

## **ONE WEEK STTP ON “EMERGING TECHNOLOGICAL TRENDS IN POWER ELECTRONICS”**

**Dates: 6th July 2015 to 11th July 2015**

**Coordinators: Prof. Shikha Shrivastava, Prof. Asha Durafe**

An ISTE approved one week STTP on “Emerging Technological Trends In Power Electronics” was conducted from 6th July 2015 to 11th July 2015. The program was started by lighting lamps for the goddesses of education Lord Saraswati by our dearest I/C Principal Dr. V. C. Kotak.

Many eminent resource persons from the relevant field like Dr. B.G Fernandes (IITB), Dr. Vivek Agarwal (IITB), Dr. Sincy George (FRCRIT), Dr. Sandhya Save(TCET), Dr. Vishwesh Vyawahare (RAIT), Dr. Anjali Deshpande, Prof.Prabhu (VIT) and Prof. B.B.Pimple (SPCE) had shared their knowledge in the subject of Power Electronics.

An Industrial visit was organized at E.S.D safe Electronics lab, Indian Railways as a part of STTP. The participants have gained immense knowledge on various motor, drive schemes, various parts of a locomotive through the visit.







**Event Number: 02.**  
**Event name: All about Editing**  
**Date: 22<sup>nd</sup> August 2015**  
**Event conducted by speaker: HARSH SHAH**

ISTE SAKEC arranged a video editing workshop for the students of SAKEC from all branches. Students attended the workshop with great enthusiasm. We aimed to make them familiar with the software called 'Adobe After Effects'.

The workshop was held on 22<sup>nd</sup> August, 2015. Harsh Shah (T.E-IV) was the speaker. The workshop was conducted on the first floor in lab 102 in two slots. The first slot was held from 9.30-1 and the second slot was held from 1:45-5. The students were strangers to the software so the workshop proceeded with the explanation of each function in software. A better understanding developed among the students by knowing each and every function, which led to the development of basic knowledge of editing skills helpful for future purposes.







INFORMATION TECHNOLOGY DEPARTMENT  
&  
Indian Society for Technical Education

Name of the Event: **"My Phone-My App-Using  
Android"**

Event held on 12<sup>TH</sup> September 2015 from 9:00 a.m. to 1:00 p.m.

CO-ORDINATOR: Pramila Shinde (Asst. Prof.)

Speakers: Vidit Shah (B.E. IT)

Anuj Shah (B.E. IT)

ISTE SAKEC in association with Information Technology department organized an Android app workshop for the students of SAKEC from all branches. Students attended the workshop with great enthusiasm. We aimed to make the students familiar with Software called Android.

The workshop was held on 12<sup>th</sup> September, 2015. Workshop was conducted on the 5<sup>th</sup> floor 507 lab, from 9:30am - 2:00pm. The participants were not familiar with the software, so the workshop begun with explanation of versions and features of Android operating system. All the participants were taught to develop basic Calculator application. It was followed by App on Intents. An advanced app like SGPI calculator was also covered. Last topic for the workshop was Android SQLite Database connectivity.

Participants were given hands on throughout the session.

A better understanding developed among participants by knowing each and every function, which led to the development of basic knowledge of app making skills for future purposes.

All participants were awarded Certificates at the end of the workshop. All volunteers and Speakers were felicitated which was followed by thanksgiving by the coordinator of the workshop.



