

## RISE KRISHNA SAI PRAKASAM GROUP OF INSTITUTIONS:: ONGOLE (APPROVED BY AICTE-NEW DELHI, AFFILIATED TO JNTUK KAKINADA)

AN ISO 9001:2015 Certified Institute

#### **Department of Electronics and Communication Engineering**

Report on

Workshop

#### "HANDS ON SCI-LAB AND ITS APPLICATIONS IN ECE"

Resource persons

#### 1.Dr. J. Lakshmi Narayana

Professor and HOD Department of ECE POTTI SRIRAMULU CHALAVADI MALLIKARJUNA RAO COLLEGE OF ENGINEERING AND TECHNOLOGY

2. Mr. A. Ramesh,

Assistant professor Department of ECE
POTTI SRIRAMULU CHALAVADI MALLIKARJUNA
RAO COLLEGE OF ENGINEERING AND TECHNOLOGY
3.Mr. S. Pradeep Kumar

Assistant professor Department of ECE
POTTI SRIRAMULU CHALAVADI MALLIKARJUNA
RAO COLLEGE OF ENGINEERING AND TECHNOLOGY

On

29th November 2018

#### **INTRODUCTION TO SCILAB:-**

**SCILAB** is a free and open source, cross platform computational package and high level oriented programming language. It can be used for signal processing, statisticalanalysis, fluid dynamics simulations, numerical optimization and modeling, simulation of explicit and implicit dynamical systems and (if the corresponding toolbox is installed) symbolic manipulations.

Scilab is one of the two major open-source alternatives to MATLAB, the other one being GNU Octave. Scilab puts less emphasis on syntactic compatibility with MATLAB

This allows users to rapidly construct models for a range of mathematical problems. While the language provides simple matrix operations such as multiplication, the Scilab package also provides a library of high-level operations such as correlation and complex multidimensional arithmetic operations.

#### **HISTORY:-**

Scilab was created in 1990 by researchers from INRIA and ENPC. It was initially named Ψlab (*Psilab*). The Scilab Consortium was formed in May 2003 to broaden contributions and promote Scilab as worldwide reference software in academia and industry. In July 2008, in order to improve the technology transfer, the Scilab Consortium joined the Digiteo Foundation.

In February 2017 Scilab 6.0.0 was released which leveraged the latest C++ standards and lifted memory allocation limitations.

Since July 2012, Scilab is developed and published by Scilab Enterprises and in early 2017 Scilab Enterprises was acquired by Virtual Prototyping pioneer ESI Group

#### **SCILAB EXISTANCE INTO RISE:-**

Our Principal, BoardOf Directors A.V.bhaskar Rao sir and head of the department ECE Ch.venugopal reddy sir got combined together made a milestone and created a great platform for the students who are pursuing B.tech 2<sup>nd</sup> year to get practical knowledgeabout the scilab. They made effect to conduct a workshop with one of the resource persons DR.J.L.Narayana, who is expert in scilab and his team to introduce the scilab to the students which will be helpful to analyze the high level technical subjects

#### **SCHEDULE OF WORKSHOP:-**

The workshop has conducted for three working days. On the first day we got a basic theoretical knowledge later it made to write code for generating signals. On second day the topics went to high level but understandable to generate the outputs. On third day we have got full knowledge about how to use the scilab. The total work done is clearly explained below.

#### DAY-1 (29-NOVEMBER-2K18):-

On this day, we have a workshop on SCILAB which is alternative to matlab .We learned many technical applications by using SCILAB. For other computer languages, we must **ne mired** the support of expert in order to learn, but for scalar simply by using pdf provided by the sir we can learn. On morning section, we had a lecture, means introduction to scilab, by DR.J.L.Narayana sir .Most of the students come to brief understand by introduction itself.



Our HOD Ch.Venugopal reddy sir received the work shop head, resource person DR.J.L.Narayana sir with a flower bouquet



Dr.J.L.narayana sir taking a class on brief introduction on SCILAB

On afternoon session, we had a lab session on the topic "HANDS ON IN SIGNAL PROCESSING" by Mr.S.Pradeep Kumar sir. Any program me in the matlab end with in 10lines, as we take other computer languages we need to type a program of minimum 20 lines and maximum 100 lines. This is the main advantage. It is very easy to install, it is free of cost .Simply, it's good as a technical language



Mr.S.Pradeep Kumar sir giving instruction to students that how to access SCILAB

#### **DAY 2 30-NOVEMBER-2K18:-**

On 2<sup>nd</sup> day of our workshop we have known many things in waves, antennas etc..., andIN this session we have "HANDS ON IN ELECTROMAGNETIC, MICROWAVE AND ANTENNAS. Which was taught by Dr.J.L.Narayana and we also learnt how antennas work and the introduction and the process of that with some examples of our daily life and how the wave fields, field lines of our related subjects.

By listening those topics we had very much interest in knowing new things our subjects in advance or in before only by presentation.



On account of sessions finished by Dr.J.L.narayana sir, principal sir saying few things about workshop class given by Dr.J.L.narayana sir.



A small gift is presented to Dr.J.L.narayana by our management staff.

