



**SNJB'S Late Sau K B Jain College of Engineering, Chandwad  
Department of Electronics & Telecommunication Engineering**

Academic Year: 2022-23	Class: TE
Semester: II	Date:3/5/2023

**Title of Innovation method/activity:** Participative Learning.

**Name of Faculty:** Prof. Rathod Y S

**Subject:** Power Devices And Circuits

**Objective:** To communicate effectively, engage the audience, and achieve the desired outcome.

**Topic Covered through Activity:** Power Electronic Applications.

**Benefits:** Participative Learning provides Enhanced understanding, Collaborative learning, stimulates thinking capacity and boosts confidence.

**The method:**

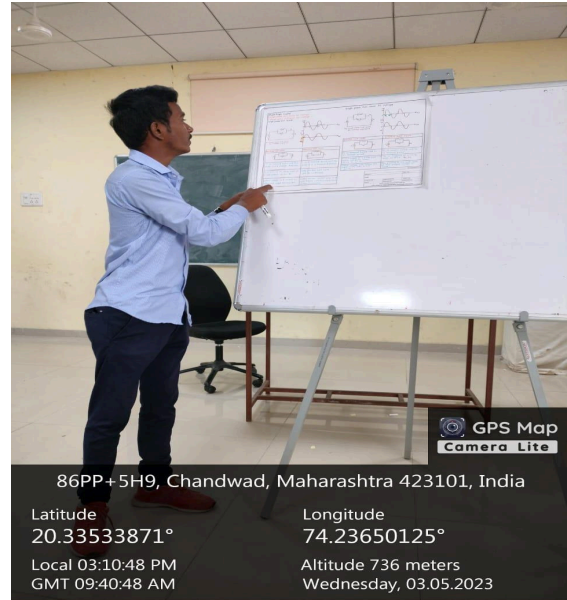
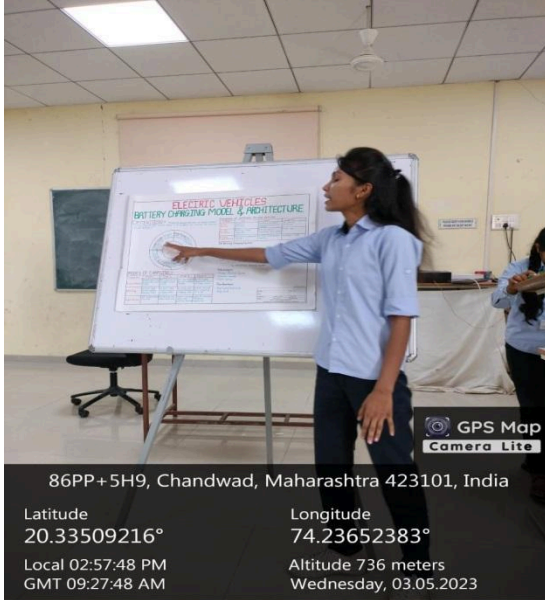
- Topics are given to group of students.
- Asked Students to prepare Chart on said topic.
- Present topic to all students.

## Impact Analysis (Show the impact of the activity in examination)

- OK
- Q6)** a) What is the need of resonant converter? Explain ZVS resonant converter with circuit & waveforms. [8]
- b) Why heatsink is used in power electronic circuits? Draw its thermal equivalent circuit. [4]
- c) What are various EMC standards? Explain any two. [5]
- Q7)** a) What is UPS? What are its types? Explain operation of any one UPS with block schematic. [7]
- b) Explain working of electronic ballast with block schematic. [6]
- c) Why driver is required for LED lamp? Explain with suitable circuit diagram working of a LED lamp drive. [5]
- OK
- Q8)** a) Explain single phase full converter drive for single phase separately excited dc motor. [6]
- b) Explain with neat diagram BLDC drive. [6]
- c) Explain various performance parameters of batteries used in battery operated power systems. [6]

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- Question on Power Electronic Applications were asked in the SPPU examination.
- Activity Picture (Add picture of the activity if possible)



**For review and critique contact: e-mail address of faculty and HOD**

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