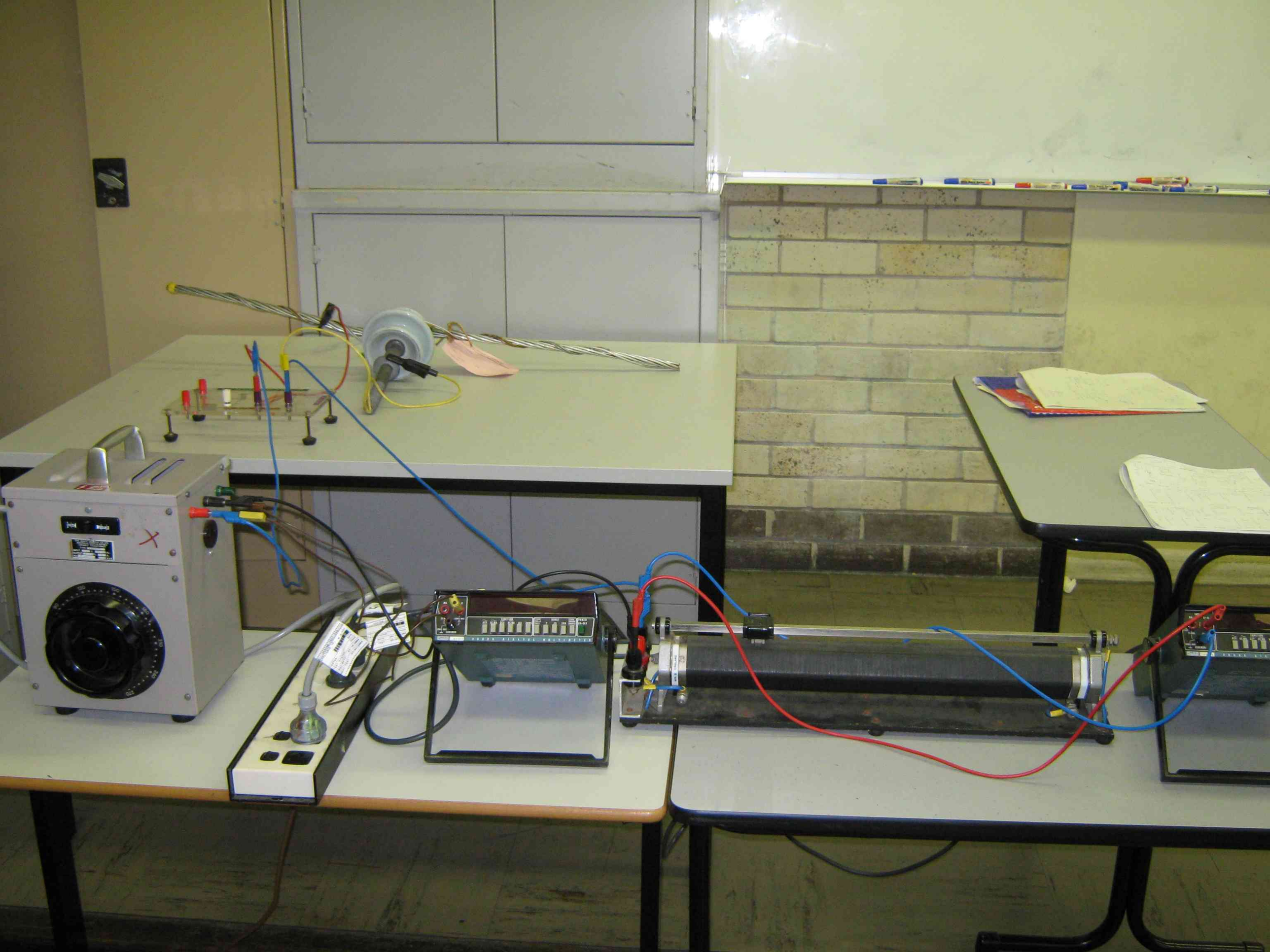
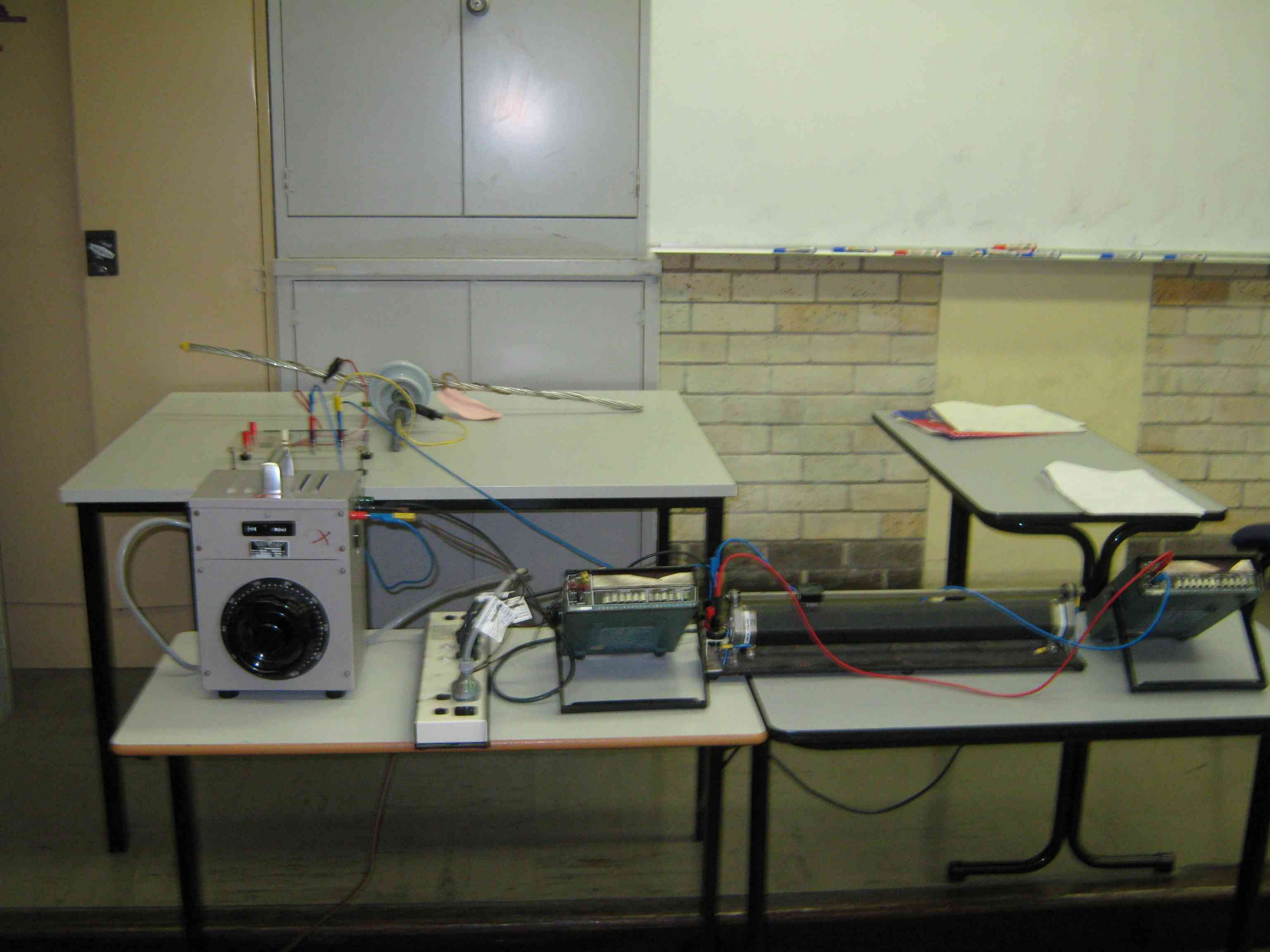


