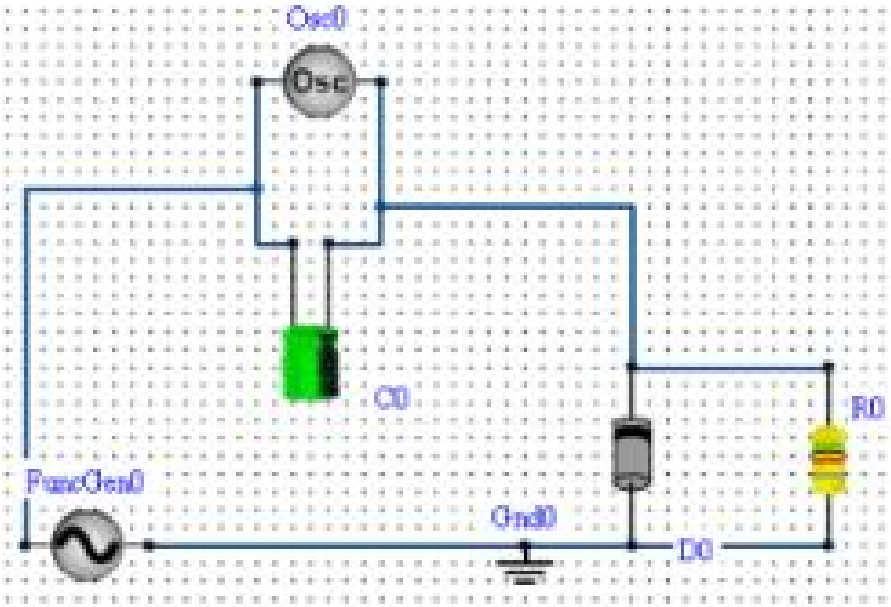
PULSE, SWITCHING AND ANALOGUE CIRCUITS

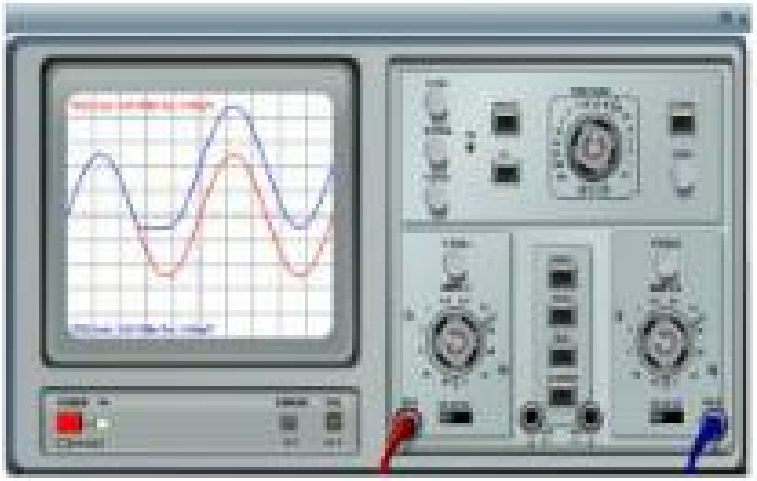
Diode Applications : Clampers

Positive Clamper : Experiment

construct the circuit as below.

1. Use AC Source of 5 Volts from Function Generator, 1 KHz
2. Use a Diode and Capacitor of 100 mF. Use Load of 5.1 KOhms
3. Connect Oscilloscope as shown
4. Run the simulation and observe output waveforms.

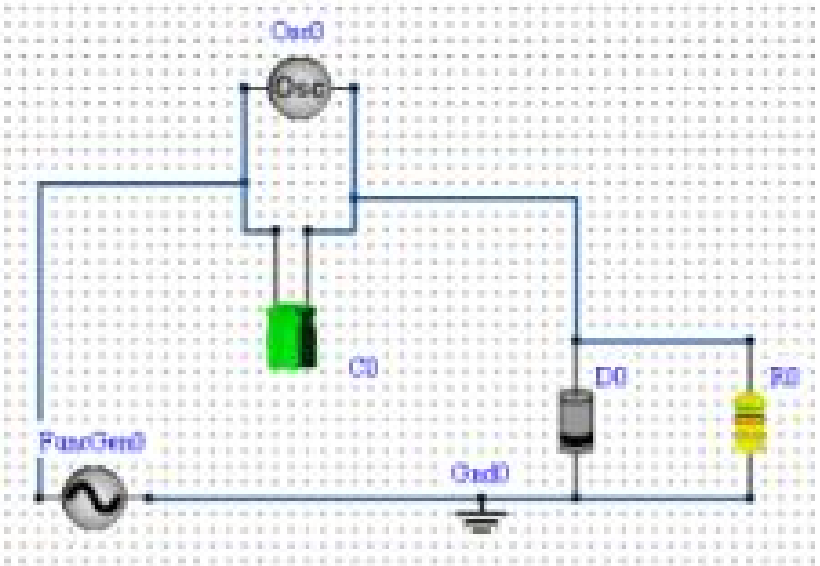


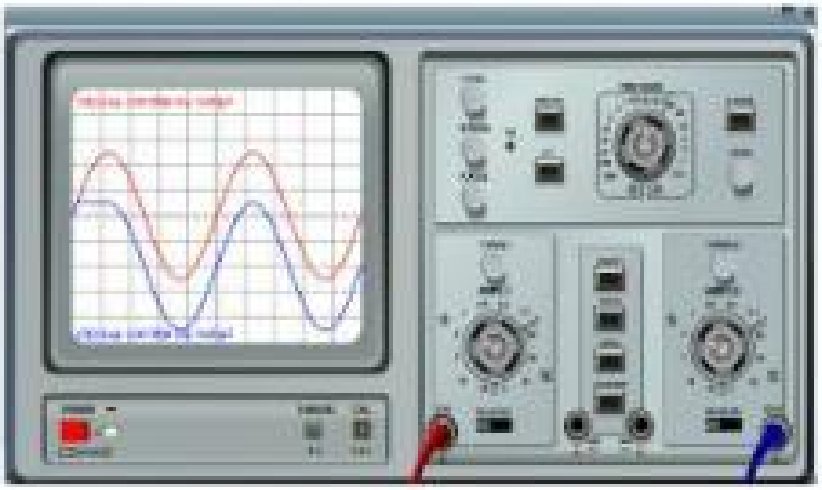


Negative Clamper : Experiment

construct the circuit as below.

1. Use AC Source of 5 Volts from Function Generator, 1 K Hz
2. Use a Diode and Capacitor of 100mF and load of 5.1 KOHms
3. Connect Oscilloscope as shown
4. Run the simulation and observe output waveforms.





Positive Biased Clamper : Experiment

Construct the circuit as below. To apply a bias of 2 V,

1. Use AC Source of 5 Volts from Function Generator. 1 KHz
2. Use a Diode and Capacitor of 100 mF, load of 5.1 KOhms
3. Connect DC source of 3V as shown
4. Connect Oscilloscope as shown
5. Run the simulation and observe output waveforms being clamped at a higher value as expected.