



SYNCOM

ECE Dept. NEWS LETTER

VOICE OF ELECTRONIC AND COMMUNICATION ENGINEERING
September 2019 Vol.4 Issue 09



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VISION, MISSION & PEO'S

Vision

Developing highly Qualitative, Technically Competent and Socially Responsible Engineers.



Mission

To provide quality education in the domain of Electronics and Communication Engineering through

- Enriched curriculum for addressing the needs of Industry.
- Effective teaching learning processes through congenial environment.
- Gaining contemporary knowledge through research, development, curricular, co and extra-curricular.



ECE Program Educational Objectives

Graduates of Electronics & Communication Engineering Shall

PEO1: Develop a strong background in basic science and mathematics and ability to use these tools in their chosen fields of specialization.

PEO2: Have the ability to demonstrate technical competence in the fields of electronics and communication engineering and develop solutions to the problems.

PEO3: Attain professional competence through life-long learning such as advanced degrees, professional registration, and other professional activities.

PEO4: Function effectively in a multi-disciplinary environment and individually, within a global, societal, and environmental context.

PEO5: Take individual responsibility and to work as a part of a team towards the fulfillment of both individual and organizational goals.

The institute is a symbol of egalitarian outlook without discretions. KITS student activity council is organized exclusively by students with representatives from various disciplines stands for the advocacy of democracy and leadership opportunities provided by the institute.. **KITS imparts Outcome Based Education (OBE)** which gives equal opportunities to teaching and learning curricular, co-curricular and extra-curricular activities

PLACEMENT

As you start a new career, We wish you good luck in your new job, may you continue to shine as you have always done. We wish you all the best in your new job, may it be the job you have always dreamed of. Enjoy the greener pastures! A new routine, new life and new job! Congratulations on new job. Continue doing great and all the blessings will come your way. Congratulations

S.No	Roll.No	Name of the Student	Company
1	16JR1A04E2	V.Navya	Code Vita
2	16JR1A04E7	V.Sri Lakshmi Subhasini	Code Vita
3	16JR1A04H2	V.Naga Venkata Viswa	Infosys
4	16JR1A0424	G.Radha	TCS
5	16JR1A0425	G.Divya MAdhuri	TCS
6	16JR1A0427	A.Sai Krishna Reddy	TCS
7	16JR1A0435	B.Sai Akil Kumar	TCS
8	16JR1A0459	K.Nagarjuna Reddy	TCS
9	16JR1A0492	Nikhil.L	TCS
10	16JR1A04A9	N.Vijay Kumar	TCS
11	16JR1A04B9	P.Divya Sai	TCS
12	16JR1A04C5	P.Sai Preethi	TCS
13	16JR1A04D0	Sd.Haseena	TCS
14	16JR1A04D3	T.Harsha Vardini	TCS
15	16JR1A04F5	Sk.Najeeb Ur Rahman	TCS
16	16JR1A04G0	J.Surya Teja	TCS
17	16JR1A04G1	S.Vamsi	TCS
18	16JR1A04A0	M.Sai MAnasvi	TCS

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<C*deVita/>

The TCS Global Coding Contest



Student Corner

On the eve of SPACE Day , the team conducted various activities like PPTs, Project Expo, Technical Quiz and Electrothan .The following student are winners and runners of the events.

Electrothan			
S.No	Roll.No.	Name	Prize/ Position
1	17JR1A0482 18JR1A0416 18JR1A0460 18JR1A0440	M.HemaLatha Ch.Pranathi J.Mounika Ch.naveen	First
2	17JR1A0496 18JR1A04G8 18JR1A0442 18JR1A0466	P.Naga Lakshmi V.Venkata Naveen Ch.BalaSaidaiah K.NagaJyothi	Second
3	17JR1A04A3 18JR1A0456 18JR1A04F6 18JR1A0477	K.Raju Javid S.Vali M.Swarnalatha	Third

Technical Quiz			
S.No	Roll.No.	Name	Prize/ Position
1	17JR1A04E6 18JR1A0405 17JR1A04G1 18JR1A04F2	A.Tejaswi A.Lohithakshi P.V.N.S.Bharathwaj R.Jyothiradithya	First
2	18JR1A0426 17JR1A0492 17JR1A0408 18JR1A0420	A.VenuGopal N.LakshmiChandana S.LeelaVenkatBhavani G.Keerthi	Second

