ECE2260

Lab1 – Report Point Breakdown

Communication Organization (ease of locating figures/code/etc) Clarity of style (ease of reading, and etc.) English (grammar, punctuation, and etc.) Introduction Figure titles and numbers Equations explained (at least one sentence between equat Matlab listings and comments	30 Points Total
System Components Table of Components (Measured Values) Measured Components used in Matlab	10 Points Total 5 5
Analysis of Launcher Circuit	20 Points Total
Overdamped:	2
Circuit Schematic	2
Derivation of I(t) Matlab Plot of I(t) Expression	2
State Equations Derivations	2 2 2
Matlab Comparison of I(t) for 2 Methods	2
Underdamped:	2
Circuit Schematic	2
Derivation of I(t)	2
Matlab Plot of I(t) Expression	2
State Equations Derivations	2
Matlab Comparison of I(t) for 2 Methods	2
Construction and Testing of Launcher	10 Points Total
Measured R and L of Coil	5
Table of Launch Measurements	5
Third-Order System	25 Points Total
Circuit Schematic	2
State Equations Derivations	6
Matlab Code for ODE45 Solver	3
Matlab Plot of ODE45 Solution	2
Measured V2 Plot	4
Matlab Code for Comparison	3
Matlab Comparison Plot	2
Comments on Measured vs. Calculated Comparison	3
Conclusion	5 Points Total