DEPARTMENT OF ELECTRICAL AND COMPUTER ENGINEERING

North South University

EEE/ETE141L.5 Final Exam

Full marks: 30
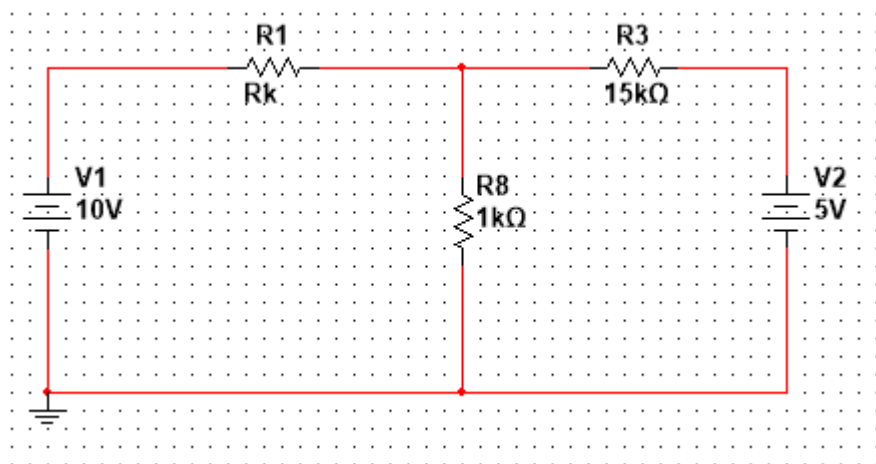
Duration: 60 minutes

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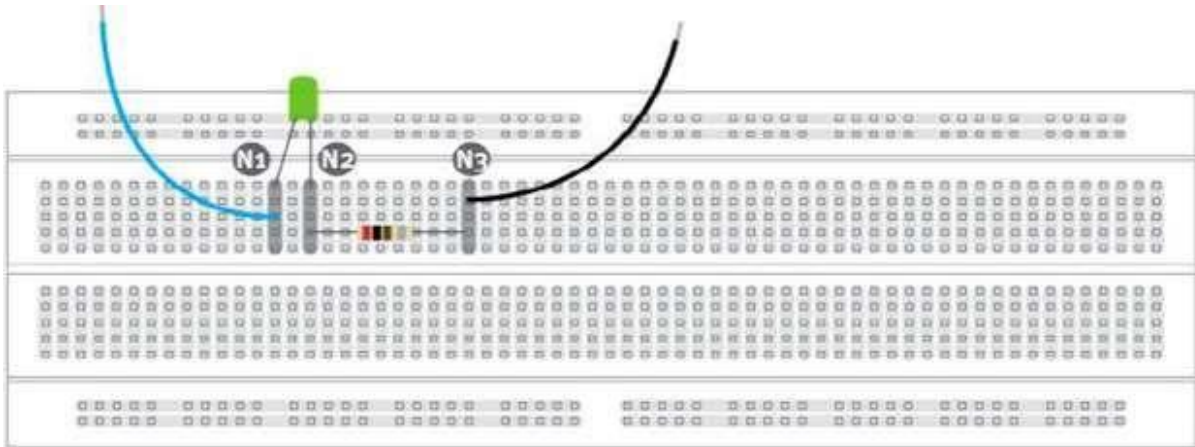
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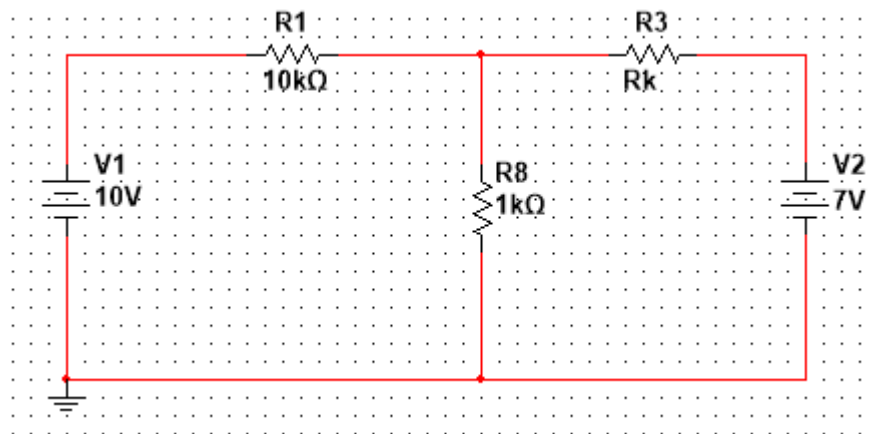**Answer all the questions below. Write all the steps clearly and mention the correct units.**

1. What happens to the DMM if you use the V Ohm terminal for measuring current? **(2)**

2. a) Write one similarity and one difference between Thevenin & Norton theorems. **(4)**

   b) Find I_N, R_N, & V_L from the following circuit. USE MULTISIM. **(6)**

   c) Explain what happens to the power after the maximum power has been delivered to the load. **(2)**