Paper Presentation		
S.No	Name	Prize/ Position
1	B.NagasaiDurga	First
2	Y.Syamala Y.Tulasi	Second
3	K.Sunanda A.Tejaswi	Third

Project Expo		
S.No	Name	Prize/ Position
1	K.L.Priyanka K.Ankitha K.Akanksha	First
2	G.Rohith G.Srikanth Ch.Naveen	Second
3	Sk.Afreen S.Navya Sk.Masthan	Third

- **N.Sirisha (18JR1A0480), M.Swarna Latha (18JR1A0477) and K.Akanksha (18JR1A0465)** got Second Prize in Project Expo with project “Life Detection System” in KHIT technical fest Samkalp-19.
- **K.Lakshmi Priyanka (18JR1A0464) and K.Poojitha (18JR1A0462)** got Second Prize in Poster Presentation with title “Design of Eco Friendly Equipment to produce Energy” in KHIT technical fest Samkalp-19
- **M.Dheeraj Krishna (17JR1A04B6), G.BramhaTeja (17JR1A04A0) & K.Sai Naga Chaitanya (17JR1A04A7)** participated in “Technobyte Workshop on Humanoid robotics with IoT” in IIT Hyderabad on 28th and 29th september 2019

Congratulations to the II ECE students who successfully completed the NPTEL course on “Problem Solving through Programming -C”

S.No	Roll.No	Name of the candidate
1	18JR1A0462	K.POOJITHA SAI NAGA LAKSHMI
2	18JR1A0464	KEDARI LAKSHMI PRIYANKA
3	18JR1A0477	MUKIRI SWARNA LATHA
4	18JR1A0480	NEELA SIRISHA
5	18JR1A0484	PARVATHINENI DHARANI
6	18JR1A04A1	MOHAMMED MUSHARAF

World Ozone Day

16 September



Faculty Article:

WORLD OZONE DAY 2019: HISTORY, SIGNIFICANCE AND KEY FACTS

World Ozone Day is observed on 16 September every year to spread awareness among people about the depletion of Ozone Layer and search possible solutions to preserve it. On this day people from all over the world are expected to join Montreal protocol to join the talks and seminars. Let us read more about World Ozone Day, its history, significance and some facts about Ozone Layer.



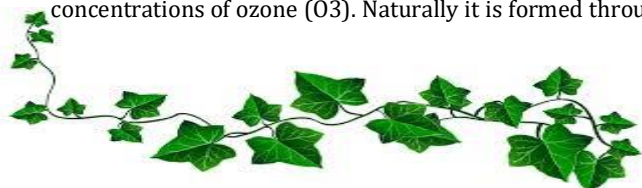
Since 1995, International Ozone Day is observed on 16 September annually. This day reminds the signing of the Montreal Protocol on substances that depletes the Ozone Layer.

World Ozone Day 2019: Theme

The theme of World Ozone Day 2019 is '32 years and Healing'. This year's theme celebrates three decades of remarkable international cooperation to protect the Ozone Layer and the climate under the Montreal Protocol. It also reminds the people to keep up the momentum to ensure healthy people and a healthy planet. In 2018, the latest Scientific Assessment of Ozone Depletion was completed. This assessment shows that the parts of the Ozone Layer have recovered at a rate of 1-3% per decade since 2000. Even at the protected rates, Northern hemisphere and mid-latitude ozone will heal completely by the 2030s. The Southern Hemisphere will follow in the 2050s and Polar Regions by 2060. No doubt Ozone Layer protection efforts also contribute in fighting with the climate change.

What is Ozone Layer?

We all know that ozone protect us from UV rays coming from the sun. In 1957, Professor Gordon Dobson of Oxford University discovered the ozone layer. Ozone is made up of three atoms of oxygen. It is highly reactive gas and is represented by O_3 . It occurs naturally as well as a man-made product in the Earth's upper atmosphere i.e. stratosphere and lower atmosphere i.e. troposphere. That is Ozone layer is present in Earth's atmosphere (15-35km above Earth) in the lower portion of the stratosphere and has relatively high concentrations of ozone (O_3). Naturally it is formed through the interactions of



solar ultraviolet (UV) radiation with molecular oxygen O₂. It reduces the harmful UV radiation reaching the Earth's surface.

But at ground level ozone is considered as a major air pollutant. We all know that ozone protect us from harmful UV radiations but ozone at ground level is dangerous and causes pollution. Due to human activities ozone layer is getting depleted on the planet which could be very disastrous. It also causes photochemical smog and acid rain.

