst of the entire hectic academic schedule, days like Lakshya can never be forsaken. LAKSHYA is a national level technical symposium, annually organised by Lakireddy BaliReddy College of Engineering, Mylavaram. LAKSHYA is a perfect conglomeration where expertise, passion, innovation, fun go hand in hand. With events like SRUJANA (Paper Presentation), PRAGNA (Poster Presentation), NIPUNA (Project Expo), MEDHA (Technical Quiz), LAKSHYA can be regarded as an Arena to showcase thousands of talents. Besides these, Art Expo, Central events and jillions of Spot events are blended together along with the Cultural Events that would satisfy the participants quest for knowledge and drench them with waves of excitement and fun. Anyone with sheer enthusiasm is appreciated to participate and get a handful of insights, exposure that would cater to their development.

Our flagship **National level annual Techno-Cultural Fest** is organized every year with the participation of hundreds of students from various engineering colleges within and outside A.P. This highly innovative, competitive and fun-filled Techno-Cultural Symposium pr ovides a wide spectrum of events to bring out the latent technical and aesthetic talents of students and their creativity, innovation and originality in thinking. It includes Technical Events like Paper Presentation (SRUJANA), Poster Presentation (PRAGNA), Quiz (MEDHA), Project Exhibition (NIPUNA) and some highly creatively-designed cultural e vents in Music & Dance.

The details and broad objectives of the four major technical events are as follows:

**SRUJANA**: Paper Presentation • To promote, showcase and reward the technological developments taking place in the world • To exhibit the creative ability in identifying and communicating the views and ideas.

**PRAGNA**: Poster Presentation • To collate, compile, analyse and communicate the technical assessments in one's own technological domain

**MEDHA**: Quiz Competition • To develop thinking ability, general awareness and sharpness in diagnosing the problem • To test the technical quotient of students

**NIPUNA**: Technical Project Exhibition • To formulate, plan, develop and execute technical models or prototypes • To develop innovative solutions for real-time problems

**SPECIAL EVENT: YANTRORA, A Robotic competition** The robots build by given dimensions and specifications will be allowed for the game. If the participants fail to get their own robot, the organisers shall provide a kit. Please note that the same robot will be given to other participants falling in to the same criteria. Hence, it is highly recommended to make your own kit. The rounds will be decided according to groups participated. The robot which gains maximum points will be the winner.

The LAKSHYA event is organised in the Department of Mechanical Engineering (MECH) and Department of Master of Computer Applications (MCA) with Dr. S. Pichi Reddy, Professor & HoD and Dr. P. Ashok Reddy, HoD, Dept of MCA as conveners at the college level and coordinated and conveyed by Mr. J. Subba Reddy, Associate Professor with two Student Coordinators Mr. D. Sai Naresh, IV yr B.Tech, 15761A0316 and Mr. K. Vinayak, III Yr B. Tech, 16761A03D6 at Department Level. With the support of over 60 student volunteers and faculty, non teaching staff, the event is made a success.

S.No	Event	No. of Internal Participants	No. of External Participants	Total
1	Srujana – PPT	11	10	21
2	Pragna – Poster	10	04	14
3	Nipuna – Project Expo	00	05	05
4	Medha – Quiz	20	08	28
5	Special Event – Yantrora	06	08	14
6	Spot Event – Engine X	33	02	35
	Total	80	37	117

The summary of the event is:

## Name of Outside Colleges Participated in the event:

- 1. RVR & JC College Of Engineering, Guntur
- 2. VRSEC, Vijayawada
- 3. Gudlavalleru Engineering College, Gudlavalleru
- 4. Amrita Sai Institute Of Science And Technology, Paritala
- 5. DVR And Dr HS MIC College Of Technology, Vijayawada
- 6. NRI Institute Of Technology Agiripalli
- 7. St. Ann's College Of Engineering And Technology, Chirala
- 8. Vignan's Foundation For Science, Technology & Research, Vadlamudi
- 9. Sagi Ramakrishnam Raju Engineering College, Bhimavaram
- 10. Sasi Institute Of Technology & Engineering, Tadepalligudem
- 11. Usha Rama College Of Engineering And Technology, Telaprolu

