



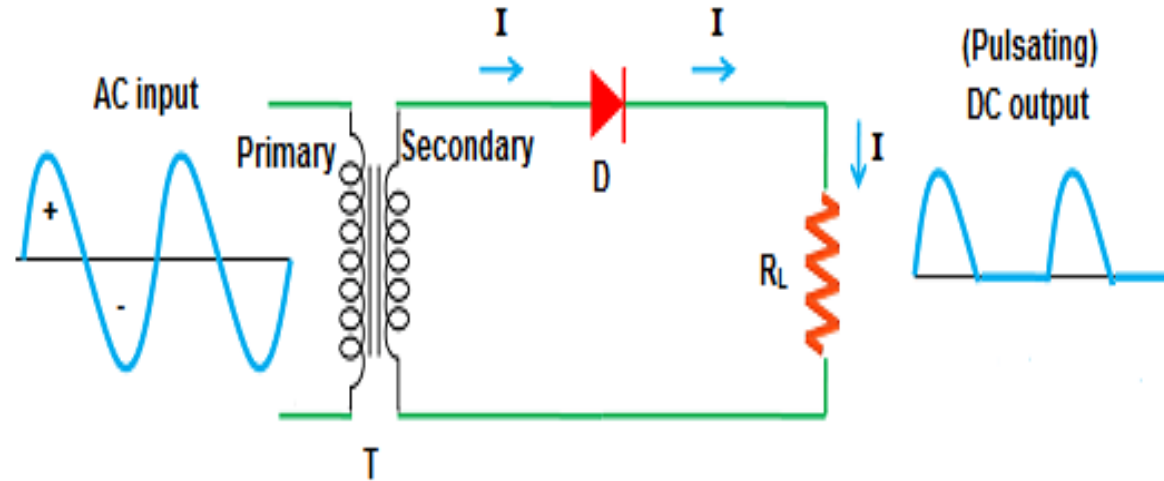
Unit 1 –

SEMICONDUCTOR DIODES

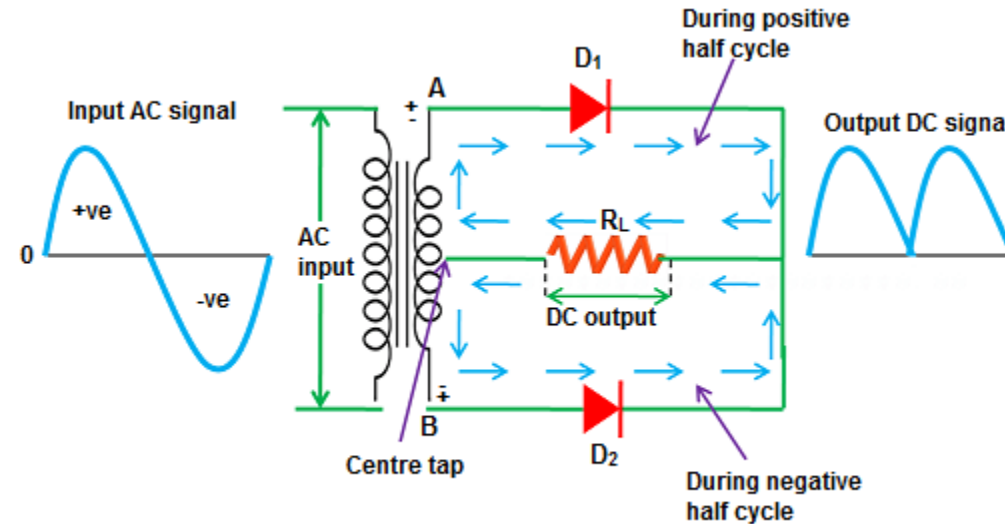
Dr. Shilpa K.C
Assistant Professor
Dept. of Electronics and
Communication
Engineering
Dr. AIT

