

General physics lab 202

Student's name:.....

Student's number:.....

Experiment 6 : Series and parallel connection of capacitors

Series connection:

C ( $\mu$ F )	V ( )	Q = CV ( )
4.7		
4.7		
4.7		
	V <sub>batt</sub> =	Q <sub>av</sub> =

Theoretical:

$$\frac{1}{C_{eq}} = \frac{1}{C_1} + \frac{1}{C_2} + \frac{1}{C_3} = \dots\dots\dots$$

$$C_{eq} = \dots\dots\dots$$

Experimental:

$$C_{eq} = \frac{Q_{av}}{V_{batt}} = \dots\dots\dots$$

Parallel connection:

C ( $\mu$ F )	V ( )	Q = CV ( )
4.7		
4.7		
4.7		
	V <sub>batt</sub> =	Q <sub>total</sub> =

Theoretical:

$$C_{eq} = C_1 + C_2 + C_3 = \dots\dots\dots$$

Experimental:

$$C_{eq} = \frac{Q_{total}}{V_{batt}} = \dots\dots\dots$$