## **Events Appreciation list:**

	SRUJANA-PAPER PRESENTATION				
S.No Name of the student Name of the college		Position of Appreciation			
	D. DINESH SRINIVASA	RVR & JC COLLEGE OF ENGINEERING,			
1	VARMA	CHODAVARAM			
1	G TEJA	AMRITASAI INSTITUTE OF SCIENCE AND	FIRST PRIZE		
		TECHNOLOGY, PARITALA			

2	B. SUNNY GEORGE	LBRCE. MYLAVARAM	SECOND PRIZE
	N. CHAITANYA TEJA		SECOND FRIZE

	PRAGNA-POSTER PRESENTATION				
S.No	Name of the student	Name of the college	Position of Appreciation		
1	G. NAVEEN KUMAR	ST. ANN'S COLLEGE OF ENGINEERING			
1	A.SRINIVASULU	& TECHNOLOGY	FIRST PRIZE		
	D. DINESH SRINIVASA	RVR & JC COLLEGE OF ENGINEERING	SECOND PRIZE		
2	VARMA	RVR & JC COLLEGE OF ENGINEERING	SECOND PRIZE		

	NIPUNA-PROJECT EXPO				
S.No	S.No Name of the student Name of the college		Position of Appreciation		
1	K. D.A.N.V.S. PRAKASH	SASI INSTITUTE OF TECHNOLOGY AND ENGINEERING, TADEPALLIGUDEM	FIRST PRIZE		
		,			
	M. POORNA CHAND	AMRITASAI INSTITUTE OF SCIENCE AND	SECOND PRIZE		
2	V. NARASIMHA	TECHNOLOGY, PARITALA	SECOND PRIZE		

	MEDHA-QUIZ				
S.No	Name of the student	Name of the college	Position of Appreciation		
1	E. PRASAD	LBRCE, MYLAVARAM	FIRST PRIZE		
	S.THIRUMALESH		FIRST FRIZE		
	P. MURALI				
2	MANOHAR	VIGNAN UNIVERSITY, VADLAMUDI	SECOND PRIZE		
	CH. PAVAN SAINADH				

	CENTRAL EVENT-1(YANTRORA)				
S.No	S.No Name of the student Name of the college		Position of Appreciation		
	S. SRIRAM DATTU	USHARAMA COLLEGE OF			
1	V. HEMA KRISHNA	ENGINEERING. & TECHNOLOGY, TELAPROLU	FIRST PRIZE		
	M. SURYA KUMAR	USHARAMA COLLEGE OF			
2	K.V.RAMA KRISHNA	ENGINEERING. & TECHNOLOGY, TELAPROLU	SECOND PRIZE		

	CENTRAL EVENT-2(ENGINE-X)				
S.No	Name of the student	Name of the college	Position of Appreciation		
1	CH. ANANTH BABU	LBRCE, MYLAVARAM			
L	P. RAMA KRISHNA	LBRCE, MYLAVARAM	FIRST PRIZE		
2	K. SRINU	LBRCE, MYLAVARAM	SECOND PRIZE		
	Y.S.SAI NARAYANA	LBRCE, MYLAVARAM	SECOND PRIZE		

