

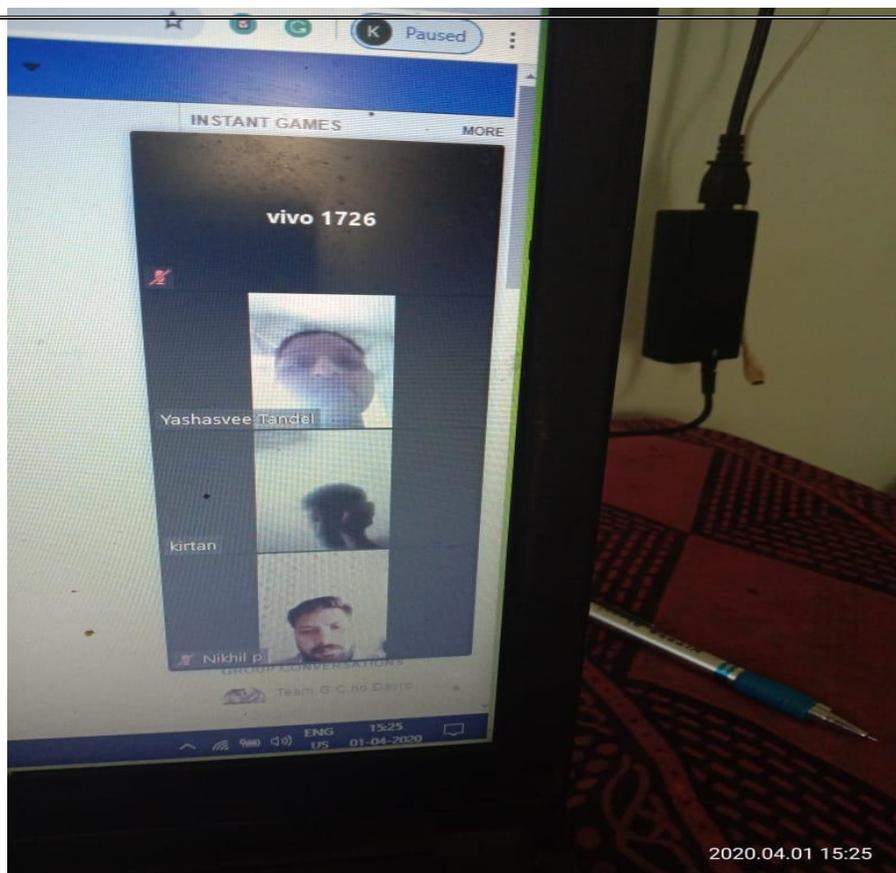
Online Interaction through a Video Lecture by

Prof. Dr. K.L Mokariya

To continue the academic enhancement of the students of Government Engineering College Valsad even during the lockdown condition due to COVID-19, various strategies are adopted by the Electrical Engineering department. Faculties of the Electrical Engineering Department are continuously monitoring and delivering content through Google classroom. Head of Electrical Engineering Department Dr. K.L Mokariya delivered the online webinar to final year Electrical Engineering students with below-mentioned objectives.

- 1) To explain the exercise given to them on Energy Conservation of equipments at their home.
- 2) Replacing the existing devices with energy-efficient devices.
- 3) Design and development of off-grid solar PV Plant at their premises.
 - a) To find the total watt-hour needed.
 - b) To calculate the watt peak needed per day while considering the panel generation factor.
 - c) To select the appropriate module of monocrystalline, polycrystalline or thin-film cell with proper justification.
 - d) Define the system voltage and to calculate the number of modules needed
 - e) To find the capacity of an inverter with considering losses.
 - f) To compare various batteries for an off-grid solar PV system and to find the appropriate battery capacity by considering the depth of discharge and days of autonomy.
 - g) To find the charge controller ratings.
 - h) To decide the MPPT, PWM or any other controller with proper justification.
 - i) To select the appropriate cable with its rating and to defined various standards for the components.

Some other exercises of TCEE (Testing commissioning maintenance of Electrical Equipment) and ECA(Energy conservation and audit was also explained and student's difficulties were resolved.



The meeting was organized on 1st April 2020. A day before all the necessary information and videos were circulated to students for getting acquainted with the online application through zoom. Video links are given below.

Video link

1 Basic understanding.

<https://youtu.be/hIkCmbvAHQQ>

2 Giving the Invitation

<https://youtu.be/XhZW3iyXV9U>

3 Basic controls

https://youtu.be/ygZ96J_z4AY

4 zoom through google calendar

<https://youtu.be/E0XmIIXcrEY>

5 webinar registration

<https://youtu.be/dz4KVADtZxg>

Kashyap mokariya is inviting you to a scheduled

Zoom meeting.

Topic: Presentation for ECA and TCEE

Time: Apr 1, 2020 03:00 PM India

Join Zoom Meeting

<https://zoom.us/j/100675057>

Meeting ID: 100 675 057

In response to the initiative, tremendous positive feedback has been received from the students. I thank Principal of the institute Dr. V.S Purani for motivation and students of the final year of the Electrical Engineering Department for their active participation.