Causes of Ozone Depletion

Main cause of depletion of Ozone layer is human activity mainly human-made chemicals that contain chlorine or bromine. These chemicals are known as ODS that is Ozone - Depleting Substances. Since early 1970's scientists observed reduction in stratospheric ozone and it was found more prominent in Polar Regions. Do you know that one molecule of chlorine has the capability to break down thousands of ozone molecules. The chief ozone depleting substances include chlorofluorocarbons (CFCs), carbon tetrachloride, hydrochlorofluorocarbons (HCFCs) and methyl chloroform. Halons, sometimes known as brominated fluorocarbons, also contribute mightily to ozone depletion. ODS substances have a lifetime of about 100 years.

What are the effects of Ozone depletion?

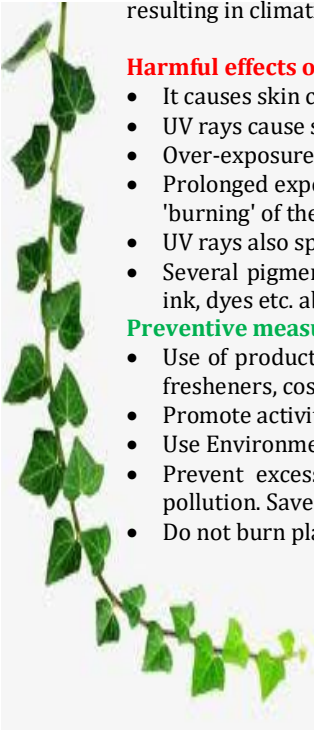
Ozone is responsible for shielding the UV rays from sun; its depletion may cause severe health hazards. Ozone depletion also impacts the environment adversely by altering the life cycles of plants and disrupting the food chain. Microscopic organisms such as plankton may not survive hence animals dependent on planktons will also not be able to survive. Depletion of ozone layer may result in change in wind pattern, leading global warming hence resulting in climatic changes all over the world.

Harmful effects of UV Rays

- It causes skin cancer.
- UV rays cause skin burn.
- Over-exposure to UV radiation affects or damages immune system.
- Prolonged exposure to UV rays damages the tissues of eyes and can cause a 'burning' of the eye surface known as 'snow blindness'.
- UV rays also speeds up the aging of skin.
- Several pigments like colour used for colouring food, fabric, plastic, paint, ink, dyes etc. absorb UV and change colour.

Preventive measures to save our planet Earth

- Use of products which has Chlorofluorocarbons (CFCs) such as hair sprays fresheners, cosmetics and aerosol in plastic containers should be avoided.
- Promote activities such as tree planting and backyard gardening.
- Use Environmental-friendly fertilisers.
- Prevent excessive smoke emission from your vehicle which causes air pollution. Save on gasoline and crude oil by regular maintenance.
- Do not burn plastics and rubber tires.



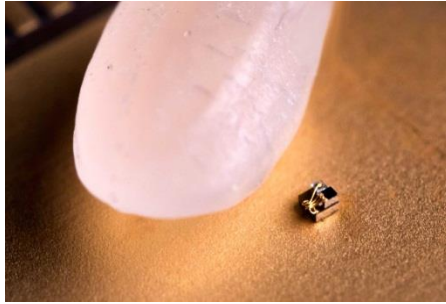
By
Mr. B.Venu , Asst. prof.

Student Article:

WORLD'S TINIEST 'COMPUTER' MAKES A GRAIN OF RICE SEEM MASSIVE

It could lead to big changes in health monitoring.

You didn't think scientists would let IBM's "world's smallest computer" boast go unchallenged, did you? Sure enough, University of Michigan has produced a temperature sensing 'computer' measuring 0.04



cubic millimeters, or about a tenth the size of IBM's former record-setter. It's so small that one grain of rice seems gigantic in comparison - and it's so sensitive that its transmission LED could instigate currents in its circuits.

The size limitations forced researchers to get creative to reduce the effect of light. They switched from diodes to switched capacitors, and had to fight the relative increase in electrical noise that comes from running on a device that uses so little power.

The result is a sensor that can measure changes in extremely small regions, like a group of cells in your body. Scientists have suspected that tumors are slightly hotter than healthy tissue, but it's been difficult to verify this until now. The minuscule device could both check this claim and, if it proves true, gauge the effectiveness of cancer treatments. The team also envisions this helping to diagnose glaucoma from inside the eye, monitor biochemical processes and even study tiny snails.