S.No	Faculty - In charge (s)	Designation	Phone No	Mail Id
Activi	ty / Event : Technical Team to sc	rutinize the papers and	posters	
1	Dr. P. Vijaya Kumar	Professor	9490817851	pjoel2013@gmail.com
2	Dr. Y. Appala Naidu	Professor	9440660246	appusir@gmail.com
3	Dr. K. Murahari	Associate Professor	9985668751	kmhari.nitw@gmail.com
		CENTRAL EVENT	S	
1	. SRUJANA: A Paper Presentati	on Context		
1	Dr. P. Vijaya Kumar	Professor	9490817851	pjoel2013@gmail.com
2	Mr. D. Mallikharjuna Rao	Assistant Professor	9059722219	malliaug01@gmail.com
2	PRAGNA: Poster Presentation	I		
1	Dr. M. Pulla Rao	Associate Professor	9440651708	itsmemuvvala@gmail.com
2	Mr. T. Venkateswara Rao	Assistant Professor	9000358101	tvrao90@gmail.com
3	• MEDHA: Quiz Competition			
1	Dr. V.Dhana Raju	Associate Professor	9848363670	dhanaraju.v@lbrce.ac.in dhanaraju1984@gmail.com
2	Mr. R. Praveen Kumar	Assistant Professor	8985923633	praveenkumarravutla@gmai l.com
3	Mr. P. Tarun Sai	Assistant Professor	9542913139	tharunsai345@gmail.com
4	NIPUNA, Project Expo			
1	Dr. K. Murahari	Associate Professor	9985668751	kmhari.nitw@gmail.com
2	Mr. K.V. Viswanath	Assistant Professor	7702893880	viswanadhmailing2u@gmail. com
DEPA	RTMENT SPECIAL EVENT: YANTR	ORA, A Robotic Competi	ition	
1	Mr. A.Nageswara Rao	Assistant Professor	8985621662	nagesh803@gmail.com
2	Mr. V. Venkatesu	Assistant Professor	9949713496	venkatesu57@gmail.com
SPOT	EVENTS : Faculty In – Charge : D	. Y. Appala Naidu, Profe	essor	
Specia	al Event 1: Engine - X			
1	Mr. A.Naresh Kumar	Assistant Professor	9666574150	nareshkumarakula@hotmail .com
2	Mr. K. Laxmi Prasad	Assistant Professor	9885827526	klprasad1108@gmail.com
OTHE	R SPOT EVENTS			
1	Mr. S. Rami Reddy	Assistant Professor	9490907709	ramireddy.mec@gmail.com
2	Mr. J. V Somi Reddy	Assistant Professor	9490926427	jvsr4482@gmail.com
	-	dipators and Volunt	·	1

The following faculty is allotted as faculty – in charges to the events:

List of Student Coordinators and Volunteers for Department Events

	SRUJANA		
Coordinators			
V. Revanth	15761A0357	9848247541	
K Siddha Nagarjuna	16761A03E6	9010778463	
Volunteers			
J Santosh	15761A0378		
J Swapna	15761A0379		
P V M Subhakar	16761A03F2		
K Sri Ram Pavan	17765A0317		

	PRAGNA		
Coordinators			
G Archana Reddy	15761A0321	8184946692	
K Kartik	16761A03D5	7032670657	
Volunteers		L	
A Anjani	15761A0362		
A Vintha	15761A0360		
B. Balu Mahonar Kumar	16761A03C3		
	MEDHA		
Coordinators			
M Jaya Mani Kumar	15761A0336	9494222705	
D L S V Narsimha Swamy	16761A0363	9440173050	
V Prasanna	16761A0357	7702972979	
Volunteers			
P Venu Madhav	15761A0341		
	15761A0303		
	16761A0368		
	NIPUNA		
Coordinators			
G Yerram Naidu	15761A0376	7095169253	
Md Khalid	16761A03F2	9014501808	
Volunteers	·		
G Chitti Babu	15761A0318		
G Rajesh	15761A0375		
K Sri Ram Pavan	17765A0317		
	YANTHROR	A Contraction of the second seco	•
Coordinators			
B Bargav	15761A0308	9666507537	
K S S Phani Kumar	16761A0323	7680916129	
Volunteers			
K Jaideep	15761A0385		
N Sreenivasa Rao	16765A0325		
S Ravi Kumar	1661A03A4		
S Nivesh	17765A0312		
	ENGINE - X		
Coordinators			
K Hanumath Sai	15761A0326	9491368079	
S Sai Dinesh	16761A0353	8500962728	
Volunteers			
Y V V Bhoga Sai	16765A0329		
M Prashanth	15761A0335		
G Vidya Sagar	16761A0366		