Class 4

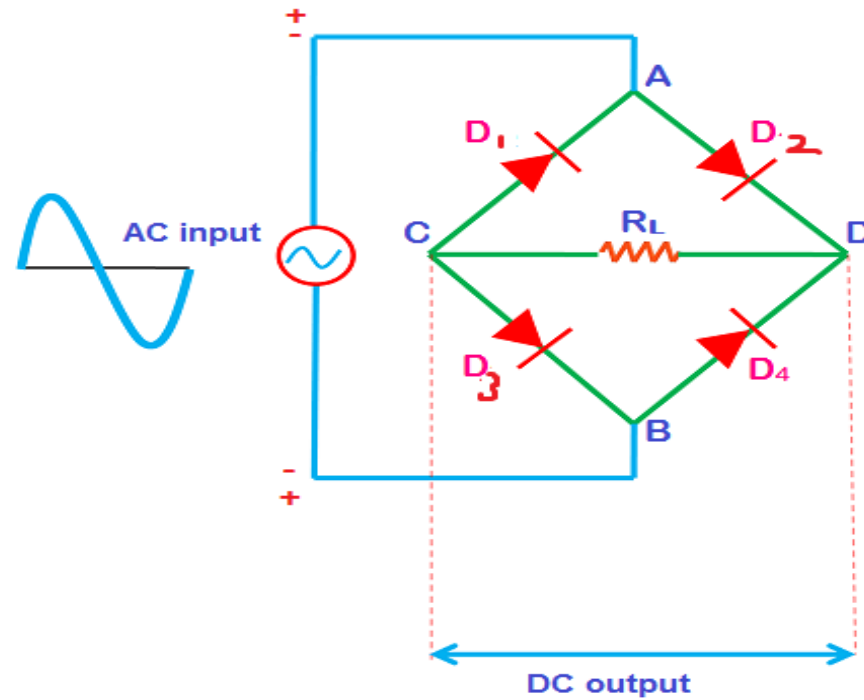
Half Wave Rectifier



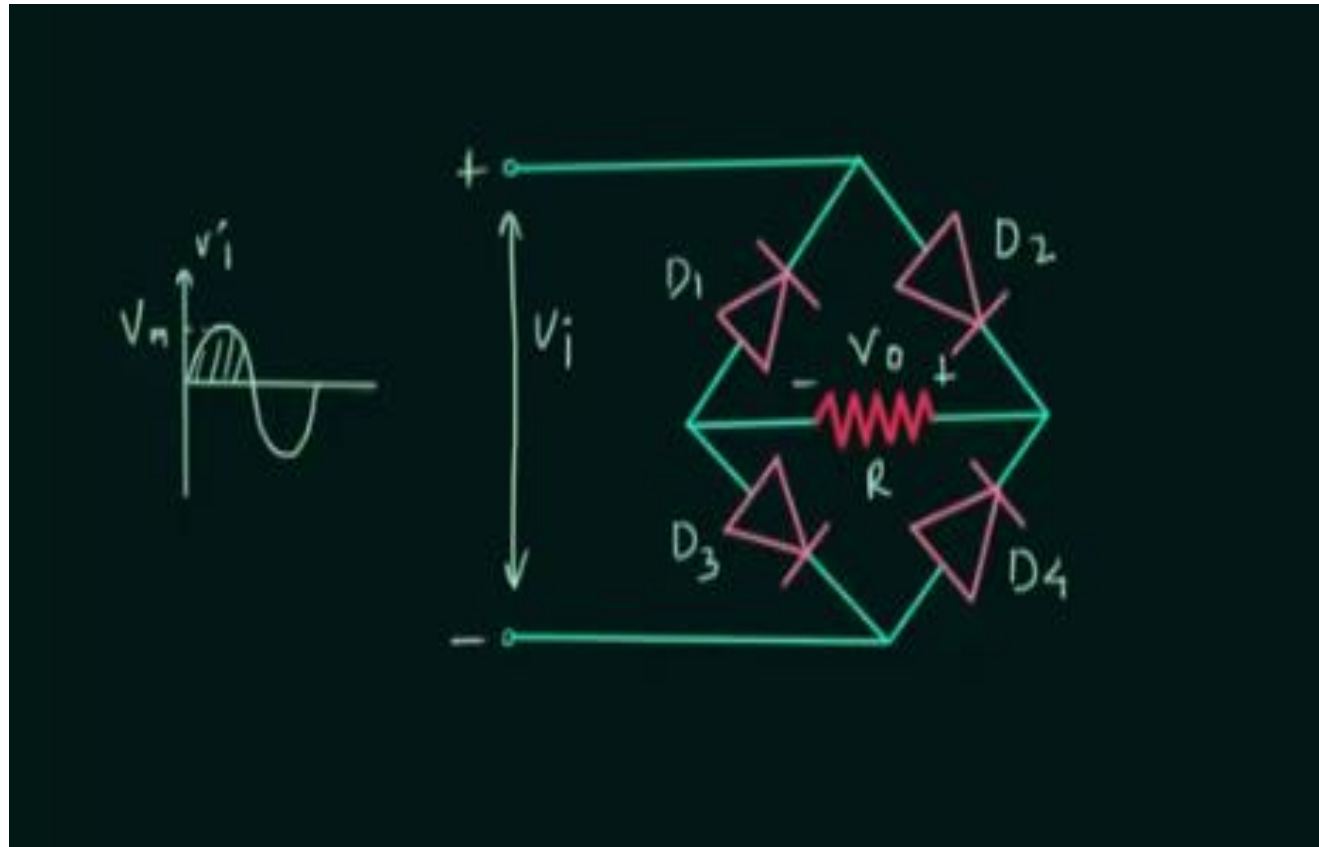
