# EE 5304 : POWER ELECTRONICS

## COMPUTER SIMULATION OF POWER ELECTRONIC CIRCUITS

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REG NO     : EG/2016/2916

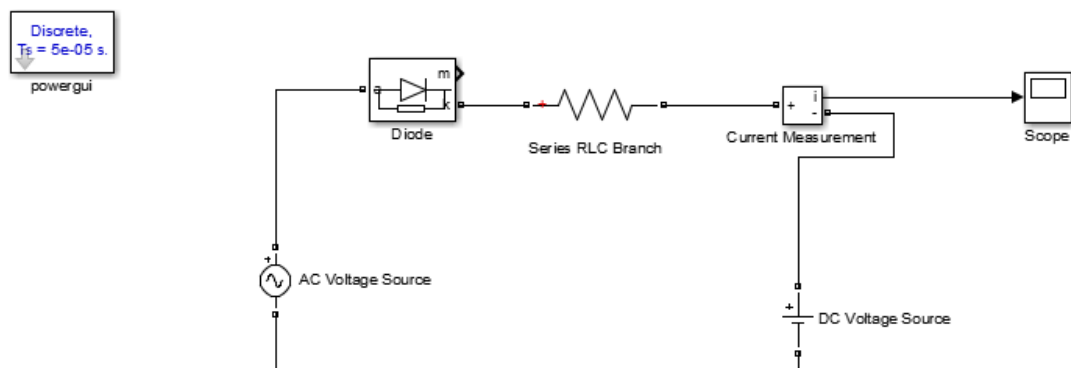GROUP NO : EE 12

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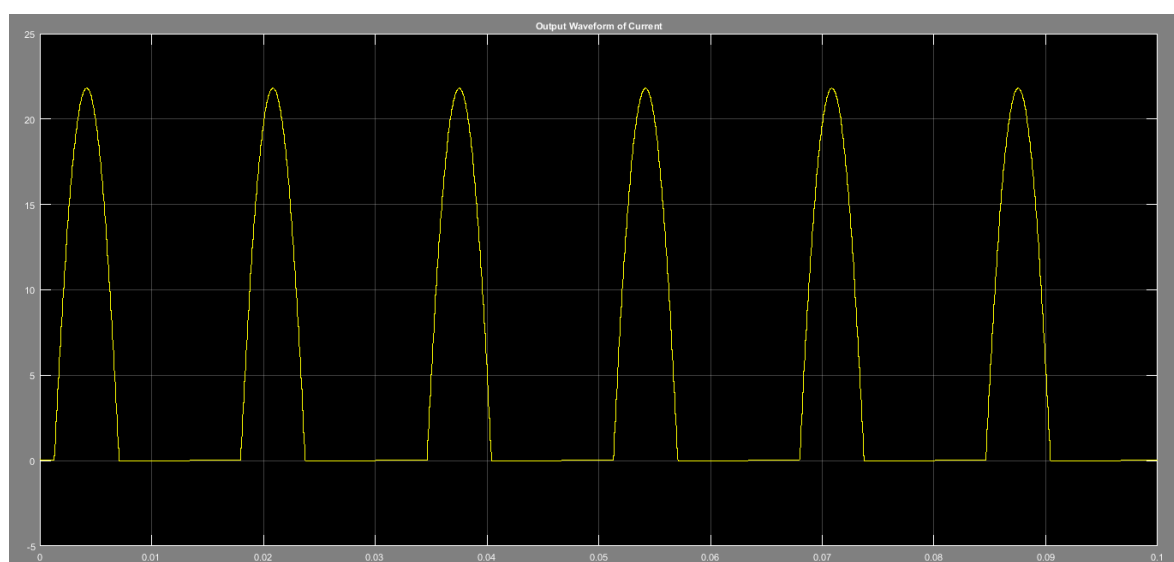
**DATE**           **:**        **23/08/2019**