Programming codes were new in such way that we can easily learn. Everything writing in theory or in matter is a waste of time. So this time can be used for learning new things and we can simply type and execute the program within less time or in seconds. So that time will not be wasted. In the afternoon session we have Mr.A.RAMESH Sir and in this lab we can write the programs of Switching Theory and Logic Design .and also we can write for conversions and executing of technical language. This makes to learn some more about Scilab

### **DAY-3 1<sup>ST</sup> DECEMBER 2K18:-**

On 3<sup>rd</sup> day in the morning session we have the Mr.A.Ramesh sir to know some more about our core subjects and their programmers in SCILAB that is "HANDS ON IN IMAGE AND SIGNAL



In memory of making workshop grand success, a photo where all staff and students who attend scilab.

PROCESSING" and having a lot of knowledge in scilab. The topics of Waves and signals and if a machine like car having eyes and ears etc. and sense like knowing the inner feelings of our mind .And we also learn how the signals are formed when we talk or when we make a sound . And its applications in our life We also learn how to convert a black and white image into color image mixing of colors and their formation. From the afternoon session we have hands on in digital designs which were thought by Mr. A.Ramesh.Having a work shop of these three days support us and gave a clarification about how to write a program in scilab in simple and short lines and also helped us to learn many new things.

# రైజ్లో ముగిసిన సైల్యాబ్ శిక్షణాతరగతులు







ఒంగోలు, మేజర్న్యూస్ : స్థానిక వల్లూరు కళాశాలకు చెందిన దాగ లక్ష్మీ నారాయణ, వారి సమీపంలోని రైజ్కృష్ణసాయి ఇంజనీరింగ్ సహయ శిక్షకులు ఎ. రమేష్, యస్. కళాశాలలో తేది 29 నవంబరు నుండి డిసెంబరు (పతాప్కుమార్గార్లచే ఇ.సి.ఇ. విద్యార్ధులకు ఎలక్ష్మా 1వరకు మూడురోజులపాటు ఐ.ఇ.టి.ఇ. సంస్థ మ్రాగ్నెటిక్ పీల్డ్, సిగ్నల్ ప్రాసెసింగ్, ఇమెజ్ అనుబందంతో బి.టెక్ సెకండ్ ఇయర్ ఇ.సి.ఇ. (ప్రాససింగ్ డిజిటల్ సిస్టమ్స్ కోర్సులపై సై బ్రాబ్ద్వారా విద్యార్ధులకు సైల్యాబ్ శిక్షణా తరగతులు జరిగినట్లు సిమ్ములేషన్లలో శిక్షణ నిచ్చారు. ఈ సందర్భంగా రైజ్కృష్ణసాయి కళాశాలల సెక్రటరీ శిద్దా కళాశాల డైరెక్టర్ దా॥ ఎ.వి. బాస్కరరావు ఈశిక్షనా తరగతులలో విద్యార్ధులు, హనుమంతరావు తెలిపారు. ఈ శిక్షణా తరగతులకు 🏻 మాట్లాడుతూ సైఆ్యబ్ ద్వారా విద్యార్థులకు ఎన్నోకొత్త (పి.యస్.సి.) పొట్టిశ్రీరాములు ఇంజనీరింగ్ విషయాలను నేర్పిందుకు ఉపయోగపడుతుందని, పాల్గొన్నారు.

ముఖ్యంగా విద్యార్భలకు టెక్నికల్గా ఎంతగానో ఉపయోగపడుతుందని తెలియజేశారు. ఈసందర్భంగా ఇ.సి.ఇ. విబాగాదిపతి డా॥ వేణుగోపాల్7ెడ్డి మాట్లాడుతూ ఈ శిక్షణా తరగతులో నేర్చుకున్న అంశాలపైన పరిశోదనలు చేసి మంచిపలితాలను విద్యార్ధులు పొందాలని కోరారు. విభాగాధిపతులు ఇ.సి.ఇ. విభాగపు అద్యాపకులు



Sun, 02 December 2018 epaper.suryaa.com/c/34515090



## రైజ్*లో ముగిసిన శిక్షణ* తరగతులు

ఒంగోలు(విద్య), డిసెంబరు1 : స్థానిక రైజ్ కృష్ణసాయి ఇంజనీరింగ్ కళాశాలలో మూడు రోజులుగా బీటెక్ ద్వితీయసంవత్సరం ఈసీఈ విద్వారు లకు నిర్వహిస్తున్న శిక్షణ తరగతులు శనివారం ముగిసినట్లు కళాశాల సెక్ర టరీ శిద్దా హనుమంతరావు తెలిపారు. ఐయీటీయూ సంస్థ అధ్వర్యంలో శిక్ష ణలు జరిగాయి. కార్యక్రమంలో కళాశాల డైరెక్టర్ ఎ.వి. భాస్కరరావు, ఈసీఈ విభాగాధిపతి డాక్టర్ వేణుగోపాల్రెడ్డి తదితరులు పాల్గొన్నారు.



Sun, 02 December 2018 ട്ടാള് https://epaper.andhrajyothy.com/c/34514676



Headlines came in newspapers on account of conducting work shop in our college.

Coordinator HOD