

**A TECHNICAL REPORT ON PEDAGOGY IMPLEMENTED**

**Chart Presentation, Student Seminars & Animated Video Presentation**

(INSIDE THE CLASS ROOM, HITAM)

**Course: APPLIED PHYSICS**

**TOPIC: SEMICONDUCTORS**

**PN junction diode & Zener diode**

**I-I SEM BRANCH: CSE B**

**AY: 2021-22**

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**Gowdavelli,vill Medchal, Hyderabad-501401**

## **POSTER (CHART) PRESENTATION**

### **IMPLEMENTATION:**

- Students are divided in to 7 groups
- Each group consists of maximum of 6 members
- Topics are assigned a week before for each group like construction and working of PN

UNCTION DIODE and ZENER DIODE

- Ask them to prepare the charts with specific figures
- Frame the rubrics for assessment
- According to the Rubrics the assessment have been done

### **Rubrics:**

**Topic 1 Rubrics: Total 10 M**

1. Explanation of P Type and N Type Semi conductor formation - 2M,
2. Explanation of PN Junction Formation - 2M
3. Explanation of Forward Bias and Reverse Bias operation of PN Diode- 2 M
4. V- I Characteristics of PN junction Diode- 2 M
5. Slides preparation and Presentation – 2 M

**Topic 2 Rubrics: Total 10 M**

1. Explanation of P Type and N Type Semi conductor formation - 2M,
2. Explanation of PN Junction Formation - 2M
3. Explanation of Forward Bias and Reverse Bias operation of Zener Diode- 2 M
4. V- I Characteristics of Zener Diode- 2 M
5. Slides preparation and Presentation – 2 M

**Evidences:**



**OUTCOME:**

Students are able to explore the concept behind the topic with visualization

**Text books:**

Applied Physics – MN Avadhanulu – S Chand Company limited

**CONTENTS BEYOND THE SYLLABUS:**

No contents were covered that are beyond the syllabus

**TIME TAKEN TO COMPLETE THE ACTIVITY:**

Time allotted for each group is 6 minutes

Its completed for all the batches within 90 minutes of time

**SUGGESTIONS GIVEN TO SLOW LEARNER:** The concept was explained again and he is asked to study the topic in the classroom and project it on the same lab for 5 min again

**CHALLENGES:**

Involving all the students in participation

**NO.OF STUDENTS PARTICIPATED: 45**

**NO.OF BATCHES MADE: 7**

**STUDENT FEEDBACK:**

1. Activity was interesting as it is happened in the classroom
2. Could understand the topic well
3. Could relate to the theory properly

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## Animated Video Presentation

### INTRODUCTION ON PEDAGOGY:

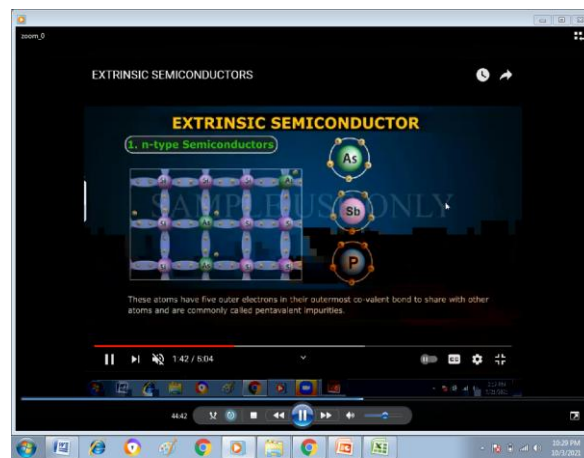
I have been following frequently out of seven qualities of engineering educator the one “genuine love and concern for the learner” on focused learners paid much attention in learning through the displayed video while involving them in class room interaction with sharing of their learning’s to the class instead of pass them from the activity and I paid attention in the class in clarification of doubts about the video with constructive counseling. It’s showed great impact to turn the inattentive learners also on to the line of learning

### IMPLEMENTATION:

- Displayed the video in the class room for full length simultaneously explaining it
- Followed Brain storming session in constructive method

### OUTCOME/REFLECTIONS:

Students are able to understand the how the Charge carriers transfer can takes place in semiconductors through visualization



**Text books Referred:**

**Text books:**

Applied Physics – MN Avadhanulu

**ICT USAGE:**

- Shraed this Video thugh Whaats App for their mobiles to learn about it

**CONTENTS BEYOND THE SYLLABUS:**

No contents were covered that are beyond the syllabus

**TIME TAKEN TO COMPLETE THE ACTIVITY:**

10 min

**CHALLENGES:**

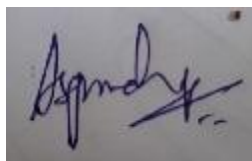
Involving all the students in participation

**NO.OF STUDENTS PARTICIPATED:** Entire Class

**NO.OF BATCHES MADE:** No batches

**STUDENT FEEDBACK:**

1. Activity was interesting inside the class
2. Could understand the topic well
3. Could relate to the theory properly



**Submitted by**

**HOD**

**Principal**

**Rambabu T**

**Assoc. Prof**