Event name – Seminar on Financial Management by SEBI

Date-16<sup>th</sup> January 2016

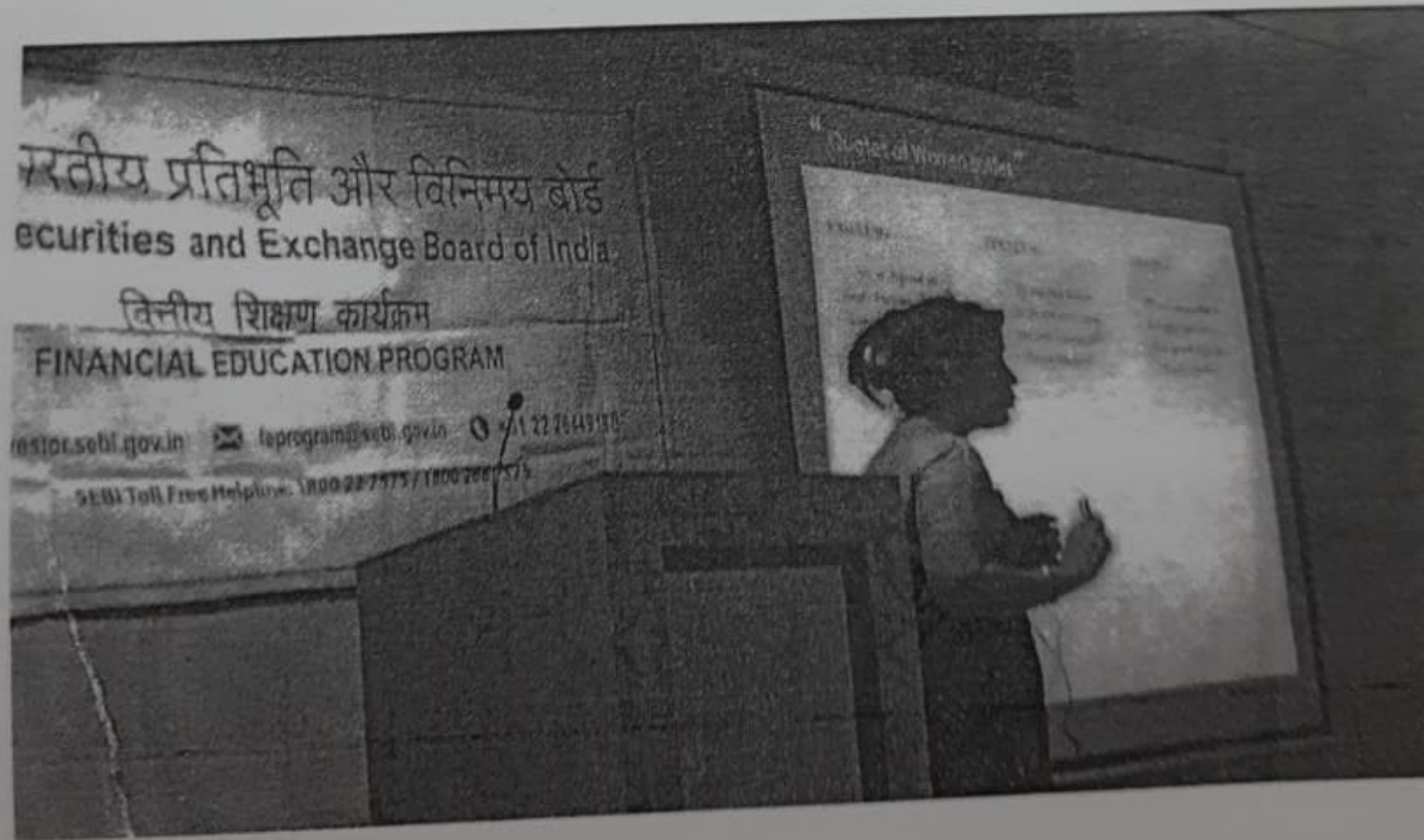
Day- Saturday

Event conducted by speaker:Neelam Bhardwaj

ISTE SAKEC arranged a seminar for the Staff members of SAKEC. It aimed to make the staff familiar with 'Do's and Don'ts' of investment in financial products, various types of financial products etc.

The workshop was held on 16<sup>th</sup> January and was conducted on the 4<sup>th</sup> floor Auditorium from 10:30-12:30. This seminar was conducted only for the staff, organised by ISTE staff council and volunteered by the student council. SEBI (Security and Exchange Board of India) seminar presented in various modules: Retirement Planning, Executives, Middle income group, Home makers, college students, school children etc. After the program, each participant was given a booklet, free of any charge, on "Financial Planning for the specific target group" published by SEBI.

This event was a success; it enhanced the knowledge of the staff regarding the various financial schemes.





## IEEE SAKEC

in association with **Electronics Department**

presents workshop on

**MATLAB**

**Event Name:** *MATLAB WORKSHOP*

**Head:** *Aditi Dumbre*

**Co-Head:** *Yogita Mahajan*

**Speaker:** *Prof. Salabha Jacob*

*Assistant Professor,*

*Electronics Department,*

*Shah & Anchor Kutchhi Engg. College*

No. of Participants: 20

Saturday, 13 ~~October~~ 2016  
*Feb*

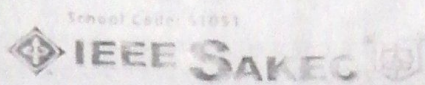
## MATLAB WORKSHOP REPORT

There were some math & computer enthusiasts somewhere between the flecks of chalk powder dancing rhythmically in the sun's rays inside the classrooms who were interested to learn something new known as 'MATLAB' which is a high-level language that is used by millions of engineers and scientists worldwide in an interactive environment. A many enthusiasts registered themselves for the Workshop. They were ready to explore and visualize ideas and collaborate across disciplines including signal and image processing, communications, control systems, and computational finance. As said in a famous proverb, "When the student is ready, a teacher arrives." Prof. Salabha Jacob was the featured speaker. This was just a clip of the movie for the event that was organized by IEEE-SAKEC in association with Electronics Engineering Department (ETRX) at Lab No: 501,502 on 13th of February.





