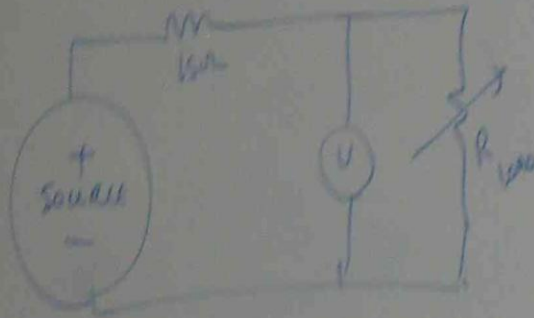


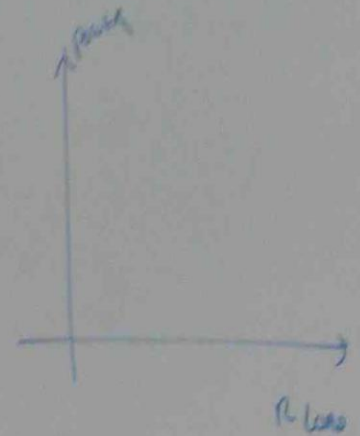
MAXIMUM POWER TRANSFER THEOREM

When Load Resistance is equal to source resistance, maximum power is transferred.

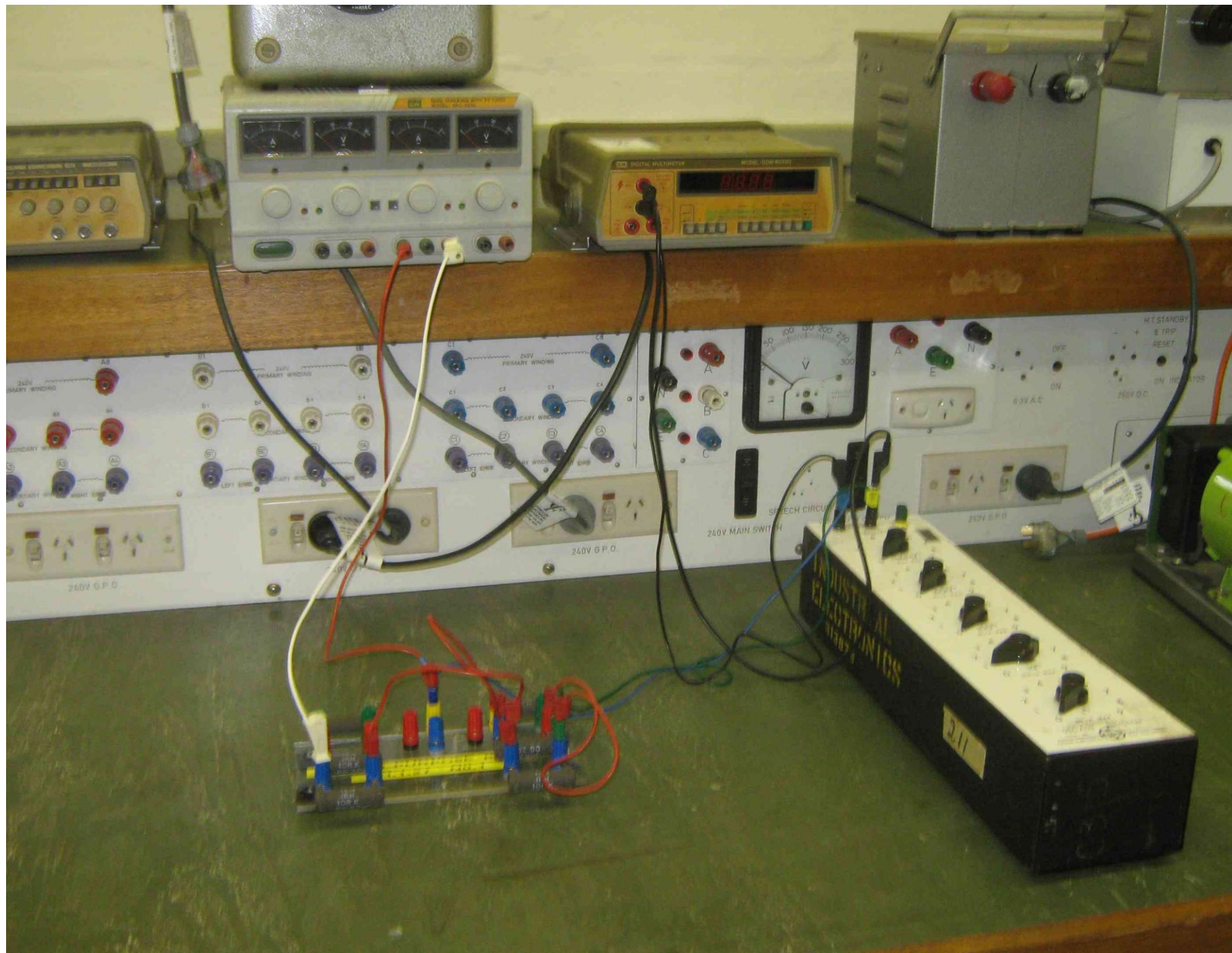
Construct the circuit



STEP	V	R_{LOAD}	Power $\frac{V^2}{R_{LOAD}}$
1	—	10Ω	Power 1
2	—	11Ω	Power 2
3	—	12Ω	
4	—	13Ω	
5	—	14Ω	
6	—	15Ω	
7	—	16Ω	
8		17Ω	
9		18Ω	
10		19Ω	
11		20Ω	



DRAW THE GRAPH

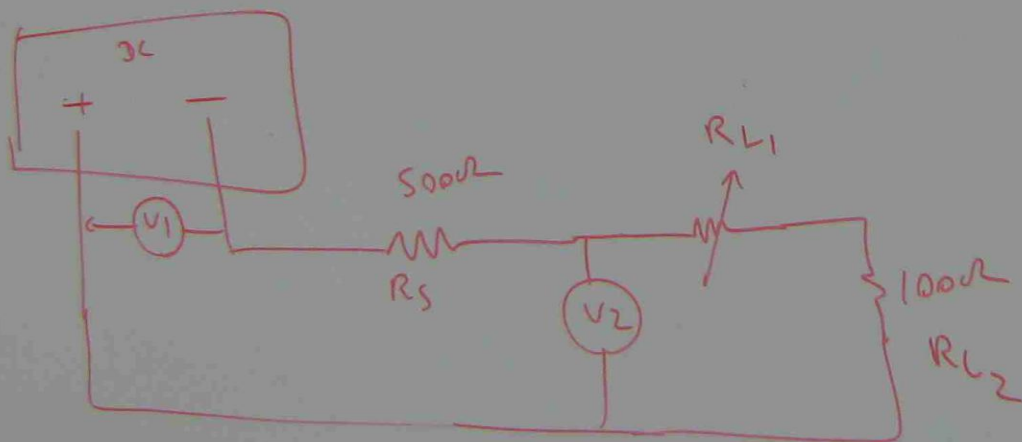


PRACTICAL

MAXIMUM POWER TRANSFER THEOREM

MAXIMUM POWER IS TRANSFERRED WHEN SOURCE IMPEDANCE IS EQUAL TO LOAD IMPEDANCE

CONNECT THE GIVEN CIRCUIT



VARY R_{L1} & NOTE V_2

R_{L1}	R_{L2}	R_{L1}
0	100Ω	
100	100	
200	100	
300	100	
400	100	
500	100	
600	100	
700	100	
800	100	

VARY R_{L1} & NOTE V_2

DRAW THE GRAPH

R_{L1}	R_{L2}	$R_{LT} = R_{L1} + R_{L2}$	V_2	$P = \frac{V_2^2}{R_{LT}}$ WATT
0	1000			
100	100			
200	100			
300	100			
400	100			
500	100			
600	100			
700	100			
800	100			

1000
 R_{L2}

P

Equal To Load

by R_L & note V_2

DRAW THE GRAPH

R_{L1}	R_{L2}	$R_{LT} = R_{L1} + R_{L2}$	V_2	$P = \frac{V_2^2}{R_{LT}}$ WATT
0	100 Ω			
100	100			
200	100			
300	100			
400	100			
500	100			
600	100			
700	100			
800	100			