3. If the blue wire is connected to 5V and the black wire to the ground, how would you use the power rail and ground rail for these voltage and ground connections at N1 and N3? **(2)**
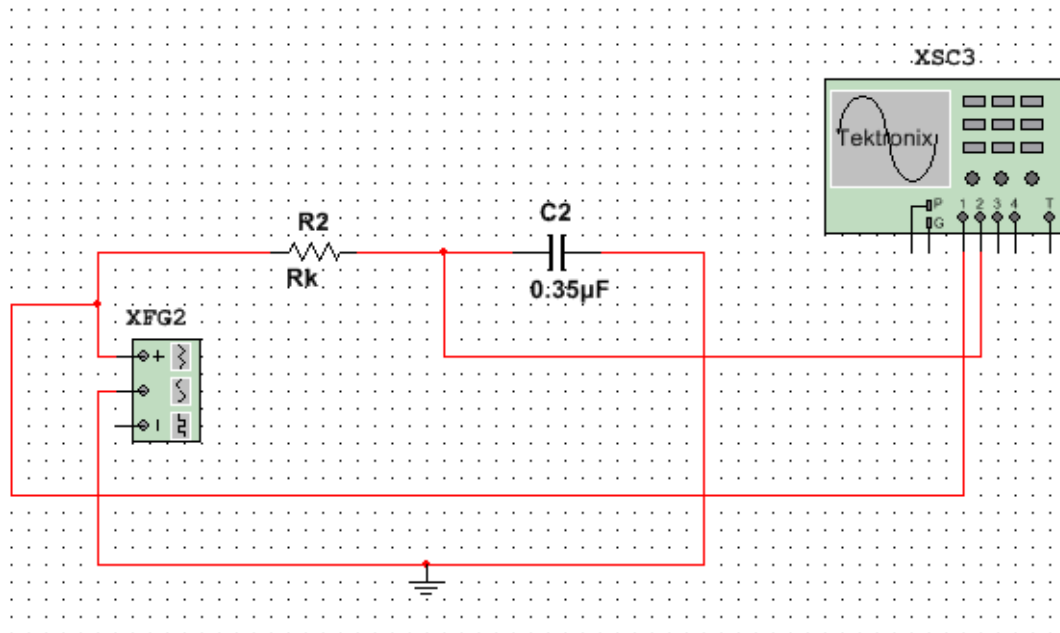

4. Using the values of V_{R1}, verify the superposition theorem using MULTISIM. **(4)**

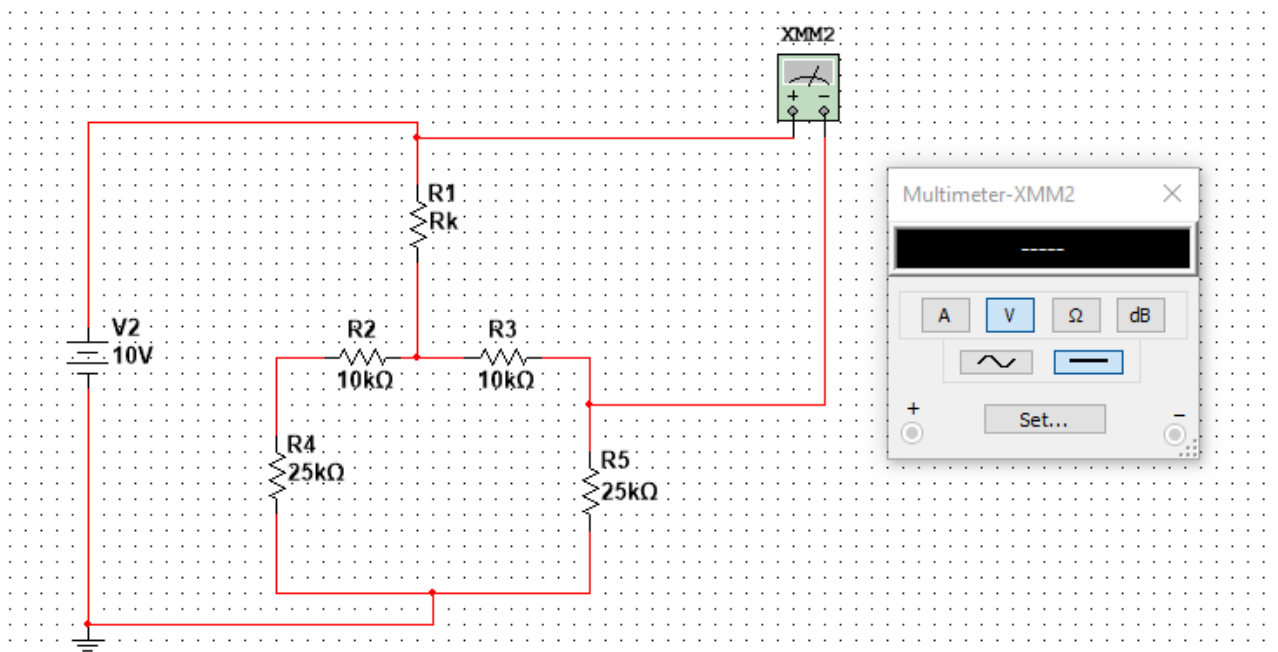**5. a)** Calculate the time constant from the following circuit. **(1)**

b) If the input voltage will be 10V pk-pk, what will be the capacitor voltage at 3 Tau? **(2)**

c) Draw the output graph of this circuit. **(2)**

6. a) What is the name of this circuit? **(1)**

b) Find the value of R_{eq} & XMM2 of this circuit using MULTISIM. **(4)**

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