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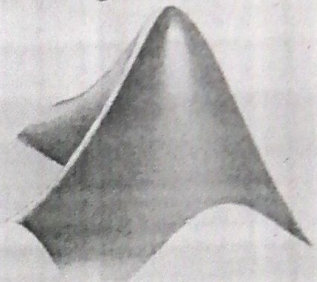
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PRESENTS WORKSHOP ON

**MATLAB**

by Prof Salabha Jacob



Date: 13th February 2016  
Venue: Lab No. 501/502

MATLAB (**matrix laboratory**) is a multi-paradigm numerical computing environment and fourth-generation programming language. It is a proprietary programming language developed by MathWorks & MATLAB allows matrix manipulations, plotting of functions and data, implementation of algorithms, creation of user interfaces, and interfacing with programs written in other languages, including C, C++, Java, Fortran and Python. Although MATLAB is intended primarily for numerical computing, an optional toolbox uses the MuPAD symbolic engine, allowing access to symbolic computing abilities. This workshop was conducted by IEEE-SAKEC at an institute level, which is a definite platform to learn all the basics & core methods of administrating. Words sometime fall short to describe certain things.





Earlier on in the day, our speaker Ms. Salabha Jacob inaugurated the workshop with the auspicious introduction to the software, "MATLAB". She explained all the necessary tools that are used in while administrating with extreme proficiency as it is a high-level program, which has many interactive features & it operates as a simple calculator. Vectors or matrix are defined and various types of plots can be created using MATLAB. We can also use few points to fit to form a polynomial. Thus, we can find roots and particular coordinate in this curve. On the other hand, MATLAB can run sequence of commands. This combines program and/or functions within MATLAB environment to make it more flexible. These programs can also combine with a Graphic User interface to make it more user-friendly. Thus, People were able to view all the tips & tricks on the prodigious screens put up with the help of projectors.

She explained that MATLAB can be run from the start menu or from a desktop icon. After starting, the MATLAB desktop opens. We can use the prompt (`>>`) in the command window to define variables or run functions. The MATLAB environment allows us to work interactively by entering and defining variables and commands at the command windows. Essentially, the only



data objects in MATLAB are rectangular numerical matrices. There are no restrictions placed on the dimensions of a matrix, but special meaning is sometimes attached to 1x1 matrices (scalars), matrices with only one row or column (vectors). The memory required for the storage of each matrix is automatically allocated by MATLAB.

Some tips & tricks explained are as follows:

- Once the variables are defined, we can use the functions to solve mathematical problems. MATLAB has over 600 functions. It can solve matrix operations, polynomial operations, matrix arithmetic, linear equations, Eigen-values, singular values, matrix factorizations, polynomial roots, evaluation, curve fitting, and partial fraction expansion etc.
- After finding out the result on command window, we can display vectors and matrices as graphs, as well as annotation and printing these graphs. To create presentation graphics, we can prepare data, call elementary plotting function, select line and marker characteristics, set axis limits, tick marks and grid lines, and annotate the graph with axis labels, legend, and text.
- We can be able to tailor MATLAB by creating another functions and programming scripts of MATLAB. The name of each file must be ended in ".m" and must be found on MATLAB's search path. These statements are not displayed by default while an M-file execute.





The thing with MATLAB is that the Team was able to see ingenious ideas & efforts put up by all the enthusiasts present during the workshop as many attendees asked witty questions & cleared their doubts. The attendees got to know that MATLAB provides an excellent platform for the computational requirements of undergraduate and research studies & which is why it is also widely used in industry and commerce throughout the world. That is why; many people recommend it to mathematics, science and engineering students & also, in the mathematics and many engineering degree courses, it is very widely taught and used at both undergraduate and graduate levels. Therefore, Mathematics students are taught MATLAB as their main computational "programming" language. Thus, the excited crowd almost came up with new wit & glorious quirks & it was truly a day to remember.