Full Wave Rectifier with centre-tapped



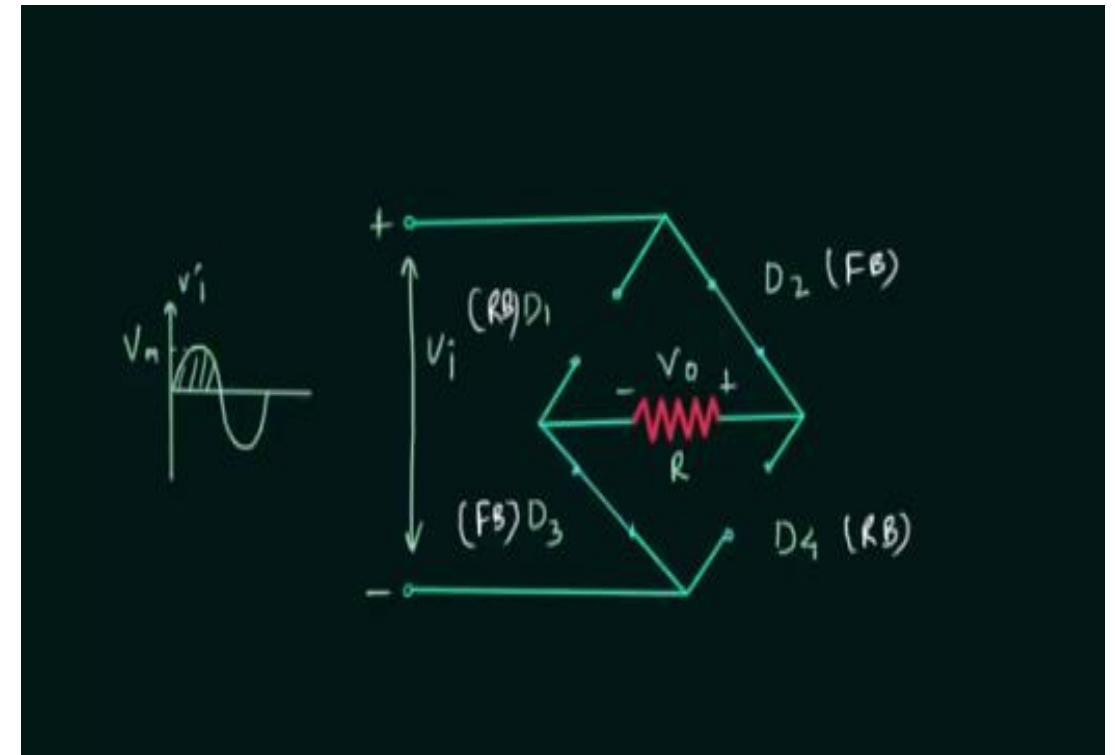
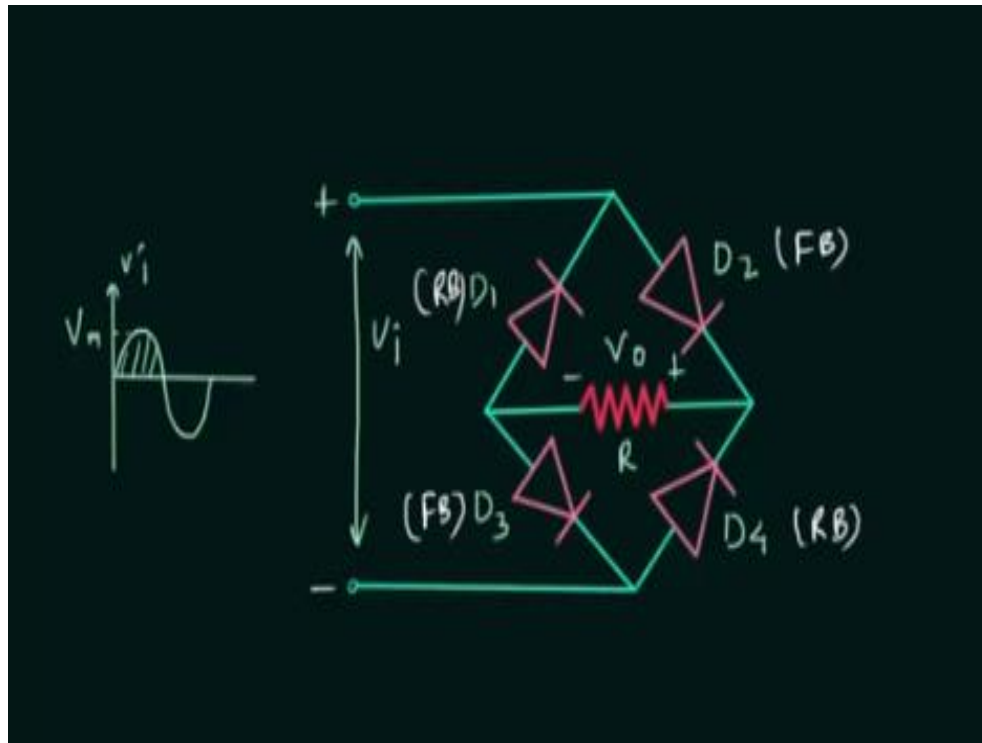
Full Wave Bridge Rectifier