#### **SRUJANA- THE PAPER PRESENTATION**

Srujana- the Paper Presentation is a competition aimed primarily at knowledge sharing. Whether the participant is presenting a technical paper he/she wrote in an educational environment or about how to improve efficiency in the workplace to your upper management, paper presentation always challenges the participant and it is an effective tool of communication and knowledge sharing.

The event allows a team consisting a maximum of two members. Participants had to send abstracts to the coordinators on or before 22<sup>nd</sup> of December 2018. The participants were allowed to present their papers on the following topics:

- 1. Green Manufacturing
- 2. Design of Thermal Systems
- 3. Design of Machine Elements
- 4. CFD, Robotics, FEM, CAD/CAM/CIM
- 5. Materials Advanced Manufacturing
- 6. Energy Conservation and Management
- 7. Industrial Engineering
- 8. Design and Analysis of Experiments

The participants were also required to send full paper by 25<sup>th</sup> December 2018.

The event srujana of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinators for the event are Prof. Dr. P Vijay Kumar and Asst Prof. Mr. D Mallikarjuna Rao of Department of Mechanical Engineering. The student coordinators for the event were Mr. V Revanth (15761A0357) and Mr. K Siddha Nagarjuna (16761A03E6). The evaluator of the event was Dr. M R Ch Sastry, Professor and Head, Department of Mechanical Engineering, Gudlavalleru College of Engineering. The event was a resounding success and the feedback received from the participants was satisfactory.

Although the response for the event was huge and numerous abstracts were sent for participation, the peer review team consisting of experts and professors, had finalised only 21 abstracts for the final presentation out of which 11 abstracts were from Lakireddy Bali Reddy College of Engineering and 10 were from various colleges pan Andhra Pradesh.

The winner of the competition was awarded to Mr. D Dinesh Srinivasa Varma of RVR & JC College of Engineering, Chodavaram and Mr. G Teja of Amrita Sai Institute of Science and Technology, Bathinapadu for their presentation on "Soaking of Oils in Spills" and the Runner up prize was awarded Mr. B Sunny George and Mr. N Chaitanya Teja of Lakireddy Bali Reddy College of Engineering, Mylavaram for their presentation on "Regulation of Cancerous Cell Migration".











#### **PRAGNA- THE POSTER PRESENTATION**

A poster in any piece of printed paper designed to be attached to a wall or vertical surface typically including both textual and graphic elements. The competition expects the participants to design a poster which are both eye catchy and informative. The participants stand by their poster and present their topic by explaining the contents and answering the question others may have about the topic. A poster competition is an exciting opportunity to showcase different novel scientific topics. Unlike a science fair, where participants might have a live demonstration of an experiment or materials from their project, participants in a poster competition use only their poster to tell others about their topic.

The event allows a team consisting a maximum of two members. Participants had to send abstracts to the coordinators on or before 22<sup>nd</sup> of December 2018. The participants were allowed to present their papers on the following topics:

- 1. Green Manufacturing
- 2. Design of Thermal Systems
- 3. Design of Machine Elements
- 4. CFD, Robotics, FEM, CAD/CAM/CIM
- 5. Materials Advanced Manufacturing
- 6. Energy Conservation and Management
- 7. Industrial Engineering
- 8. Design and Analysis of Experiments

The event Pragna- The Poster Presentation of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinator for the event is Asst Prof. Mr T Venkateshwara Rao of Department of Mechanical Engineering. The student coordinators for the event were Ms. G Archana Reddy (15761A0321) and Mr. K Kartik (16761A03D5). The evaluators of the event were Dr. Y Appala Naidu, Professor and Dr. M Pulla Rao, Assoc Professor, Department of Mechanical Engineering. The event was a resounding success and the feedback received from the participants was satisfactory.

