

**University of Information Technology & Sciences (UITs)**  
**Department of Computer Science and Engineering**  
**Program: B.Sc. in CSE**  
**Mid Term Examination, Autumn 2023**  
**Course Title: Fundamentals of Electrical Engineering**  
**Course Code: EEE 151**

Marks: 20

Time: 1(One) hour

(Answer all of questions)

1. a) Determine  $V_o$  in the circuit shown in figure 1. [04]

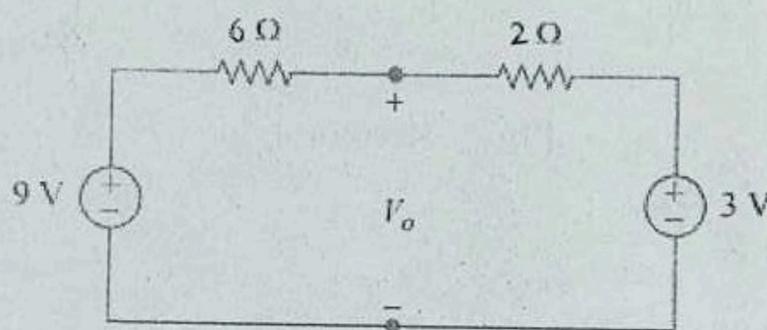


Fig.1: Circuit for 1a

- b) Determine voltages and currents using KVL and KCL for the circuit shown in figure 2. [06]

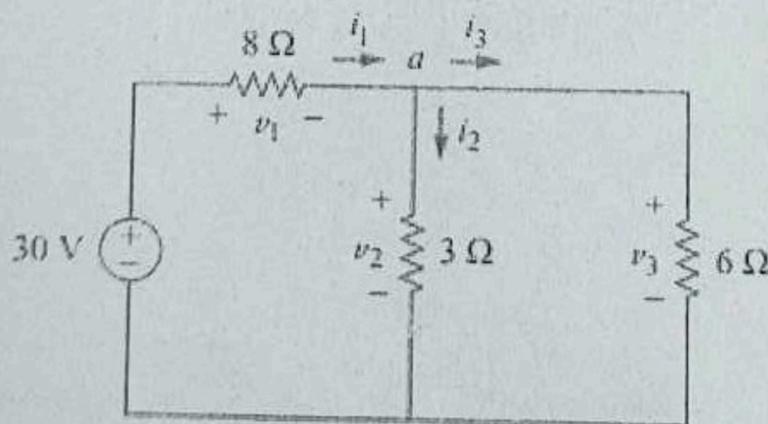


Fig.2: Circuit for 1b.

2. a) For the circuit in figure 3, find  $i_1$  to  $i_5$ .

[05]

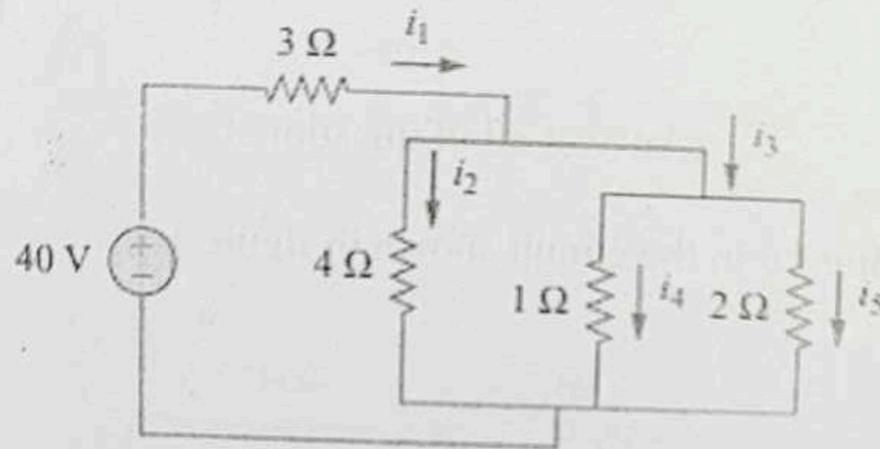


Fig.3: Circuit for 2a

- b) Find  $v_o$  and  $i_o$  in the circuit shown in figure 4.

[05]

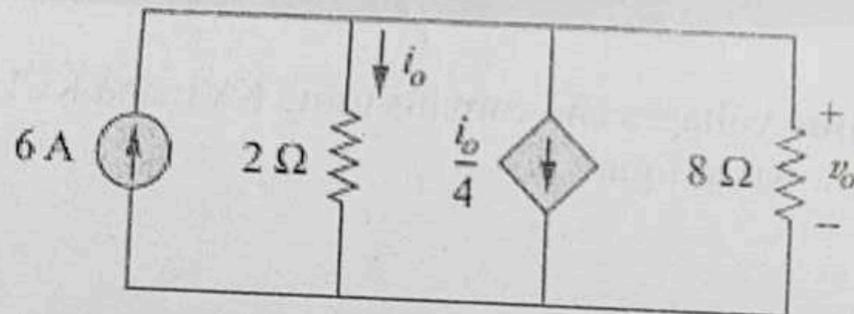


Fig.4: Circuit for 2b