

EE232Exp. #2

Diode Characteristics

Report #2

**COURSE LECTURER:**

Associate Professor Dr. Emre Arslan

**LABORATORY INSTRUCTOR:**

Research Assistant Deniz Özenli

Prepared by

Name:

Surname:

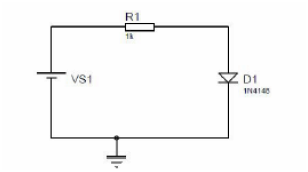
#ID:

***CAUTIONARY REMARK: All questions will be answered in the assigned blanks. Don’t use extra place for the answers due to the fact that they are not guaranteed to be evaluated.***

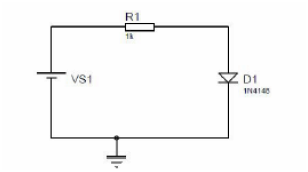
**Part 1--Introduction:** Explain the main objective of the first experiment on your own words. (10pt)

**Part 2--Procedure: a) Conventional Diode Basics:** Describe and of conventional diode in mathematical expression. Comment on the meaning of those. (10pt)

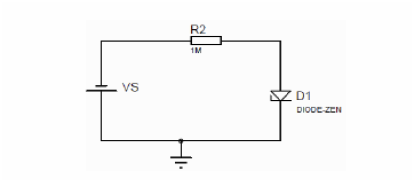
**b)** Solve the following circuit using linear diode model. Take as , (10pt)

****

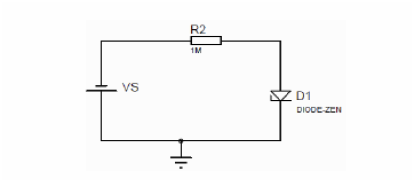
**c)** Plot versus and versus using your measurements during the lab by considering the following circuit. (20pt)



**d)** Solve the following circuit using zener diode equivalent model. Take as , (10pt)



**e)** Plot forward and reverse bias results together using your measurements during the lab by considering the following circuit. (20pt)

****

**Part-3--Conclusion:** Conclude your report with your learning from this experiment on your own words. Moreover, you can discuss or criticize some over-expected or under-expected sides of the experiment. (10pt)

**Part-4--References:** If you have referred parts, specify their references below. (10pt)