A total of 14 teams were selected for the presentation out of which four were from the colleges other than Lakireddy Bali Reddy College of Engineering.

The winner of the competition was awarded to Mr. G Naveen Kumar and Mr. A Srinivasulu of St. Ann's College of Engineering and Technology for their presentation on "Belt Type Oil Skimmer" and the Runner up prize was awarded Mr. D Dinesh Srinivas Varma of RVR&JC College of Engineering and Technology, Chodavaram for their presentation on "Green Technology in Automobiles".













## **REPORT ON MEDHA – QUIZ**

Medha-A quiz competition serves as an assessment that measures knowledge, skills and abilities. Generally, an exam is a culminating assessment that asses a student over a range of material. A quiz is generally a frequent and short assessment that can gauge a student's retention and comprehension of small of information.

The event Medha- The Quiz of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinator for the event were Asst Prof. Mr R Praveen Kumar and Mr P Tarun Sai, Asst professor, Department of Mechanical Engineering. The student coordinators for the event were Mr. M Jaya Mani Kumar (15761A0336), Mr. D L S V Narsimha Swamy (16761A0363) and V Prasanna (16761A0357). The evaluators of the event was Dr. V Dhana Raju, Assoc Professor, Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering. The event was a resounding success with a huge number of participations and the feedback received from the participants was satisfactory.

A total of 28 teams participated for the quiz out of which eight were from the colleges other than Lakireddy Bali Reddy College of Engineering.

The winner of the competition was awarded to Mr. E Prasad and Mr. S Thirumalesh of , Lakireddy Bali Reddy College of Engineering, Mylavaram and the Runner up prize was awarded Mr. P Murali Manohar and Mr. Ch Pavan Sainadh of Vignan University, Vadlamudi.









## NIPUNA- THE PROJECT EXPO

Nipuna- The Project Expo gives students a platform to show their project at higher level. Major objective of organising this expo was to provide a platform and unleash the potential of the students by showcasing their innovative projects developed in final year either as industry defined problem or user defined problem and provide an opportunity for the students to demonstrate their learning experience.

The event allows a team consisting a maximum of two members. The participants were allowed to present their project on the following themes:

- **1.** Innovations in Engineering
- 2. State of the Art Design
- 3. Technological Relevance and Applications
- 4. Green Initiatives
- **5.** Uniqueness and Novelty

The judging criteria for the event was decided to be on the basis of Innovation, Design (Compactness and the efficiency of work done), Efficiency (Performance of said task), Degree of specified task accomplished, Hardware/Mechanical Efficiency, Relevance with practical need

The event Nipuna- The Project Expo of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinator for the event is Asst Prof. Mr K V Vishwanadh of Department of Mechanical Engineering. The student coordinators for the event were Mr. G Yerram Naidu (15761A0376) and Mr. Md Khalid (16761A03F2). The evaluators of the event were Dr. K Murahari, Assoc Professor and Mr. B Sudheer Kumar, Sr. Assistant Professor, Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering. The event was a resounding success and the feedback received from the participants was satisfactory.

A total of 5 teams were selected for the presentation, all were from the colleges spread across Andhra Pradesh.

The winner of the competition was awarded to Mr. K.D.A.N.V.S Prakash of Sasi Intitute of Technolgy and Engineering, Tadepalligudem for his project on "Designa and Fabrication of Wheel Mechanism" and the Runner up prize was awarded Mr. M Poorna Chand and V Narasimha of Amrita Sai Institute of Science and Technology, Bathinapadu for their presentation on "Mechanical Sprayer".