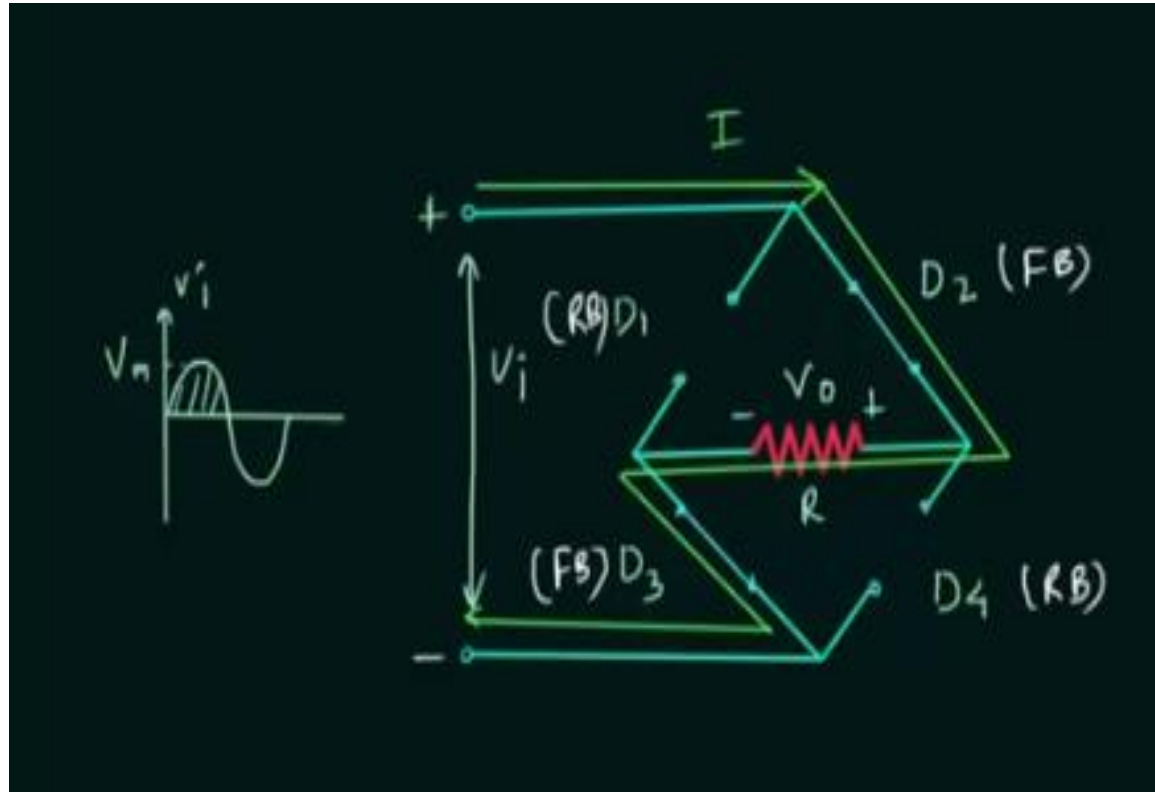
Full Wave Bridge Rectifier



Full Wave Bridge Rectifier



Full Wave Bridge Rectifier

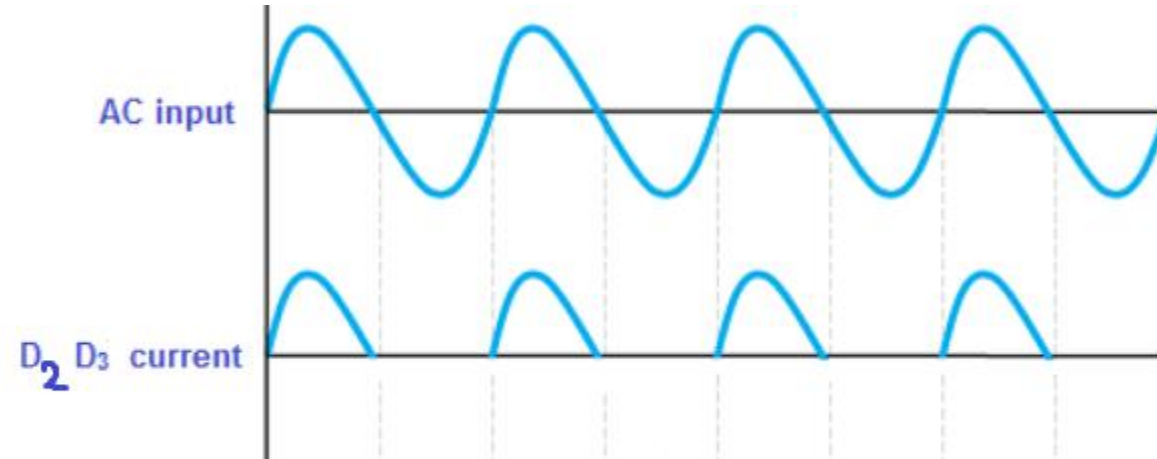


$$+v_i - v_o = 0$$

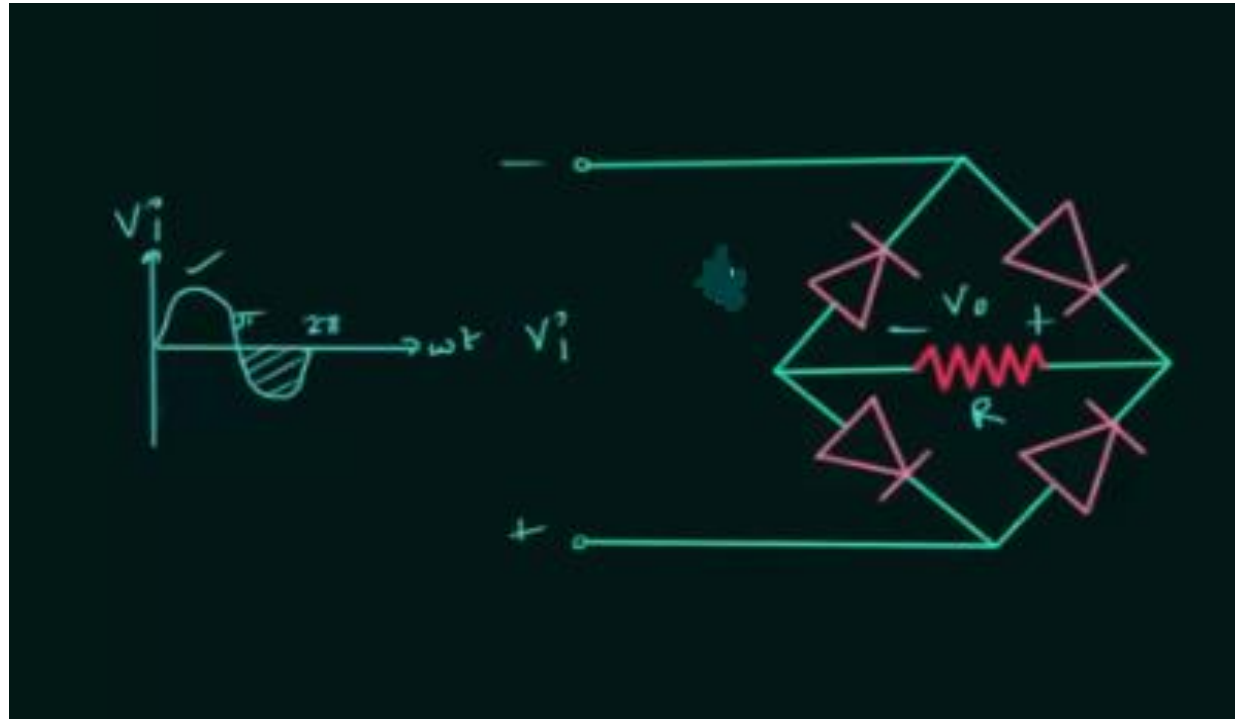
$$\boxed{v_o = v_i} \text{ ideal model}$$

