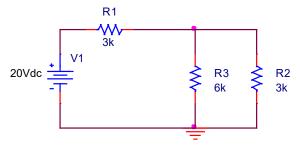
## **EXPERIMENT 7**

## **PSPICE SIMULATION 1: BASICS OF PSPICE**

**OBJECTIVE:** The object of the experiment is to learn the basics of PSPICE. Measuring current, voltage, power and resistance using PSPICE

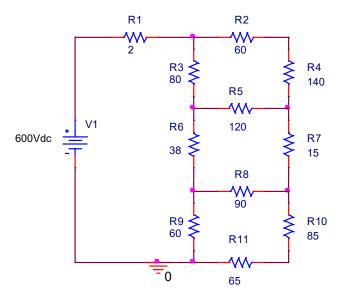
## PRELIMINARY WORK

**P1** Find voltage, current and power of all resistors using PSPICE. Verify the conservation of power. Comment on the results



	R1	R2	R3
V			
I			
P			

**P2** Find voltage, current and power of all resistors using PSPICE. Verify the conservation of power



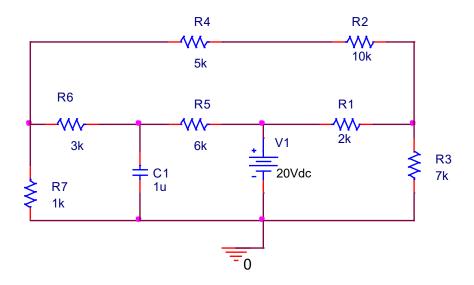
	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	V1
V													
I													
P													

P3 Using PSPICE obtain the I-V characteristics of

- a)  $10 \text{ k}\Omega$
- **b)**  $40 \text{ k}\Omega$
- c) Series combination of 10 k $\Omega$  and 40 k $\Omega$
- d) Parallel combination of  $10 \text{ k}\Omega$  and  $40 \text{ k}\Omega$

## **EXPERIMENTAL WORK**

E1 Plot the Capacitor Voltage versus time. Initial condition on Capacitor is 3V



E2 Initial Current on the inductor is 2mA. Plot the inductor current versus time.