**EXPERIMENT**        **:**        **COMPUTER SIMULATION OF**

                                         **POWER ELECTRONIC CIRCUITS**

**OBSERVATIONS**      **:**

**PART 01**



FIGURE 1 : MATLAB SIMULATION CIRCUIT



FIGURE 2 : OUTPUT WAVEFORM OF CURRENT
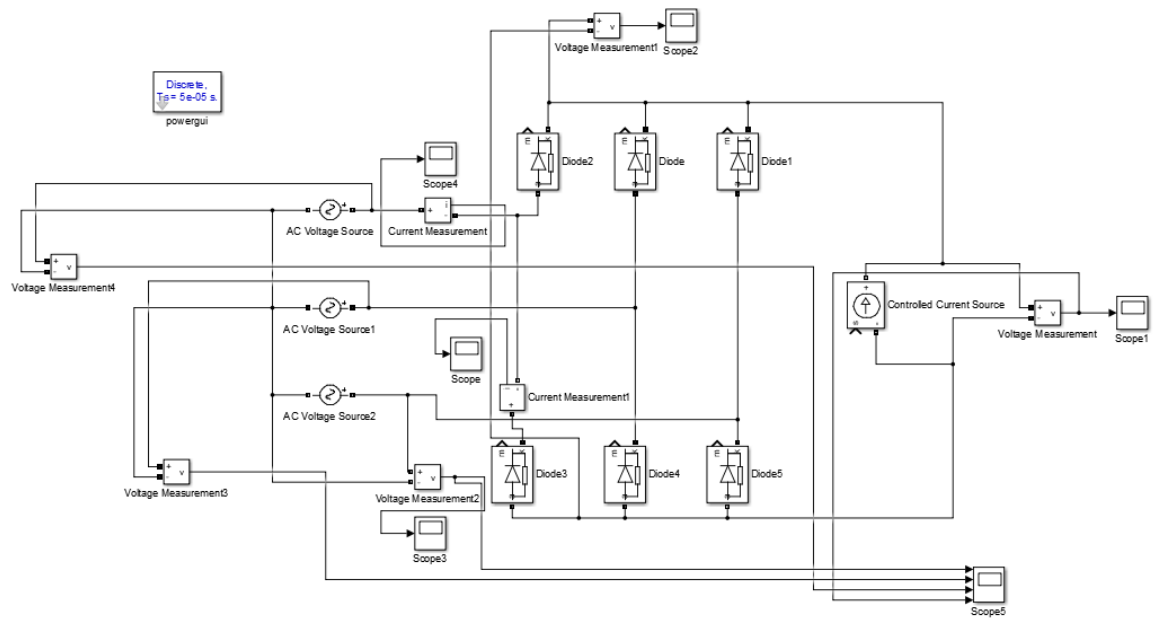
## PART 02


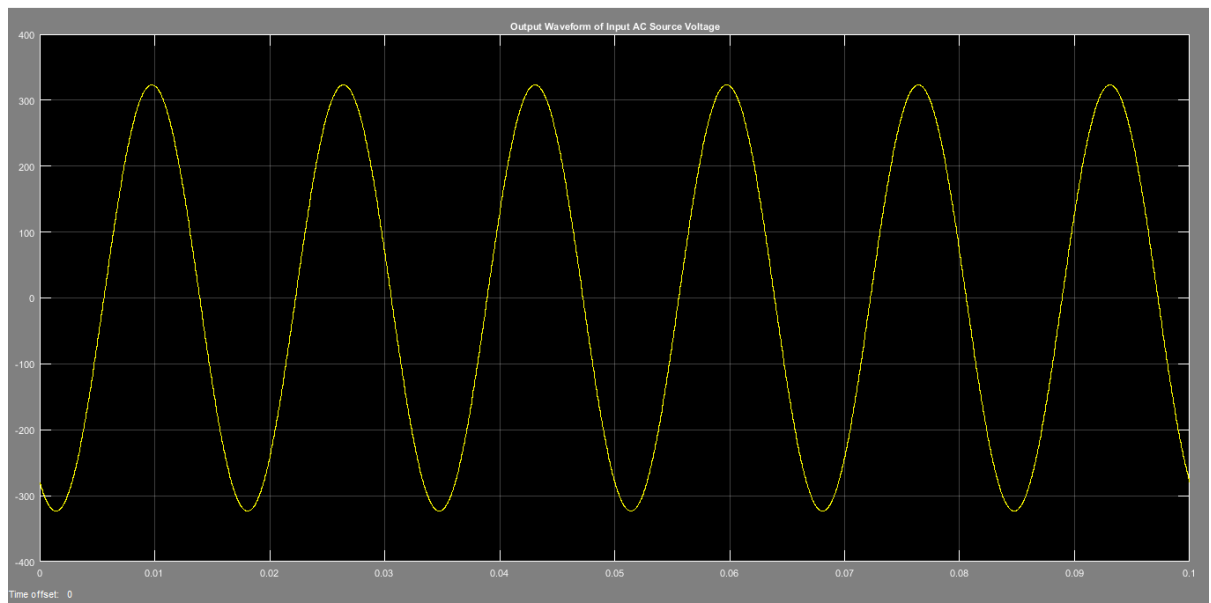
FIGURE 3 : MATLAB SIMULATION CIRCUIT
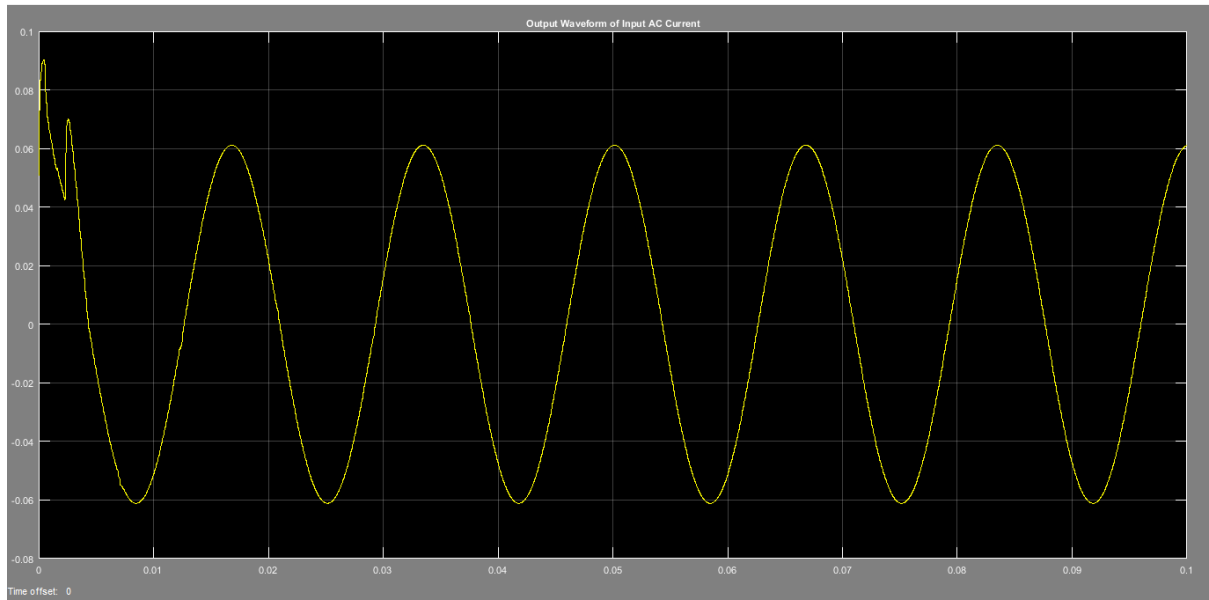


