

### Electrical and Computer Engineering Department

Network Analysis (ENEE 2311)

### **PSPICE Assignment**

Second Semester 2021/2022

30/5/2022

- Solve the two questions in this assignment using PSPICE 9.1 student version.
- Submit a hardcopy report no later than 15/6/2022; your report must include a clear snapshot (use snipping tool) of:
  - The circuits schematic in PSPICE with the values of voltages and currents shown at each node and branch for question 1,
  - The circuits schematic in PSPICE with a plot of  $v_o(t)$  for question 2.

Some of the resistors values in the questions are given as (X, Y, and Z); the values of these terms depend on your university ID Number. The last three digits of your university ID number correspond to X, Y, and Z respectively.

#### Example:

Assume having the following ID number 1110598, then, X = 5, Y = 9 and Z = 8.

In case X or Y or Z corresponds to zero in your ID number, make its value 5 instead of zero.

#### **Question 1:**

- a) Construct a PSPICE schematic for the circuit shown in Figure 1.
- b) Simulate the schematic and show voltages at each node and current in each branch.

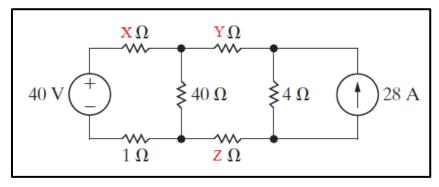


Figure 1

# **Question 2:**

- a) Construct a PSPICE schematic for the circuit shown in Figure 2.
- b) Simulate the schematic and use markers to plot  $V_{O}(t)$ .

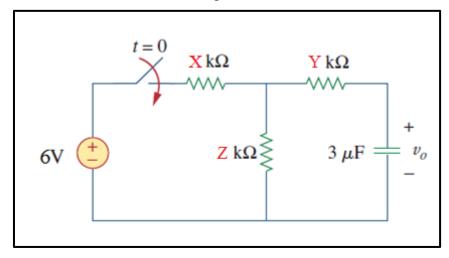


Figure 2

# **Notes:**

- Assignment solution will vary between students since some parameters depend on the values of X, Y and Z, any attempt of copying others work will cost you the assignment mark.
- Although you have enough time, do not start doing your assignment in the last day or last hour!
- If you have questions, do not hesitate to ask your instructor.

Best Wishes 😊