

ELE1EDP 2007 Laboratory: Completion Sheet

PSpice: Frequency Response and Power Plot

This form **must** be handed in before you leave the laboratory session, for you to receive **any** marks.

Computer number	Day of Week (Mon-Fri)	Date	Time

Student ID	Family Name	Given Names

Ask a demonstrator to check your work when you have completed each Question/Task.

Question/Task	Marker's Comments	Marker's Initials	Mark /5
1.1 RC circuit schematic correct			
RC file saved in H:\ELE1EDP\PSpice\			
Bode plot for R1 Voltage vs frequency			
Frequency of -3 dB point, f_{-3dB}			
Time constant, $\tau = RC$			
Cutoff frequency, $f_c = \frac{1}{2\pi RC}$			
Compare f_c with f_{-3dB}			
1.2 RL circuit schematic correct			
RL file saved			
Bode plot for L1 Voltage			
Frequency of -3 dB point, f_{-3dB}			
Time constant, $\tau = \frac{L}{R}$			
Cutoff frequency, $f_c = \frac{1}{2\pi L/R}$			
Compare f_c with f_{-3dB}			
2. Power schematic correct			
Power schematic saved			
R2 power trace			
What is the Maximum Power Transferred?			
At what value of R2?			
What's special about that value of R2?			
Total mark / 100			