

EE312 Exp. #3

**OP-AMP**

Report #3

 **COURSE LECTURER:**

Assistant Professor Dr. M.A.Alsunaidi

**LABORATORY INSTRUCTOR:**

Research Assistant Dr. 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 experiment on your own words. (10pt)

**Part 2--Procedure: a) Op-Amp:** Reseach the meanings of slew rate, input offset current and voltage , input range and output range, DC gain. Explain in your own words. (25pt)

**b)** Compare your measurement results during the lab with LM-741 datasheet values. If there are pretty much difference, explain main sources of the discrepancies. (20pts)

**c)** Research the concepts of folded cascode, telescopic cascode and rail to rail opamps. Give an exemplary circuit for anyone. Find the AC gain and cut-off frequency of this circuit. (30 pts)

**Part-4--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. (20pt)

**Part-5--References:** If you have referred parts, specify their references below. (10pt)