

Date: 24/3/21

Experiment no. 4

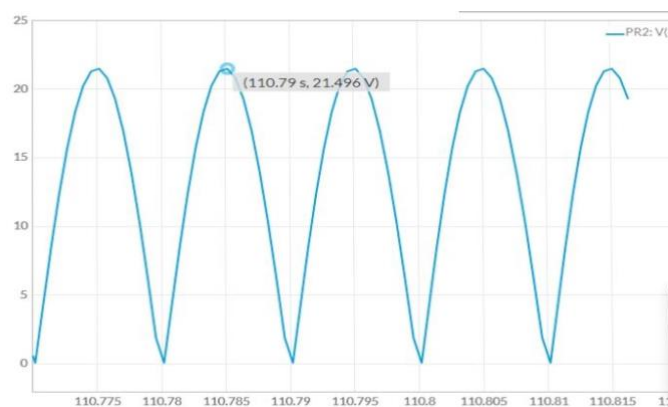
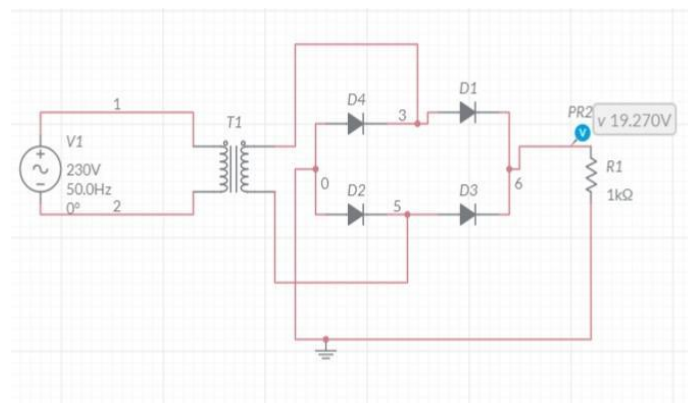
Objective: To study simulation of full wave rectifier using diodes

Software used: Multisim Live

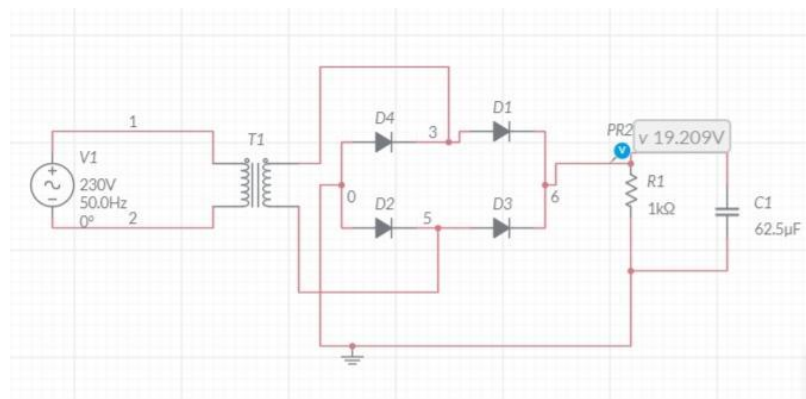
Theory: Rectifier changes AC to DC and it is an essential part of power supply. The unique property of a diode, permitting the current to flow in one direction, is utilised in rectifiers.

Circuit diagram:

1.Full wave rectifier without filter



2.Full wave rectifier with filter



Results & observations:

Observations:

1.Half wave rectifier without filter

V_{p-p}	$V_p = V_{p-p}/2$	$V_{rms} = V_p/2^{1/2}$
21.496V	10.748V	7.599V

2.Half wave rectifier with filter

V_{p-p}	$V_p = V_{p-p}/2$	$V_{rms} = V_p/2^{1/2}$
21.874V	10.937V	7.7336V

Result: The Graphs, Diagrams and observations show us the simulation of full wave rectifier using diodes

Submitted by: G Hruthesh reddy (20BCB7031)