Why the air quotes around computer, then? The tiny size is leading the University to question what a computer is. This does have a full-fledged processor (based on an ARM Cortex-M0+ design), but it loses all data when it loses power, just like IBM's device. That might be a deal-breaker for people who expect a computer to be more complete. Still, this pushes the limits of computing power and suggests that nearly invisible computing may be relatively commonplace before long.

By
Mr.P.Komal VenkatSai (III ECE-C)

Interaction with Dr.K.Lakshmi Narayana, Retd, IAS

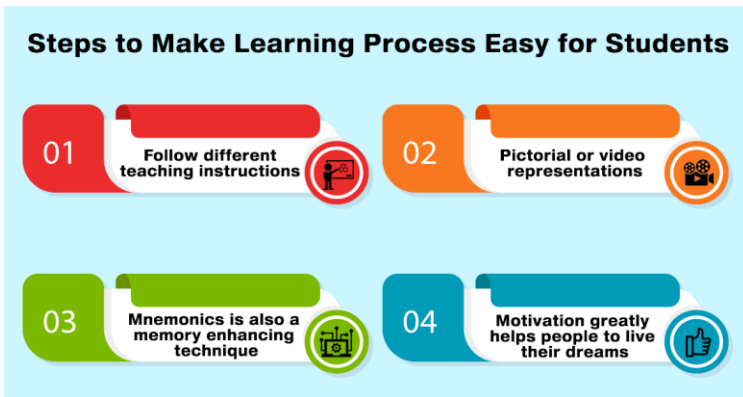
The College conducted interaction with Dr.K,Lakshmi Narayana, Retd, IAS, Founder/Director of APSSDC on “**Active Teaching Learning Methodology**” on 07th September 2019 from 12.00 PM to 4.30 PM in the Seminar Hall. He was interacted with the ECE and other dept. Faculty. This interaction was conducted to know Active Teaching Learning Methodology



Active Learning Techniques to Try

1. Try a Think-Pair-Share activity to encourage all students to interact with the material. In this activity, the instructor states an open-ended question. Ask students to spend a minute or two thinking about and writing a response. Then ask students to pair with a partner to discuss their responses. Reconvene the class after a few minutes, and call on individual students to share the pair's responses.
2. Use a One Minute Paper or Muddiest Point Paper in your class as a formative assessment. At the end of class or just before a break, ask either: "What are the two most important points from today's session?" or "What was the muddiest (least clear) point from today's session?" Give students 1-2 minutes to write brief responses to turn in anonymously as they leave the classroom. Address student responses either during the next class or online.
3. With Peer Instruction, you pause during class and ask students a conceptual question. Give students a few minutes to think about the question, and then have them provide answers, possibly using clickers. Then, have students spend a few minutes talking about their answers, usually in pairs, and try to convince each other that their answer is correct. Then have students answer again.

4. Asking students to work together in groups is a very effective way to actively engage them with your course. For example, Gallery Walk is a cooperative activity during which groups move between stations to build on solutions or discussions begun by others. The Jigsaw is a structured cooperative learning activity that relies on individual accountability to reach group goals. Student groups can discuss case studies to apply course content to solve real world problems..



All faculty members interacted with recourse person friendly and expressed their doubts. On behalf of the department of Electronics and communication engineering, the hosting department, Our faculty Coordinator extended her gratitude to the College Management and Principal. After the felicitation the program came to end with the National Anthem.

FACULTY ACHIEVEMENTS:



Dr.Sk.Sadulla has participated in AICTE Aponsored Two Week FDP on “Emerging Trends in Machine Learning for Biomedical Applications”

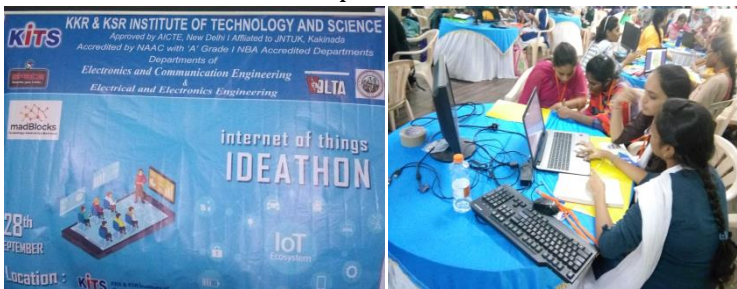


Ms. N.Soniya, Assistant Professor Published a paper on “Artifact Elimination in EEG Signal Using Block and Sign Based Normalized Least Mean Square Techniques” in International journal of Innovative Technology and Exploring Engineering (IJITEE) ISSN: 2278-3075, Vol.8, Issue.10, August 2019.