Full Wave Bridge Rectifier

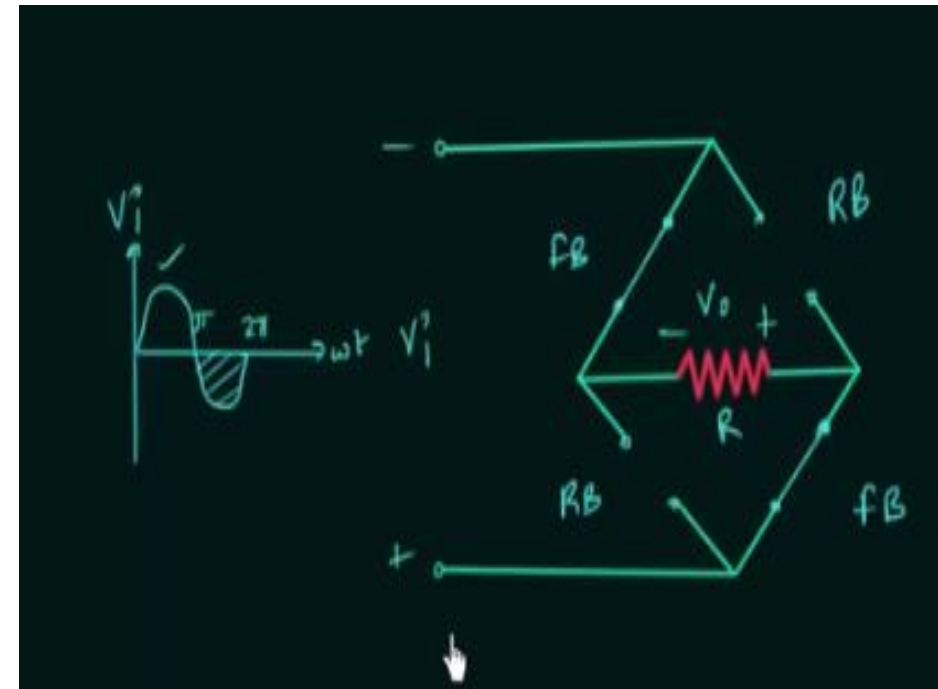
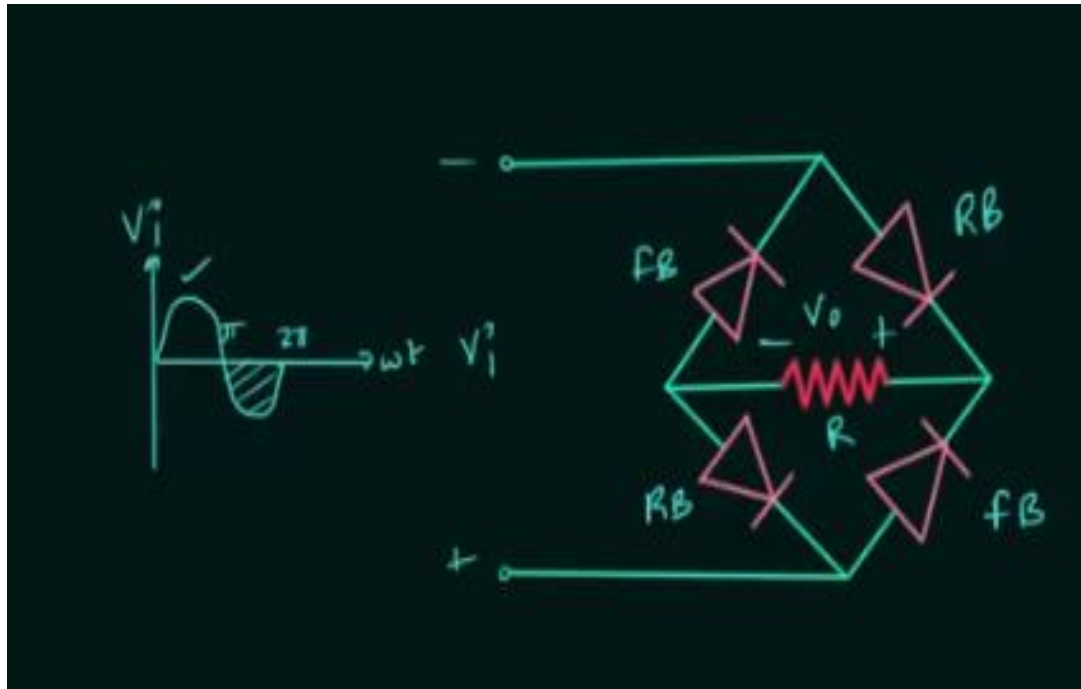
Full Wave Bridge Rectifier waveforms



