

## **EAST WEST UNIVERSITY**

Department of Computer Science and Engineering B.Sc. in Computer Science and Engineering Program In Course Assessment - 2, Spring 2021

Course: CSE 209 – Electrical Circuits, Section-4
Instructor: SHK, Senior Lecturer, CSE Department

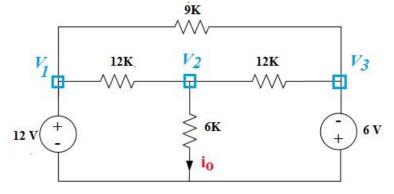
Full Marks: 19

Time: 1 Hour and 30 Minutes [Including submission time]

**Note:** There are FOUR questions, answer ALL of them. Course outcomes (CO), cognitive levels and marks of each question are mentioned at the right margin.

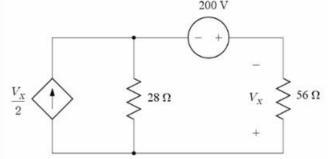
1a. Apply nodal analysis to determine  $i_0$  from the circuit given below.

[CO2, Mark:4]



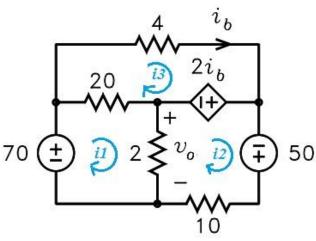
**1b.** Using nodal analysis, **determine**  $V_X$  from the circuit given below.

[CO2, Mark:2]



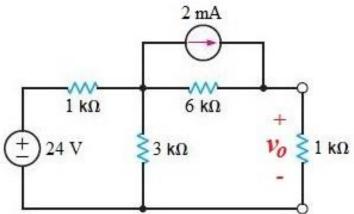
2. Using mesh currents indicated in the circuit, **determine**  $v_0$  in the following circuit.

[CO2, Mark:6]



Page 1 of 2

3. Use most effective source transformation to determine  $v_0$  in the following circuit. [CO2, Mark: 3]



**4.** Use superposition technique to determine i in the following circuit.

[CO2, Mark: 4]