IDEATHON

ECE association SPACE conducted Ideathon on 28/09/2019 & 08:10 am to 5:20 pm. Archana Rao,CEO, MADblocks was the resource person for this event

An ideathon is a short, intensive, brainstorming event to help young talents generate fresh solutions to existing challenges in their communities. Participants work in teams and use innovative ideation practices such as design thinking to brainstorm on possible solutions. Ideathon helps to engage potential Stakeholders from Academia, Government and Private Sector in the Lab Ecosystem.The main aim of the Ideathon is to develop Innovative skills in students. The Ideathon aims to bring together innovative academicians, researchers and industry to join hands for research development.



Ideathon is a unique and transformational leadership programme providing a creative space for leaders to generate ideas that can change people's lives and explore how to lead collaboration in their own organisations. Participants learn about collaborative leadership with peers from other organisations through a live experience of collaboration. During this event, they create fresh ideas to solve real business challenges, presenting back the best of their thinking at the end. They learn practical tools and techniques, develop their own

skills and behaviours and have the opportunity to network with leaders from different organisations.

Benefit in terms of learning/Skill/Knowledge obtained :

- Exploring new technologies.
- Driving business innovation.
- Sourcing incubation programs.
- Creating potential startups.
- Branding of products or an organization.
- Creating solutions for social causes.
- Analyzing data to make predictions.
- Rewarding innovative thinking.

The Themes given in Ideathon are Education, Medical, Agriculture, Smart cities, Energy. Participants work in teams and use design thinking and innovative learning practices to ideate and collaborate on a host of possible solutions. It improves leadership qualities along with creativity. The students experienced that how to implement their ideas practically



IOT BOOTCAMP

Details of Resource Persons :

Name: Madhu Parvathaneni

Address: PLOT.NO.256P/2, Pragathinagar, kukatpally , Hyderabad.

Qualification: M.Tech(ES), B.Tech(ECE)

Designation: Director of mad Blocks,

Years of Experience: 7years

5. Venue of the Event: seminar hall, KITS College

ECE association SPACE conducted IoT Bootcamp on 17th to 21st September, 2019. Mr. Madhu Parvathaneni Director of mad Blocks was the resource person for this event.



Experiences and Output of the Session:

Along with students Faculty members attended the Workshop by “**Shri Madhu Parvathaneni**” on “IoT Boot camp” held from 17th to 21st September, 2019 conducted by KKR & KSR Institute of Technology and Sciences as a part of event in the department of ECE.

Student Feedback/ Outcomes of the Workshop:

Outcomes of the Session

I am Darsi Ramya , pursuing II year in KKR &KSR Institute of Technology and Sciences with ECE discipline. I have attended the 5 day workshop on **"IOT BOOTCAMP"**. First of all I want to thank my college management who provided such facility for all of us to learn and experience that workshop. In this regard my sincere thanks to department of ECE, who have been conducting such type of events for the student nourishment. We attended the workshop from 17th to 21st September, 2019 by **"Shri Madhu Parvathaneni"**. The session is Very useful and informative. The workshop mainly aimed to create awareness on IOT. We came to know that he is deeply involved in start-up of entrepreneurship ecosystem of Andhra Pradesh and Telangana. He trained more than 1,80,000 students and 5000 faculty members. He explained and said that every second and every day in the life is the first second and first day in the life that is left. We learnt a lot in this session. He explained the need of secrecy and speed in life to hit and quit anything in the life.

On behalf of total ECE students community my heartfelt thanks to department as well as KITS management for organizing such events. He clearly explained his personal experiences with relevant to the speed and secrecy. He explained the importance of circumstances in decision making. He clearly explained how fast the technology is developing and importance of the technology in future.He responded few questions related to the importance of IOT . Really we were inspired the response given by him. He explained the importance and need of technology for the future purpose. Once again thank



1-2 minute video coverage of event (Sample Link)

<https://drive.google.com/open?id=1eKzecrR5Au7TxTQ647117RuqUqI0Bo-5>

<https://drive.google.com/open?id=1LjkiCQUP4nurytmSHFeJFRadxmCHDgMx>

https://drive.google.com/open?id=1Li69kSXIGZEBbRtt7v_5wRQbq1K0JoLb

Social Media Link: (Sample link)