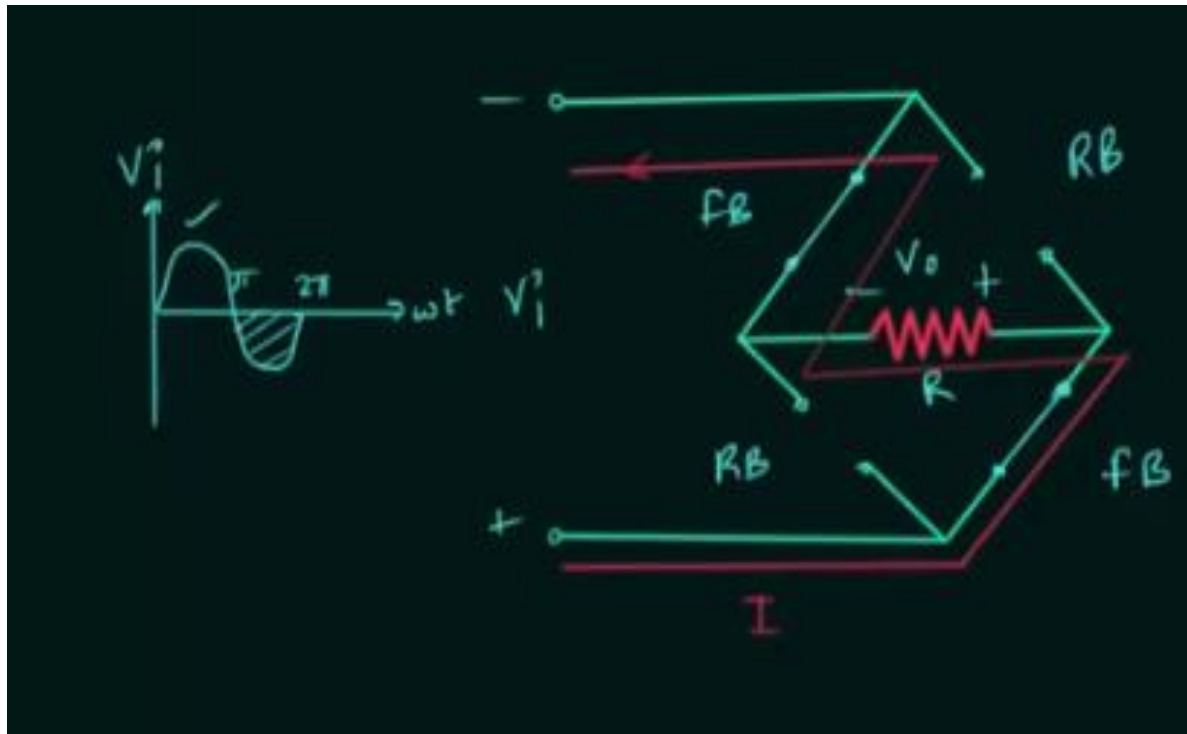
Full Wave Bridge Rectifier



Full Wave Bridge Rectifier



Full Wave Bridge Rectifier



$$+v_i - V_o = 0$$

$$V_o = V_i$$

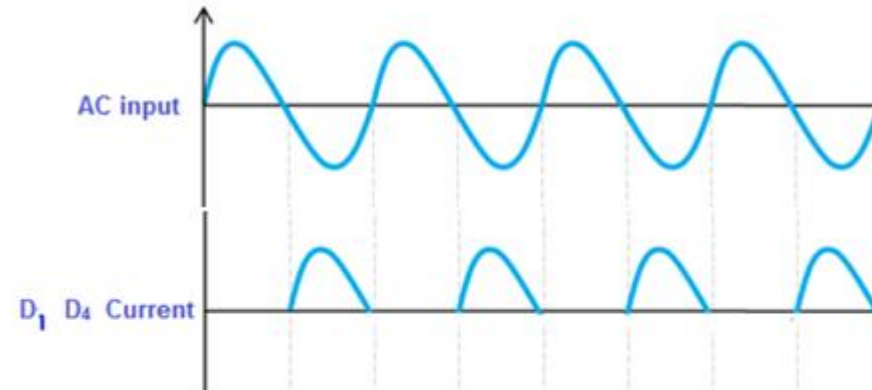


Dr. Ambedkar Institute of Technology



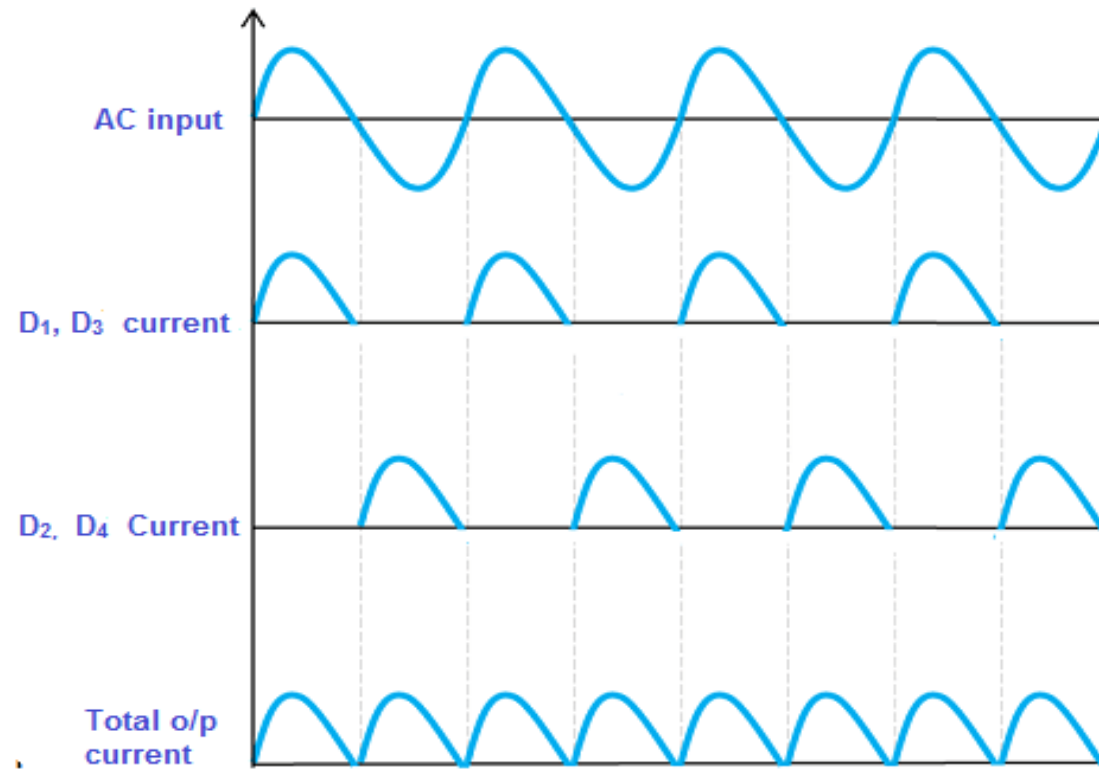