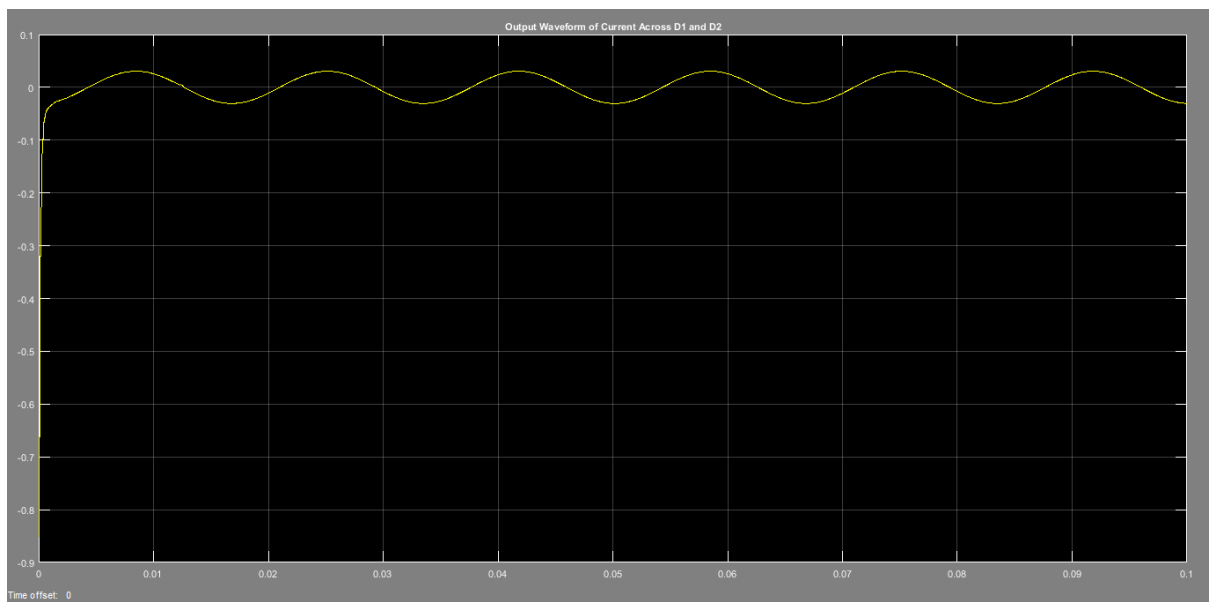FIGURE 4 : INPUT AC SOURCE VOLTAGE

FIGURE 5 : INPUT AC CURRENT



FIGURE 6 : CURRENT ACROSS DIODE D1 AND D2
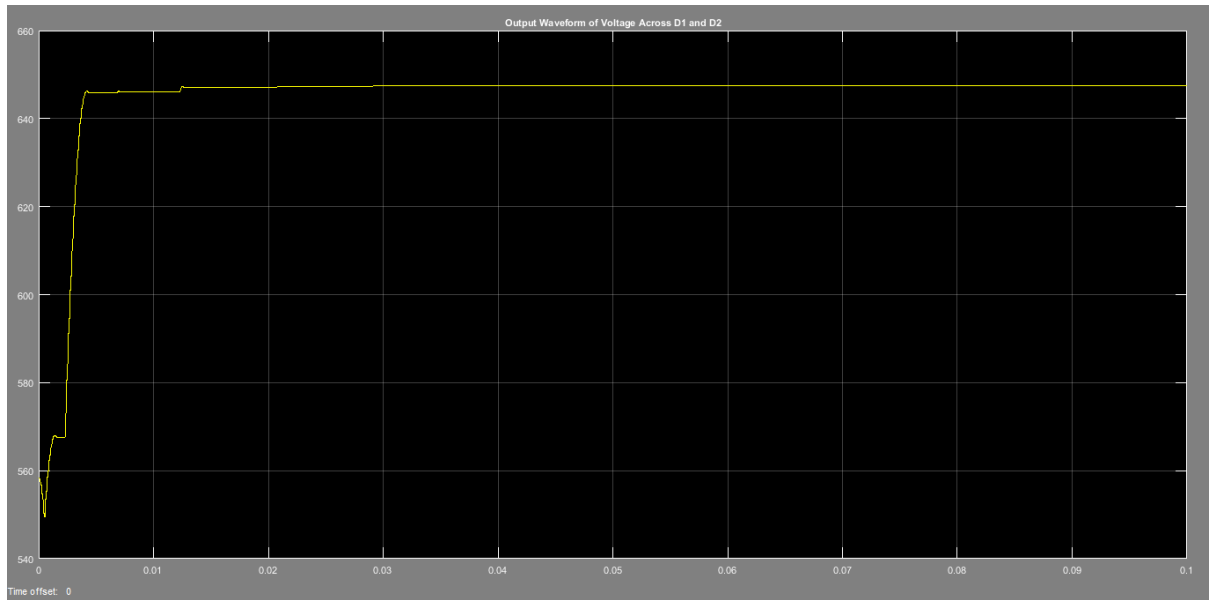