

AME 21216 – Score Sheet

A10 – Second Order Transient Response

NDID#: _____

For more details on any of the items below, please refer to the lab handout.

Item and Description	Points Awarded	Possible Points
Technical writing – Using the correct format, address all questions from the lab handout in the paragraphs.		4
For the pendulum, plot of angular displacement θ (degrees) vs. t (seconds)		4
For the pendulum, a table containing the following parameters extrapolated from the data: <ul style="list-style-type: none">• The decay constant λ (1/s).• The ringing frequency ω_d (rad/s).• The radius of gyration R (m).• The viscous drag force coefficient γ (Ns/m).		5
Plot of measured amplitude (V) vs. driving frequency (kHz) with theoretical curve for ultrasonic transducer		5
Measured resonance frequency and damping ratio for the UT (in caption of relevant plot)		4
TOTAL		22

NOTE: Although measured data is typically plotted as individual markers, transient signals (such as acceleration vs. time) should be plotted as a continuous line.