



Innovative Teaching Learning Method used during Pandemic

Following are the innovative teaching methods used for BEE for Sem I and Sem II during pandemic

- Use of pen tab for teaching
- Recap of previous lecture at the starting of each lecture
- Use of poll (3 to 5 questions) facility of google meet at the starting of each lecture for assessing understanding of students for topics covered in previous lecture

AC through RL and RC circuit

$\cos\phi = \frac{V_R}{V} = \frac{P}{S} = \frac{P}{VI}$

$\vec{V} = \vec{V}_R + \vec{V}_L$

$\phi = -90^\circ$
 $\angle_{RL} \phi < 90^\circ$

$V_m \sin \omega t$
 $I_m \sin(\omega t - \phi)$
 $\cos\phi = \text{lag}$

$V_m \sin \omega t$
 $I_m \sin(\omega t + \phi)$
 $\cos\phi = \text{lead}$

$\phi = +90^\circ$
 $R-C \phi > 0$
 $\phi < 90^\circ$

14-07-2021 Basic Electrical Engineering, Payal Shah, SPIT



Payal Shah

Recap

Problems based on parallel circuit

Resonance in parallel circuit

$f_r = \frac{1}{2\pi\sqrt{LC}} \quad R \ll \ll L$

$= \frac{1}{2\pi\sqrt{LC}}$

$\Rightarrow \omega = \frac{1}{\sqrt{LC}} \quad \alpha = \frac{1}{\sqrt{LC}}$

$f \uparrow \Rightarrow X_L \uparrow \Rightarrow Z \uparrow$
 $X_L \uparrow \Rightarrow I \downarrow$

$I_C = I_C \sin \phi_L$
 $I = I_C \cos \phi_L$

Inductive lagging
 Capacitive leading

24-06-2021 Basic Electrical Engineering, Payal Shah, SPIT



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Electronics Engineering Department

The screenshot shows a Google Meet interface with a poll titled "Power consumed by R-L circuit is ____". The poll options and their respective vote counts are:

- Watt: 16 votes
- KVAR: 4 votes
- Power consumed by resistance: 23 votes
- Power consumed by inductor: 0 votes
- Power consumed by resistance and inductor: 9 votes

The poll is currently at "Poll 3 of 3". The name "Payal Shah" is visible on the right side of the screen.

The screenshot shows a Google Meet interface with a poll titled "In case of Supermesh ____ is common between two meshes". The poll options and their respective vote counts are:

- voltage source: 0 votes
- current source: 0 votes

The poll is currently at "Poll 2 of 3". The name "Payal Shah" is visible on the right side of the screen.



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Students appreciated the recap and poll concepts used during lecture and they wanted the teaching method to be continued

Feedback from students:

3/18/2021 8:21:54	2020200026	ARYAN JAISWAL	F. Y. EXTC	Quiz
3/18/2021 8:23:00	2020200062	OMKAR VAIDYA	F. Y. EXTC	Question's practise in every topic
3/18/2021 8:23:53	2020100019	PRATHMESH AVINASH	F.Y ETRX	quality education as giving
3/18/2021 8:24:06	2020200050	Monish Rane	F. Y. EXTC	the polls that are kept helps revise i would suggest to continue this in every lecture you to
3/18/2021 8:31:34	2020100030	Tanishq Khaimar	F.Y ETRX	Revising previous lecture's concepts

The thing which you would like to tell instructor to continue

75 responses

- Poll questions
- .
- Assignments and Question discussions.
- Poll, Revision at the start of each lecture
- all topics covered properly
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- Giving enough number of examples for a concept.
- Taking poll and recap at start of every lecture
- Solving good amount of problems in the lecture