

JEE2330 – Spring 2025

Lab #2 Values and Notes

Experimental Procedures:

Section 2.5.2 – RC Transient Analysis

$$R_1 = 10 \text{ k}\Omega \quad R_2 = 10 \text{ k}\Omega \quad C = 0.02 \text{ }\mu\text{F}$$

$$V_1 = +8 \text{ V} \quad V_2 = -2\text{V} \quad f_1 = 1 \text{ kHz}$$

Section 2.5.3 – Probe Effects

$$V_3 = +2 \text{ V} \quad V_4 = +1.0\text{V} \quad V_5 = -1.0 \text{ V}$$

$$f_2 = 1 \text{ kHz} \quad f_3 = 2 \text{ kHz} \quad R_{\text{ex}} = 220 \text{ k}\Omega$$

Section 2.5.4 – Electrical Relay Analysis

$$R_E = 100 \text{ }\Omega \quad R_3 = 2.2 \text{ k}\Omega$$

$$R_4 = 3.3 \text{ k}\Omega \quad V_7 = 15 \text{ V}$$

Section 2.5.5 – RLC Transient Analysis

$$V_T = 0\text{-}8\text{V square wave with } f = 20 \text{ Hz per manual}$$

$$R_{\text{EC}} = 250 \text{ }\Omega \quad L_R = 600 \text{ mH} \quad C_R = 1.00 \text{ }\mu\text{F}$$

Report:

Omit sections 2.6.3.1, 2.6.3.2, 2.6.4.6, and 2.6.5.4.

Report Grading:

<u>Data Sheets:</u>	10 points	
<u>Section 2.6.1:</u>	4 points	
<u>Section 2.6.2:</u>	8 points	parts 2.6.2.1 – 2.6.2.2 (4 points each)
<u>Section 2.6.3:</u>	25 points	parts 2.6.3.3 – 2.6.3.7 (5 points each)
<u>Section 2.6.4:</u>	19 points	parts 2.6.4.1 (5 points), 2.6.4.2 (6 points), 2.6.4.3 – 2.6.4.4 (3 points each), 2.6.4.5 (2 points)
<u>Section 2.6.5:</u>	24 points	parts 2.6.5.1 – 2.6.5.3 (6 points each), 2.6.5.5 (6 points)
<u>Section 2.6.6:</u>	10 points	