Full Wave Bridge Rectifier

Full Wave Bridge Rectifier waveforms



Full Wave Bridge Rectifier

Full Wave Bridge Rectifier waveforms



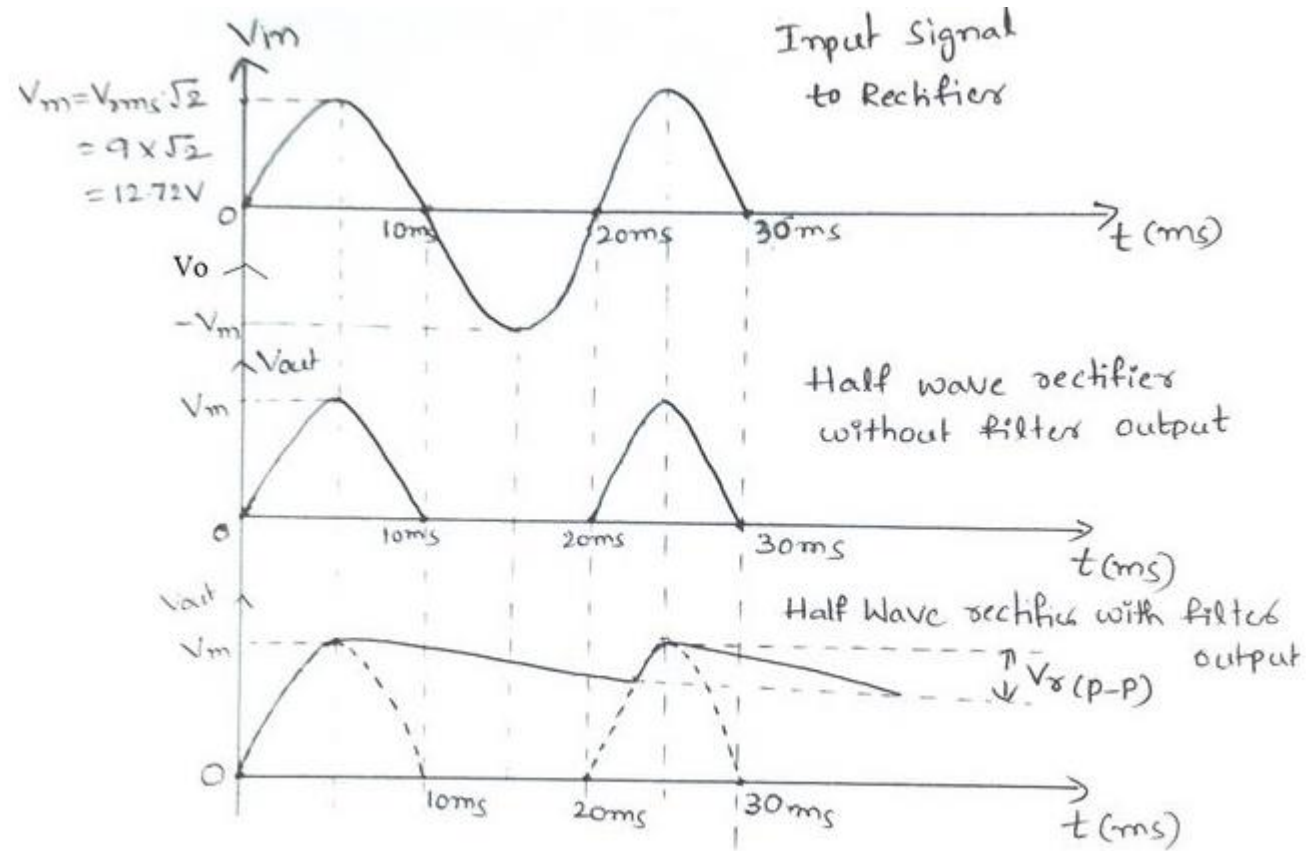


Thank You

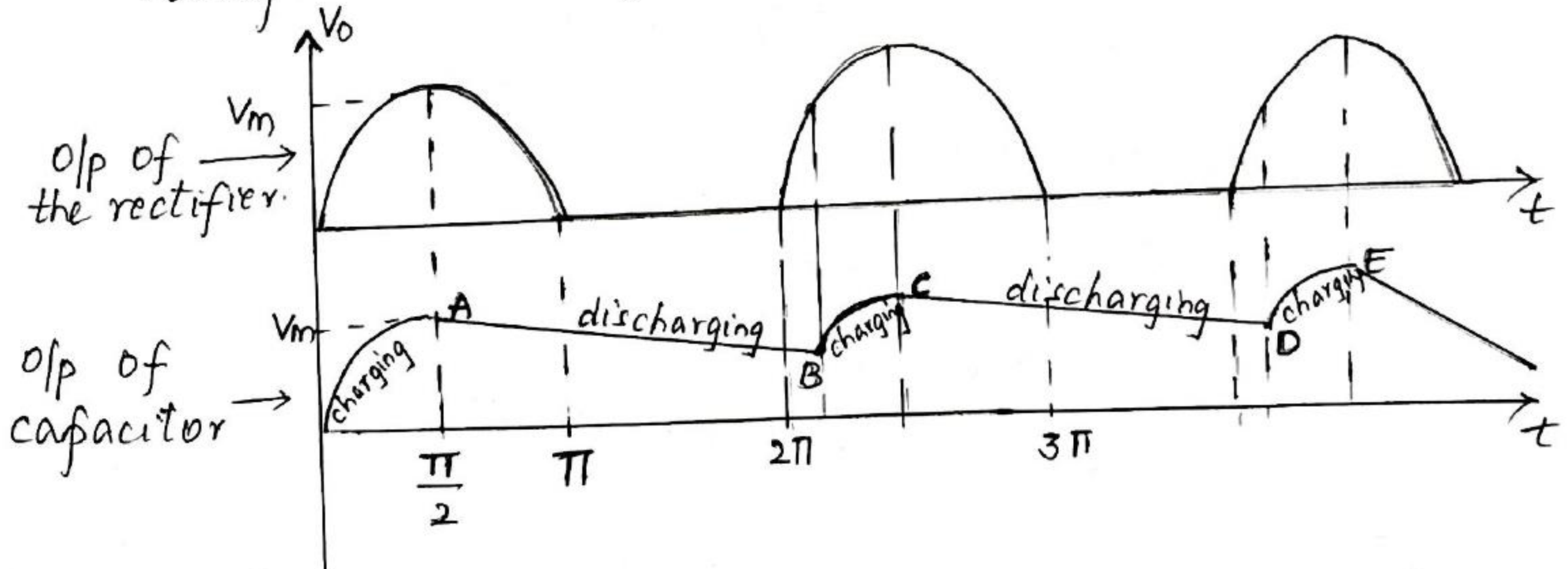
HAVE A NICE DAY

Full Wave Bridge Rectifier

Full Wave Bridge

