National University of Modern Languages
(NUML)

Assignment#3 Fall 2023

Date: -19-Dec- 2023

Program: Applied Physics Class & Section: BS-1B

Course Code & Name: _____ Duration till: 27-Dec-2023

Instructor's Name: _____ Total Marks: 25 **Marks**

Attempt all questions:
Each question carries equal marks(Mark 5).

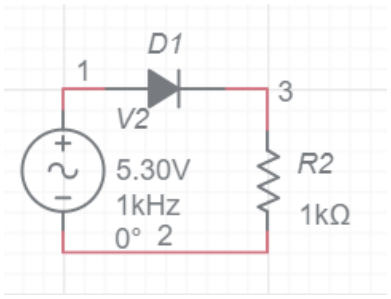
Q 1) : Calculate the V_{34} and verify the KCL. Calculate I_{R1}, I_{R2}, I_{R3}, I_{tot} and R_{eq} as shown in Figure (1)

Q2): Calculate the voltage across each resistor as shown in Figure (2)

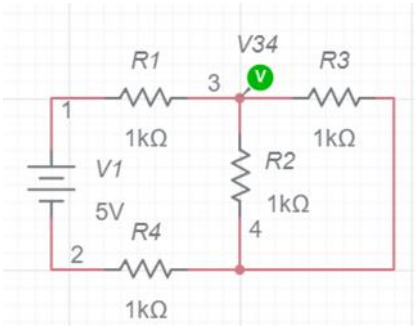
Q3) Calculate the output voltage across R_2 as shown in Figure (3) as the diode is Practical and draw a waveform. Calculate the current through R_2

Q4): Calculate the output voltage across R_1 and R_2 as the diode is practical as in Figure(4).

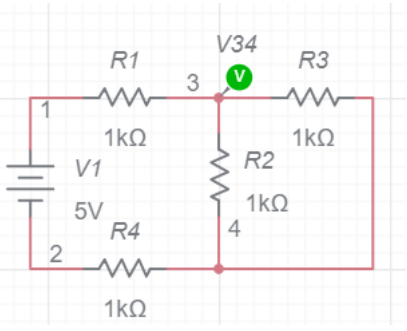
Q5): Covert the current source into a voltage source. Calculate the voltage across R_2 and R_1 in the Figure(5).



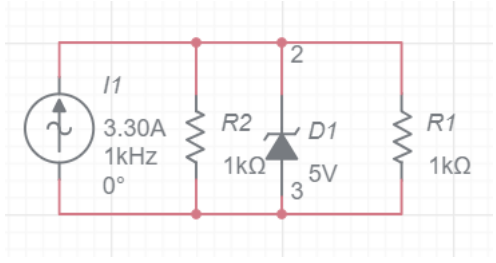
Figure(3)



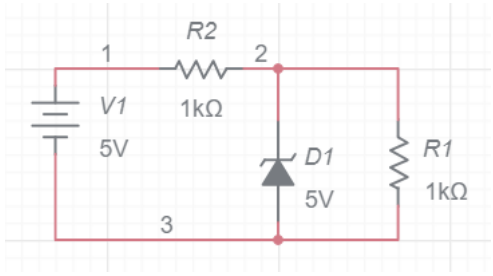
Figure(1)



Figure(2)



Figure(5)



Figure(4)

***** Good Luck*********