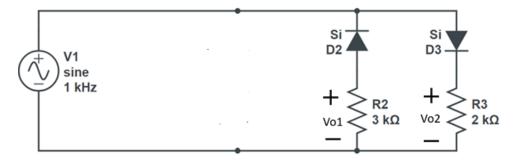Assignment-1

Full mark-20

Q1. Consider the input voltage for the following circuit is a sine wave with a peak value of 10V.

(a) Draw the Vo1 and Vo2 profiles from the circuit with proper label values.
(b) Determine the difference between Vo1, Vo2 and (Vo1+Vo2) voltage graphs.
(c) Determine the average voltage value of Vo1.
(d) Determine the peak inverse voltage of D1.

Q2. Design the clipper and clamper circuit to produce the following output voltage (Vo) according to the input voltage (Vi). Assume the diodes to be ideal.