<https://www.facebook.com/photo.php?fbid=2290029044579077&set=pcb.2290029311245717&type=3&theater>

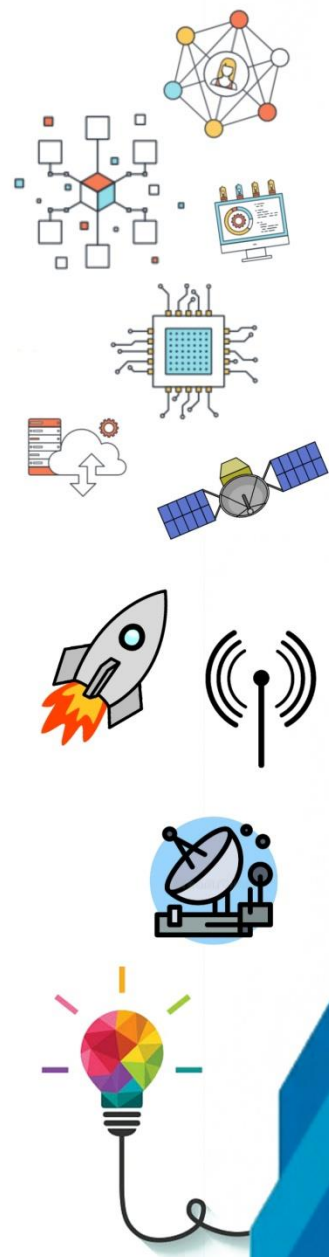
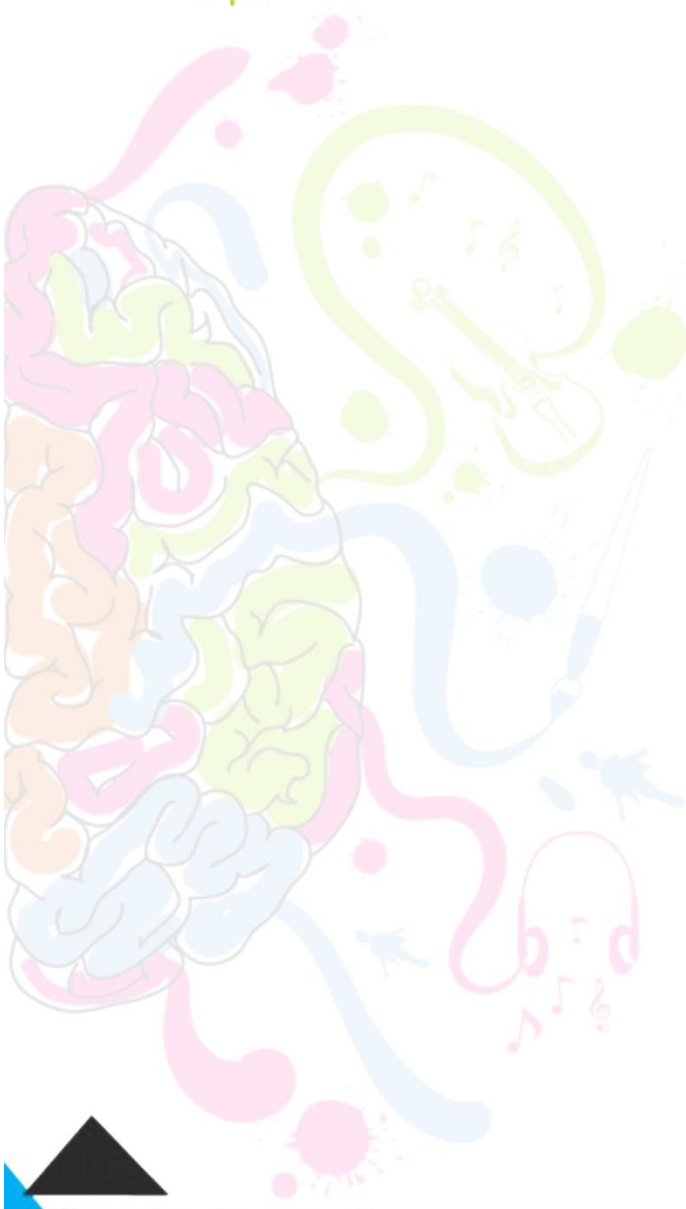
<https://www.facebook.com/kitsguntur.18>

Twitter Link

<https://twitter.com/kitsguntur>

Website Link (sample Link)

http://kitsguntur.ac.in/site/kitcontent.php?page_id=130



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