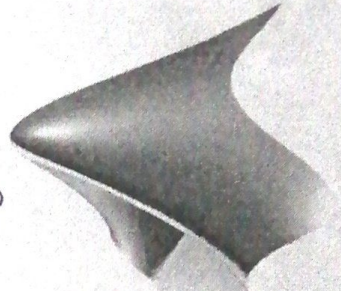
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PRESENTS WORKSHOP ON

**MATLAB**

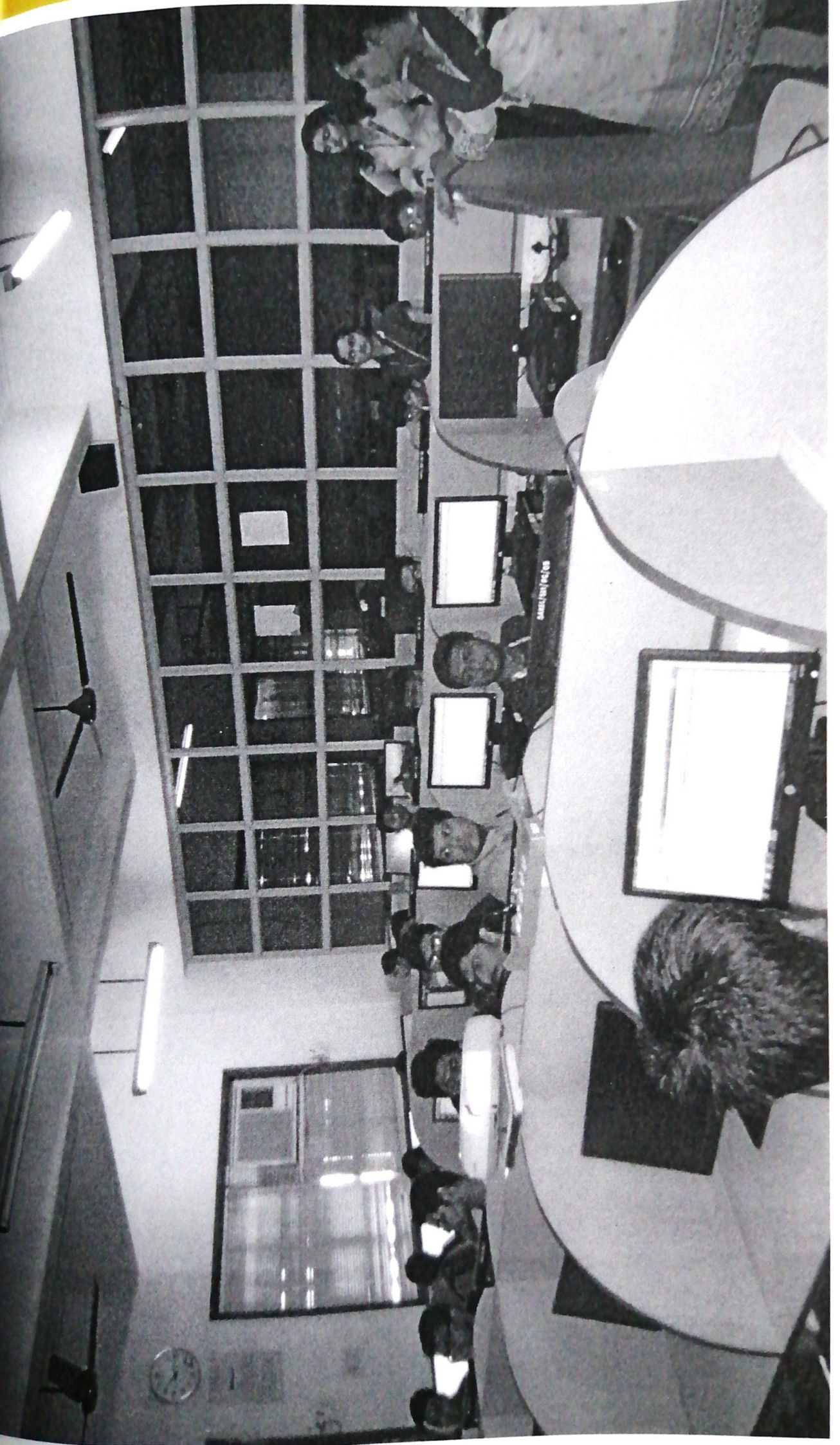
by Prof Salabha Jacob

Date : 13th February 2016  
Venue: Lab No. 501/502

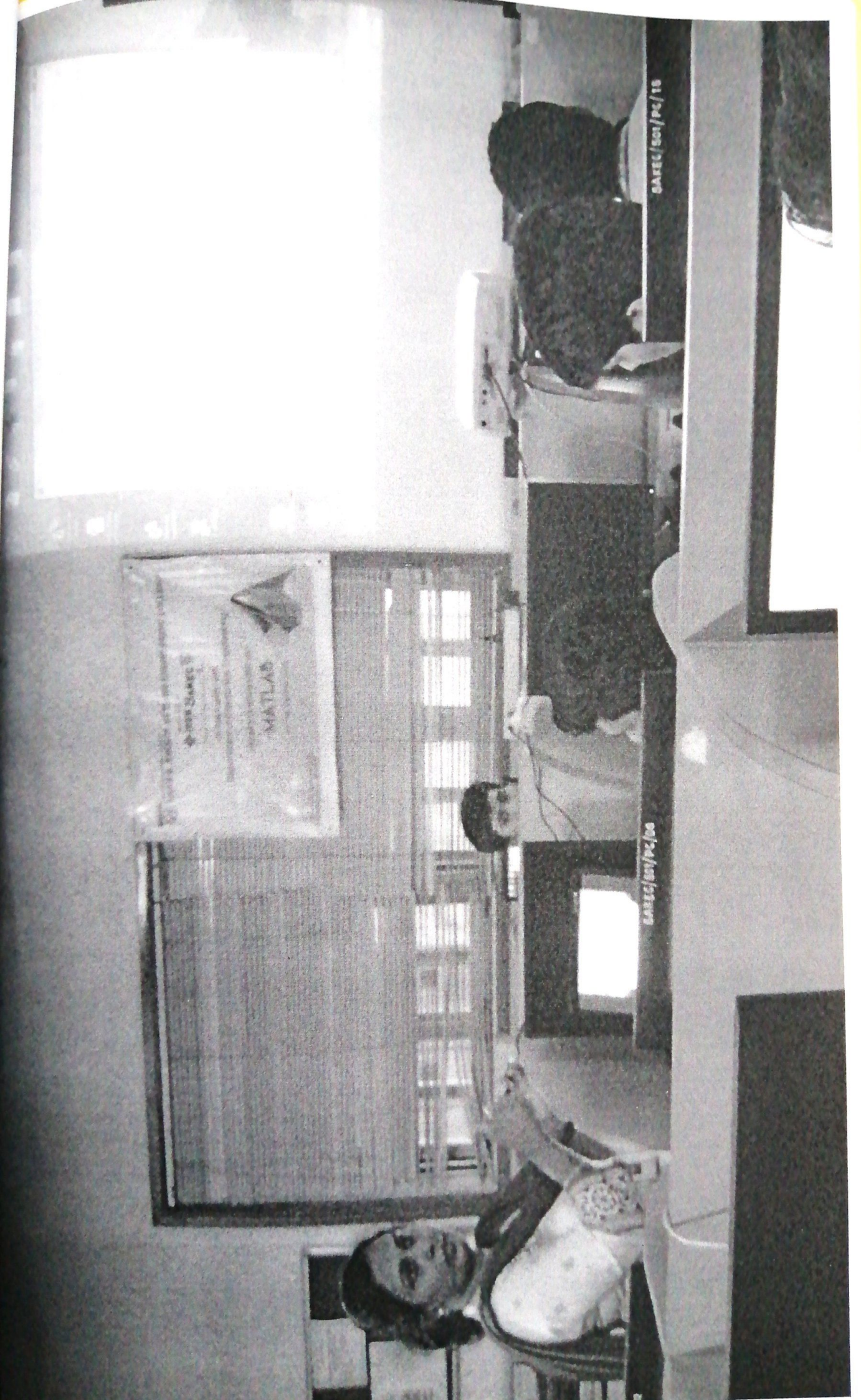


















EVENT NUMBER: 12 & 13

NAME OF EVENT: IN AND OUT OF TRANSIENT ANALYSIS I & II

DATE: 05<sup>th</sup> & 19<sup>th</sup> MARCH, 2016

EVENT CONDUCTED BY SPEAKER: PROF SHIKHA SHRIVASTAVA

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ISTE SAKEC organized a workshop on "IN AND OUT OF TRANSIENT ANALYSIS" for the students from ETRX AND EXTC branch. Students from SE, TE and BE enthusiastically registered for and attended the event.

Transient analysis is a very major and important part in every circuit. The importance of the open and close time of the circuit and according to it the behavior of the components was clearly made understand to the students.

The event was conducted in the 4<sup>th</sup> floor auditorium from 10am to 1pm. The event began with a brief introduction of inductor and capacitor & proceeded with explanation of each negative and positive possibility of the circuit. A better understanding developed in the students by knowing every component, which led to the development of a basic knowledge of their working. Various interactive questions were asked to the students with various prizes to be won. The volunteers helped the speaker reach every student to solve their doubts and made the workshop more informative and interactive.

The workshop was a success as we saw from the feedback forms given out. The participants thought it was a very useful workshop and expect such topics to be taken up in future.