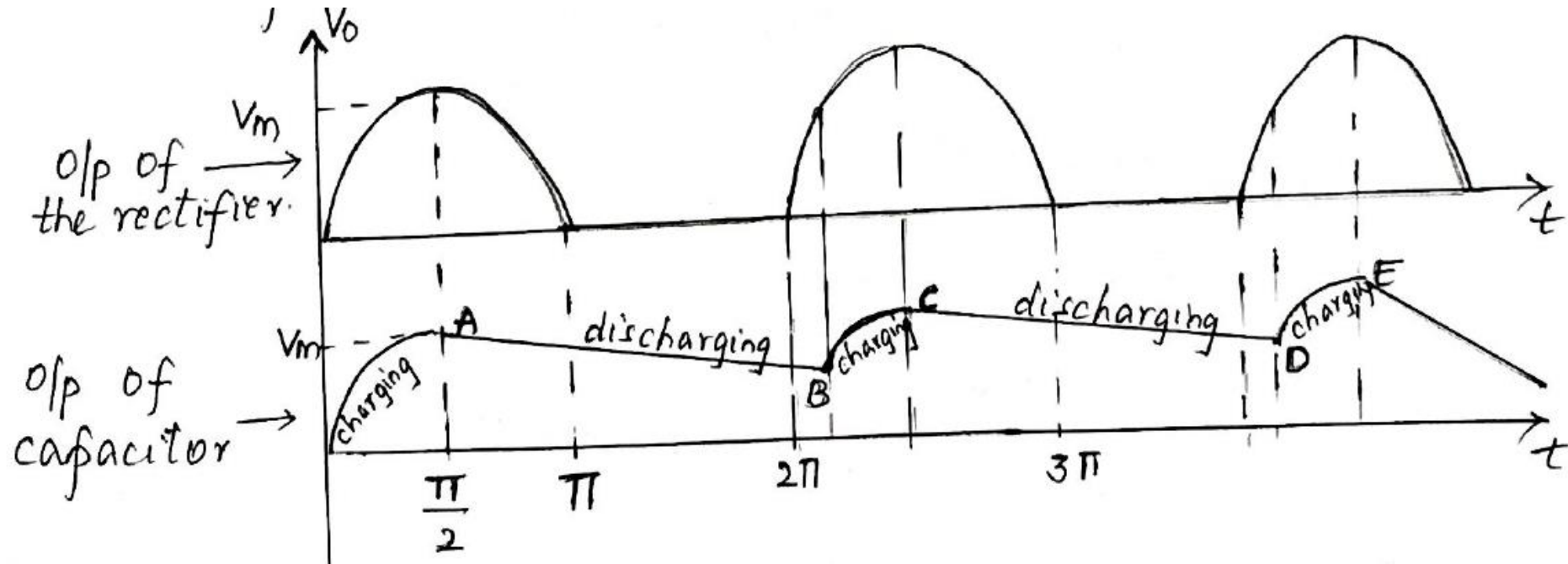


~~cap~~ charges the capacitor
Till the end of $\pi/2$ cycle, the capacitor
is charged to peak value V_m of the
rectifier voltage, shown in Fig below: (pt A)



Full Wave Bridge Rectifier

Full Wave



Full Wave Bridge Rectifier

Full Wave Bridge Rectifier waveforms