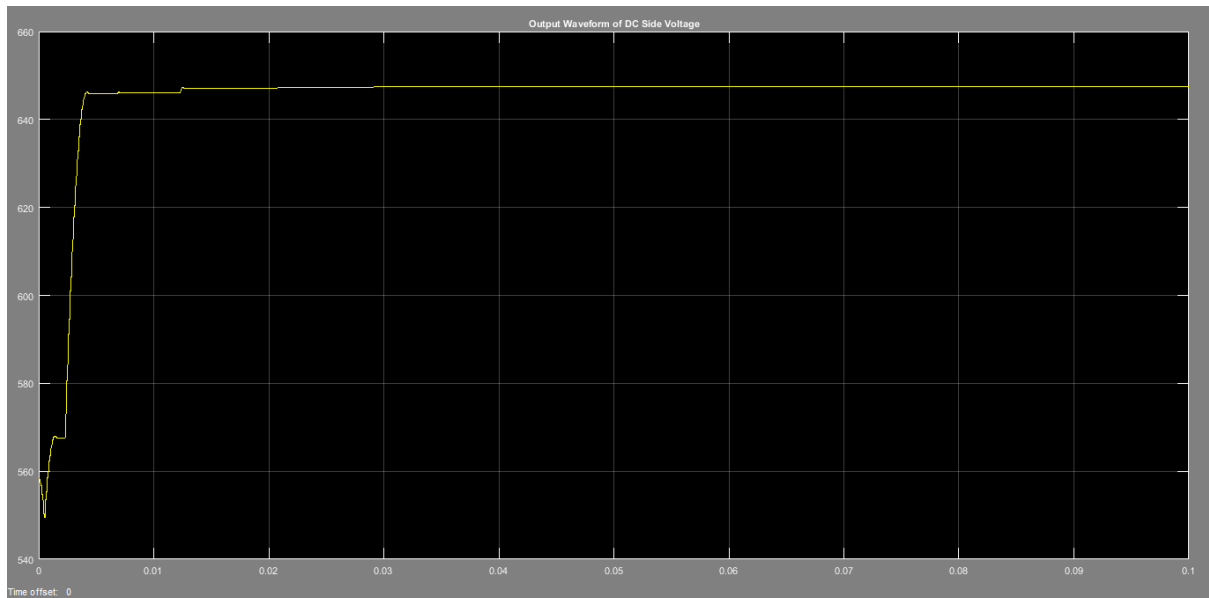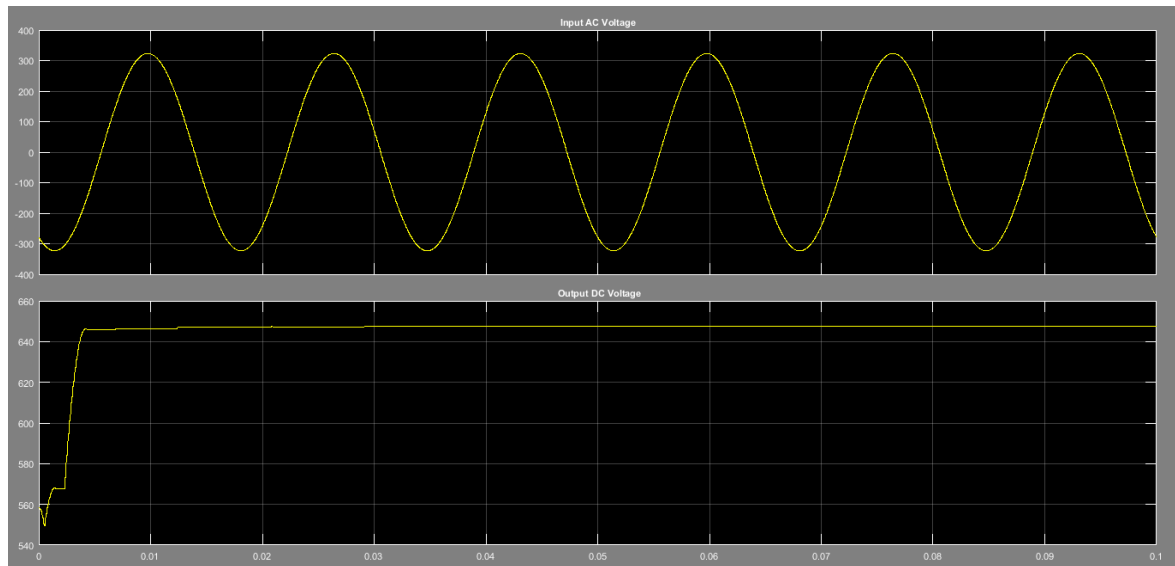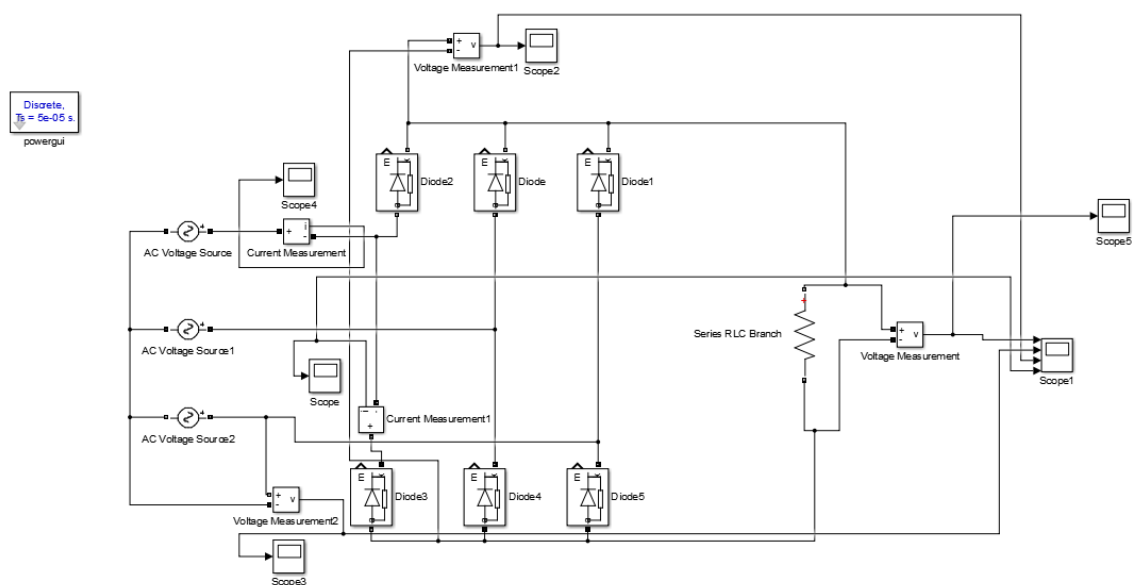
FIGURE 7 : VOLTAGE ACROSS DIODE D1 AND D2