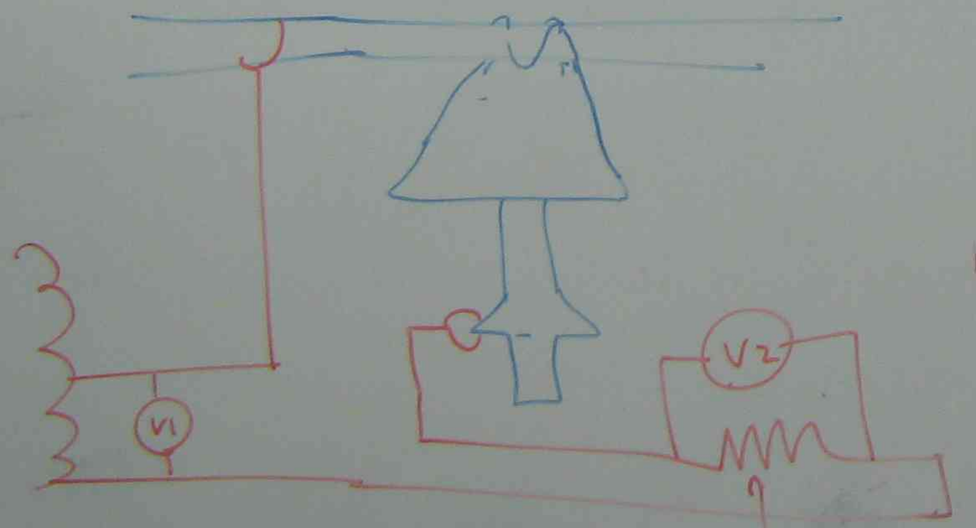


cap = 18 chairs
18 desks

TRANSMISSION LINE PRACTICAL

① LINE INSULATOR TEST

(1) CONNECT THE GIVEN CIRCUIT



(2) INJECT V_1 80V

(3) MEASURE V_2

(4) CALCULATE $I = \dfrac{V_2}{\text{RHEOSTAT RESISTANCE (30Ω)}}$

(5) $X_C = \dfrac{V_1 - V_2}{I}$

(6) $C_{80V} = \dfrac{1}{2\pi f X_C}$ WHERE $f = 50\,Hz$

REPEAT THE ABOVE STEP FOR 90V & 100V

$$C = \frac{C_{80V} + C_{90V} + C_{100V}}{3}\ F$$

(7) THEN SWITCH OFF THE SUPPLY & OBSERVE WHAT HAPPENS TO V_1