## YANTRORA-THE ROBO RACE (SPECIAL EVENT)

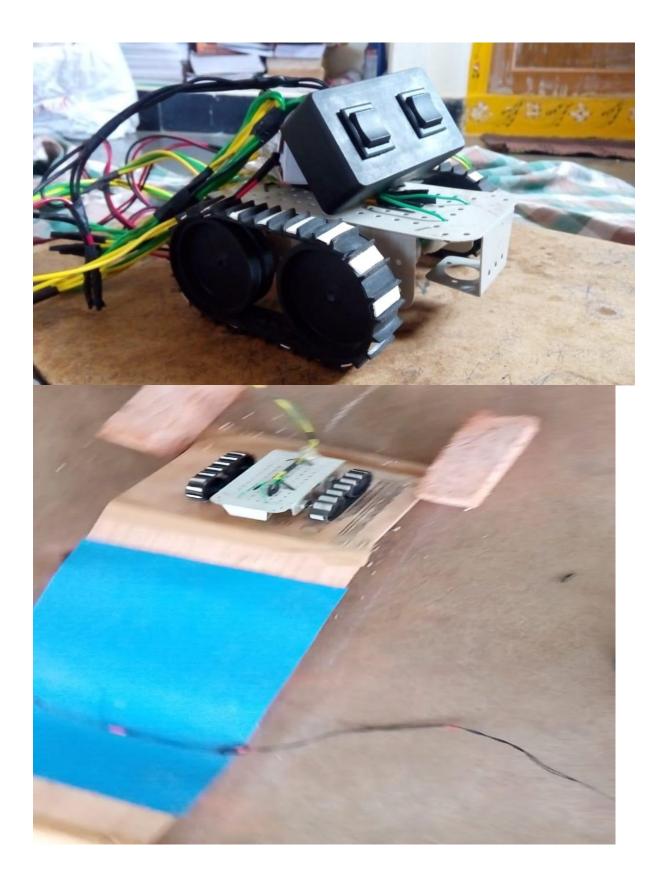
Yantrora – The Robo Race, A competition for human plus machine teams using both selfdriving and manually controlled bots. It is a new platform for individuals and organisations to test the development of their robots. Racing formats will feature new forms of immersive entertainment to engage the public imagination. The participants will develop hardware and software for their bots. The human-machine teams work together in this competition.

The participants were instructed to strictly follow the rules and regulations mentioned in the website earlier. The team had consisted of minimum 2 members. The structure of the robot were not allowed to be changed during the competition. If the robot by any chances fell from the bridge, the robot was kept back to the previous checkpoint crossed with a penalty. During the game play, if any part of a robot was destructed/ dismantled/ damaged the participant was given a timeout to repair at an expense of a penalty, while the next participant for was called to play. Only 1 timeout was given for any participant and the participant was to repair it without the help from the mentor. A maximum of 3 attempts were allowed and the commencement of the second attempt was on request of the participant and consent of the judge

The event Yantrora- The Robo Race of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinator for the event were Asst Prof. Mr A Nageshwara Rao and Mr V Venkatesu, Asst professor, Department of Mechanical Engineering. The student coordinators for the event were Mr. B Bargav (15761A0308), Mr. S Sai Dinesh (16761A0353). The evaluators of the event were Dr. V Dhana Raju, Assoc Professor, Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering. The event was a resounding success with a huge number of participations and the feedback received from the participants was satisfactory.