FIGURE 8 : DC SIDE VOLTAGE

FIGURE 9 : INPUT AC VOLTAGE AND OUTPUT DC VOLTAGE

## PART 03



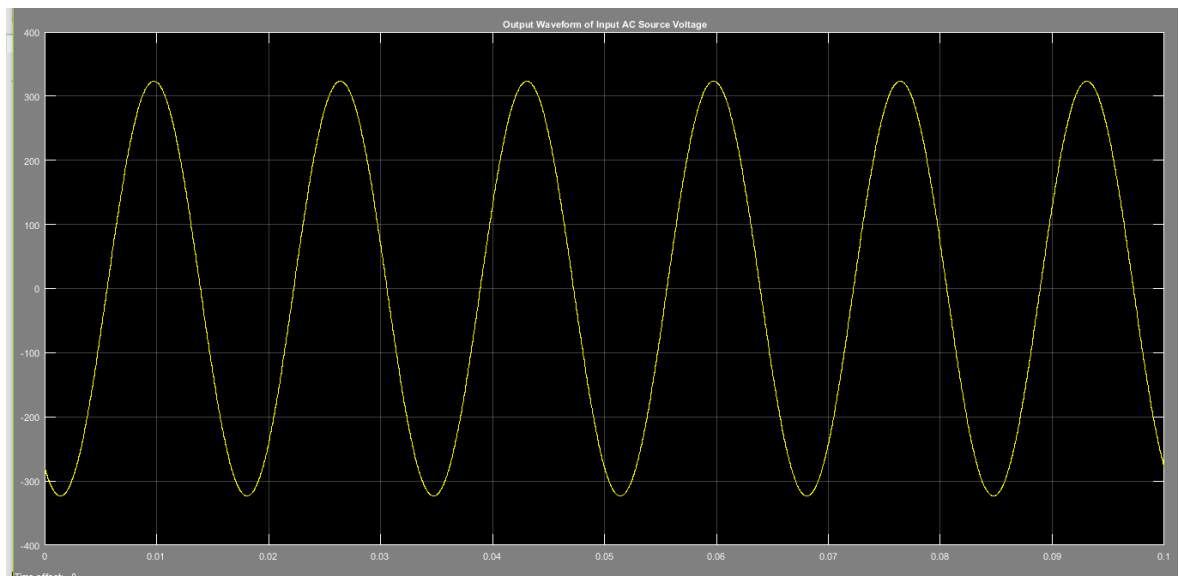FIGURE 10 : MATLAB SIMULATION CIRCUIT

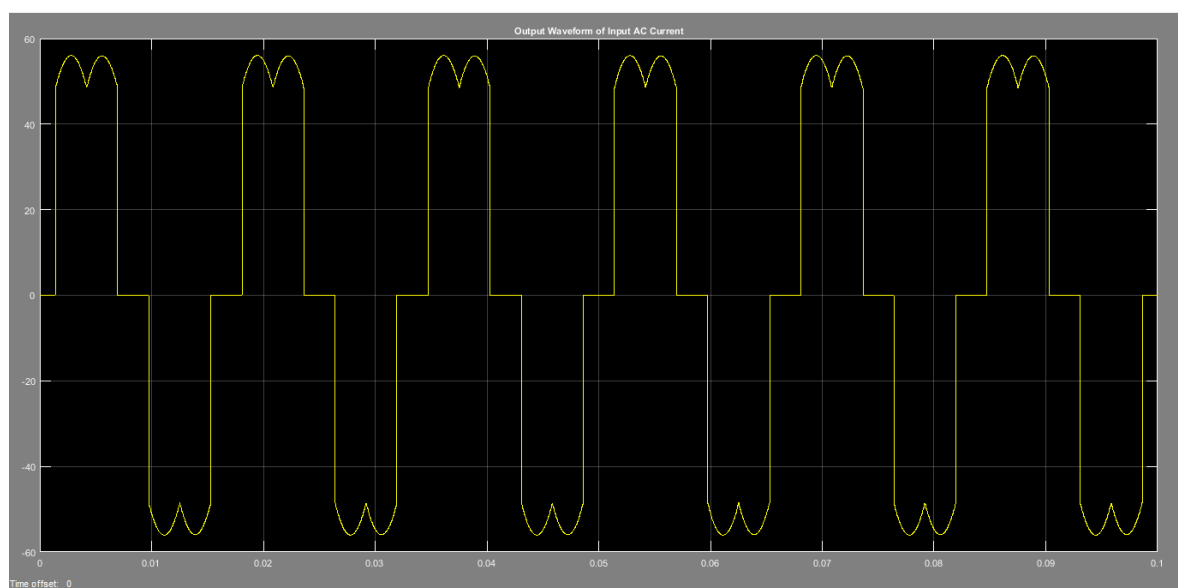FIGURE 