

**Shahjalal University of Science and Technology**  
 Department of Computer Science and Engineering  
 1<sup>st</sup> year 1<sup>st</sup> Semester Final Examination—June 2020 (Session 2019-20)

Course No.—**EEE 109D**  
 Course Title—**Electrical Circuits**

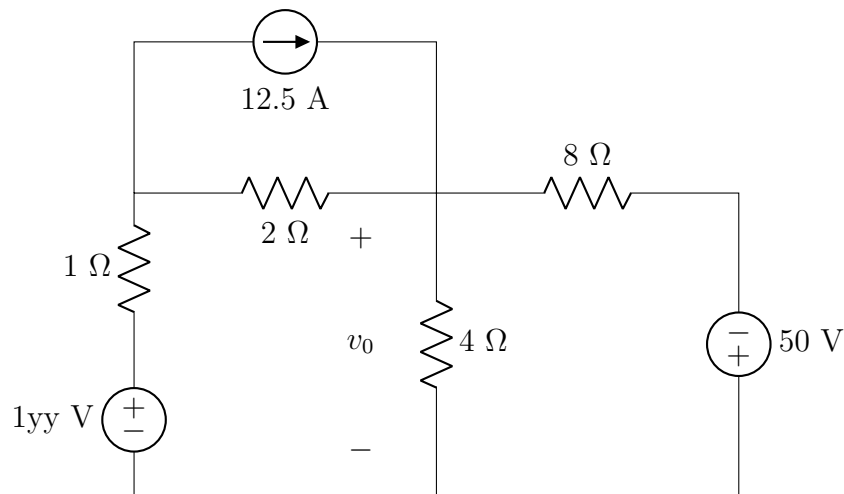
Time—**5 Hours**Credit: **3.00**Total Marks#**30**

(Answer All the Questions)

**Group A**

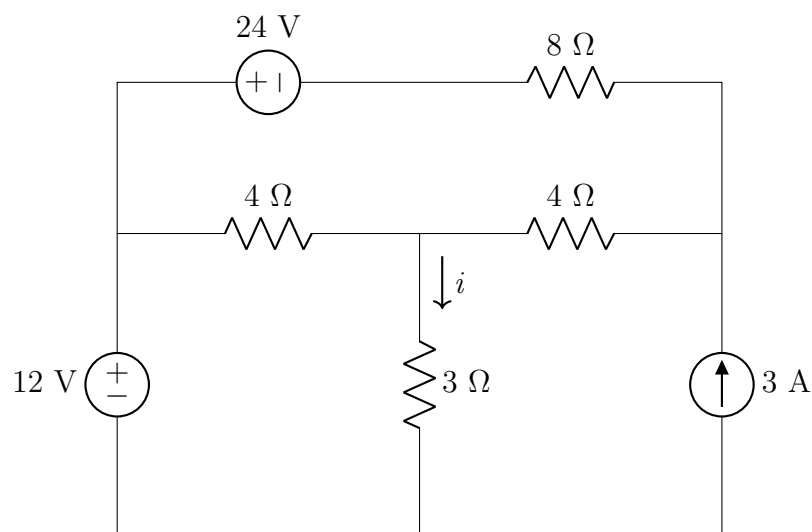
1. Obtain the **node voltages** in the following circuit using **nodal analysis**. Here, **yy** = last two digits of your registration number.

7.5



2. For the following circuit, use the **superposition theorem** to find the **current  $i$** .

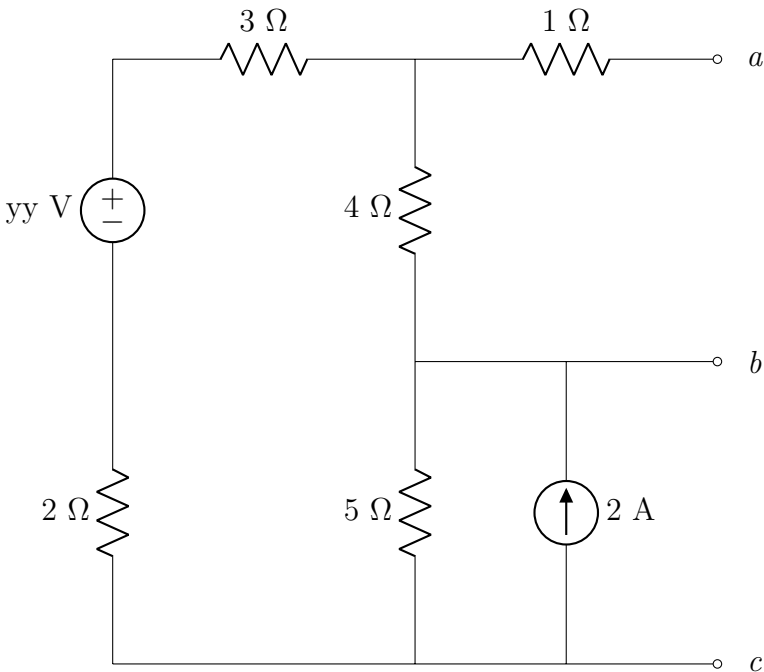
7.5



Group B

1. For the following circuit, obtain the **Thevenin equivalent** as seen from terminals **a-b**. Here, **yy = last two digits of your registration number**.

7.5



2. Find  $i(t)$  for  $t > 0$  in the following circuit. Here, **yy = last two digits of your registration number**.

7.5