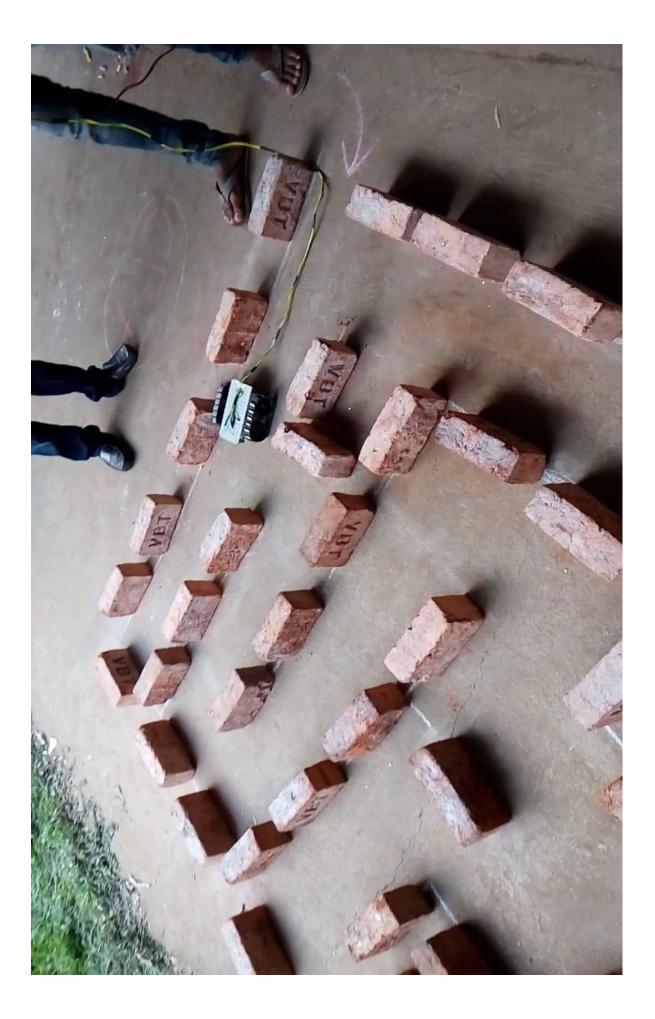
A total of 14 teams participated for the quiz out of which eight were from the colleges other than Lakireddy Bali Reddy College of Engineering.

The winner of the competition was awarded to Mr. S Sri Ram Dattu and Mr. V Hema Krishna of Usha Rama College of Engineering & Technology, Telaprolu and the Runner up prize was awarded to Mr. M Surya Kumar and Mr K V Rama Krishna of Usha Rama College of Engineering & Technology, Telaprolu.

















## Engine-X (SPOT Event)

The participants have to completely assemble the IC Engine the dismantled engine which will be provided by us in least possible time in this competition.

Each time was allowed to have a maximum of 2 participants. The students' team was allowed to use any information from professionals or from academics as long as the information is given as a discussion of alternatives with their pros and cons. Participants were required to perform the fabrication tasks where ever possible. The organisers reserved the right to revise schedule of the competition and or interpret or modify the competition rules.

The event Engine-X of Department of Mechanical Engineering of Lakireddy Bali Reddy College of Engineering at Lakshya 2K18 was organised jointly by Department of Mechanical Engineering and Department of Masters of Computer Applications convened by Dr. S Pichi Reddy and Dr. P Ashok Reddy. The faculty Coordinator for the event were Asst Prof. Mr A Naresh Kumar and Mr K Laxmi Prasad, Asst professor, Department of Mechanical Engineering. The student coordinators for the event were Mr. K Hanumanth Sai (15761A0326), Mr. S Sai Dinesh (16761A0353). The evaluators of the event were Asst Prof. Mr A Naresh Kumar of Department of Mechanical Engineering, Lakireddy Bali Reddy College of Engineering. The event was a roaring success with a huge number of participations and the feedback received from the participants was satisfactory.

A total of 35 teams participated for the quiz out of which two were from the colleges other than Lakireddy Bali Reddy College of Engineering.

The winner of the competition was awarded to Mr. Ch Ananth Babu and Mr. P Rama Krishna of Lakireddy Bali Reddy College of Engineering, Mylavaram and the Runner up prize was awarded to Mr. K Srinu and Mr Y S Sai Narayana of Lakireddy Bali Reddy College of Engineering, Mylavaram.