11 : INPUT AC SOURCE VOLTAGE

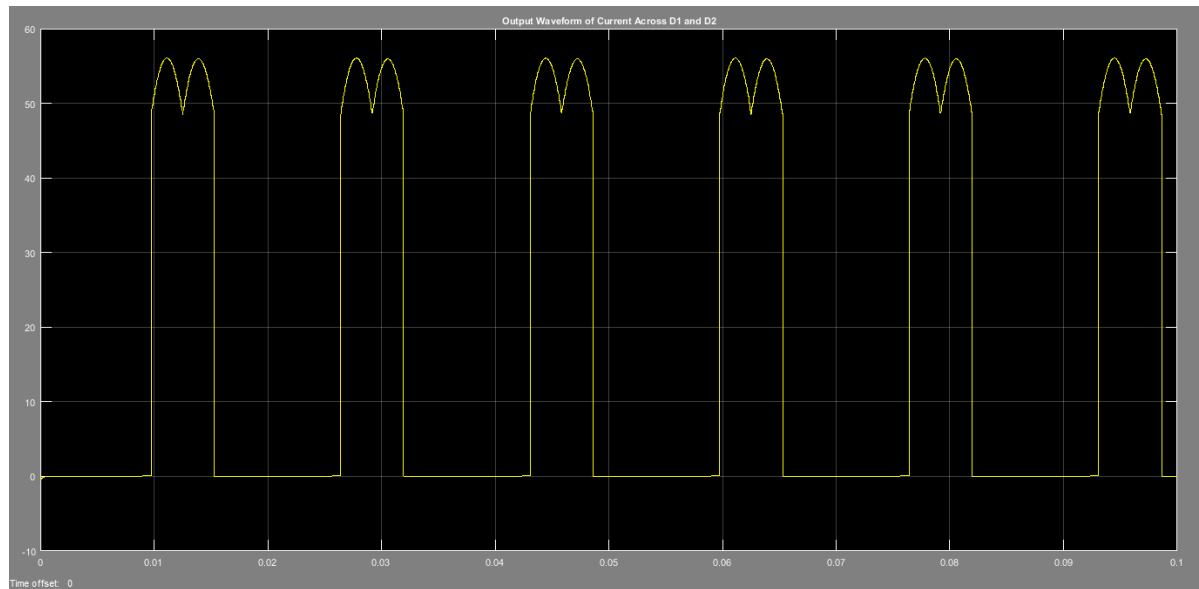

FIGURE 12 : INPUT AC CURRENT

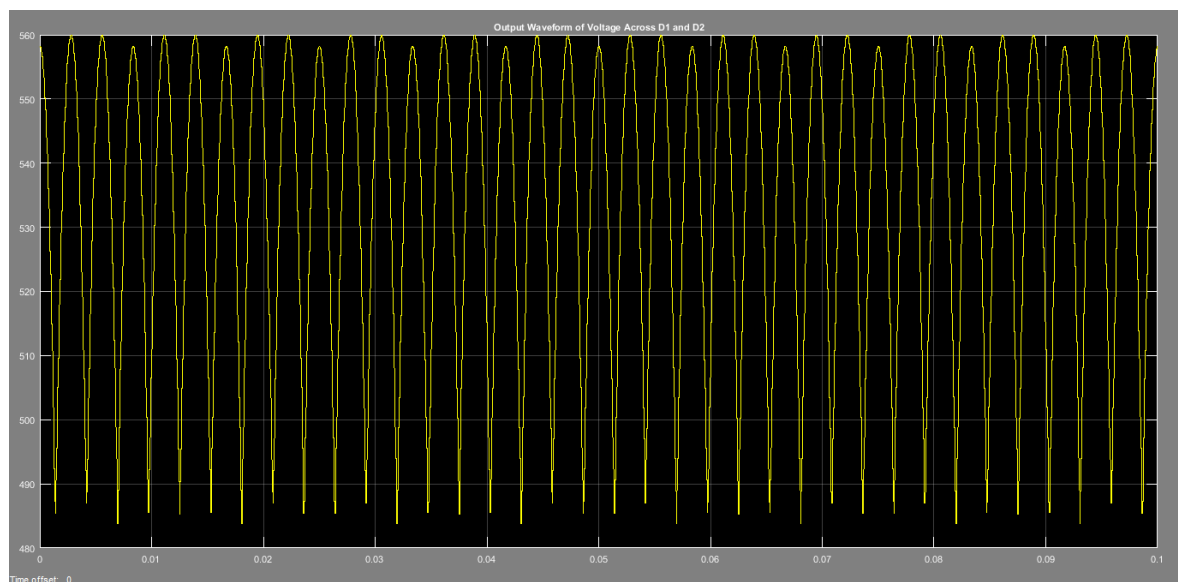FIGURE 13 : CURRENT ACROSS DIODE D1 AND D2



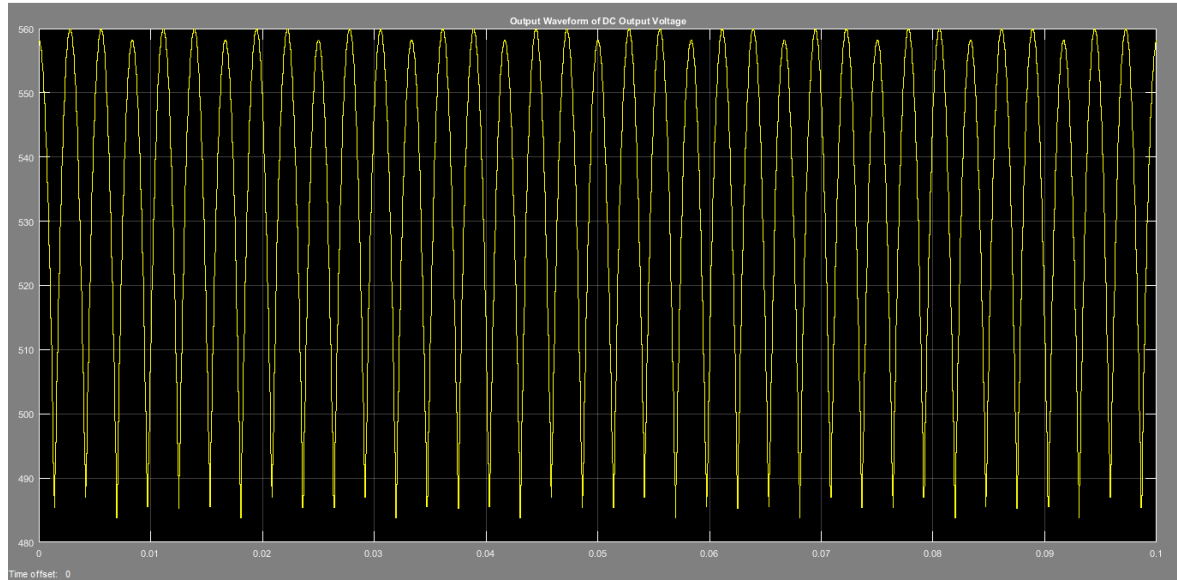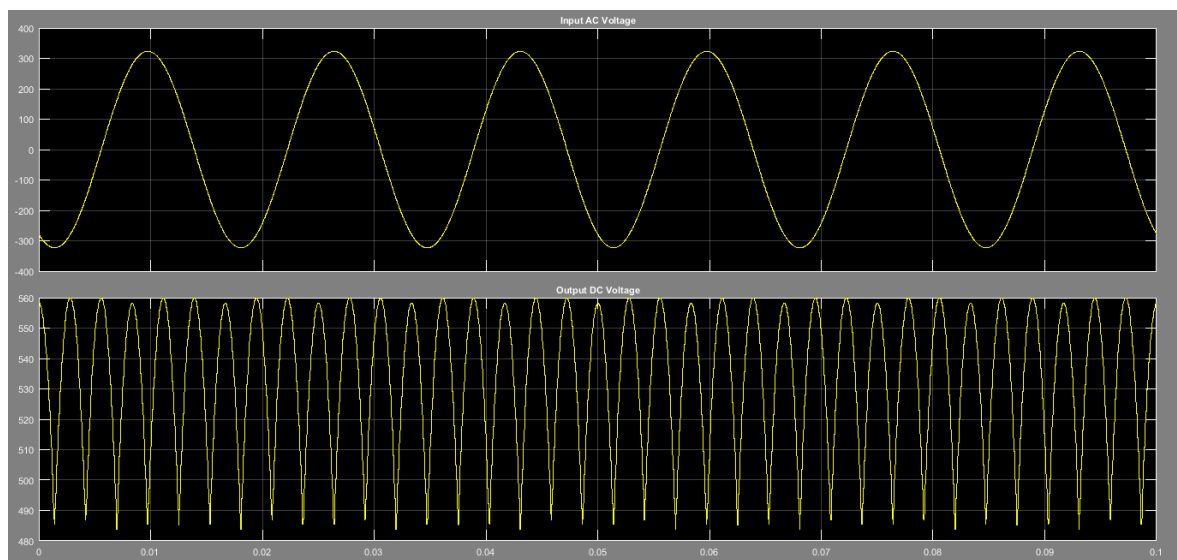FIGURE 14 : VOLTAGE ACROSS DIODE D1 AND D2

FIGURE 15 : DC SIDE VOLTAGE



FIGURE 16 : INPUT AC VOLTAGE AND OUTPUT DC VOLTAGE