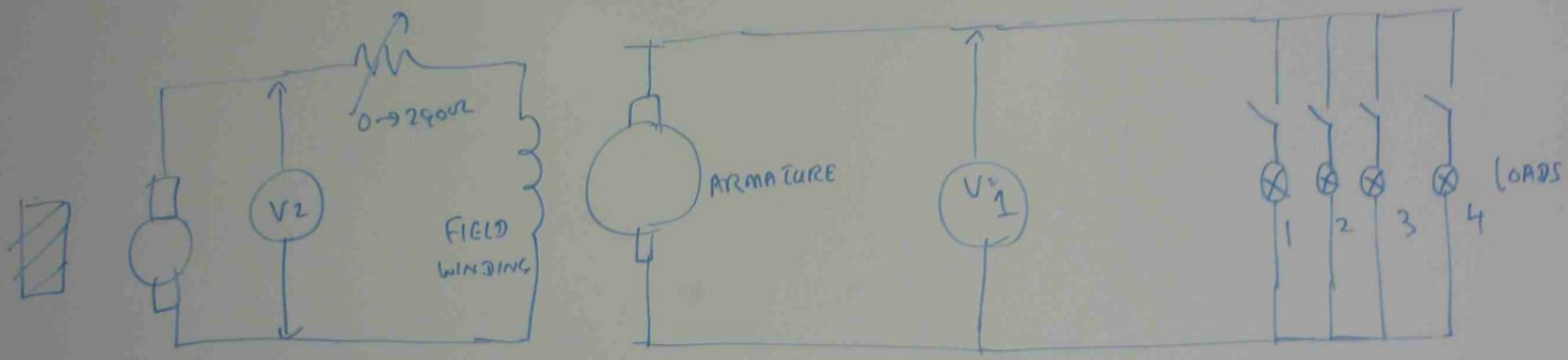
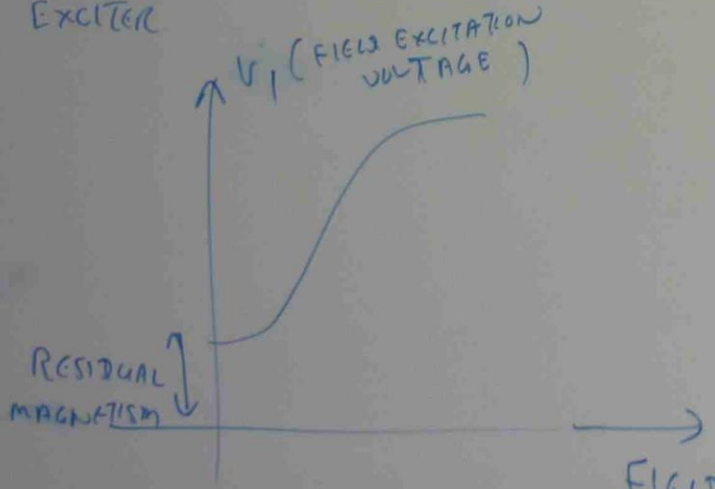
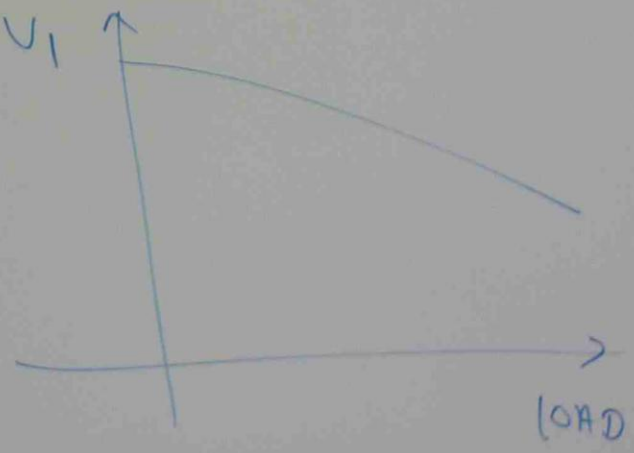
DC GENERATOR CHARACTERISTICS TEST





NO LOAD CURVE



LOAD CURVE

(1) CONNECT THE GIVEN CIRCUIT

(2) OFF THE FIELD EXCITATION SWITCH

(3) NOTE THE TERMINAL VOLTAGE PRODUCED BY RESIDUAL MAGNETISM

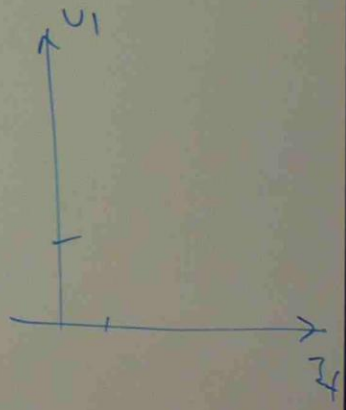
(4) ON THE FIELD EXCITATION SWITCH

(5) - REDUCE FIELD RESISTANCE AND NOTE TERMINAL VOLTAGE

FIELD RESISTANCE	$I_f = \frac{U_2}{\text{RESISTANCE}}$	U_1
FULL 290Ω		
$\frac{9}{10} \times 290$		
$\frac{8}{10} \times 290$		
$\frac{7}{10} \times 290$		
$\frac{6}{10} \times 290$		
$\frac{5}{10} \times 290$		
$\frac{4}{10} \times 290$		
$\frac{3}{10} \times 290$		

	U_1
$\frac{2}{10} \times 290$	
$\frac{1}{10} \times 290$	

PLOT FIELD CURRENT VS TERMINAL VOLTAGE



(6) RE

(7)

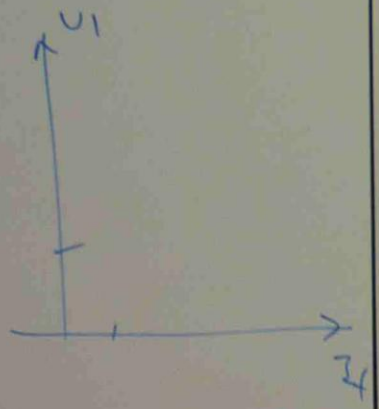
⑥ REDUCE TERMINAL VOLTAGE TO 30V

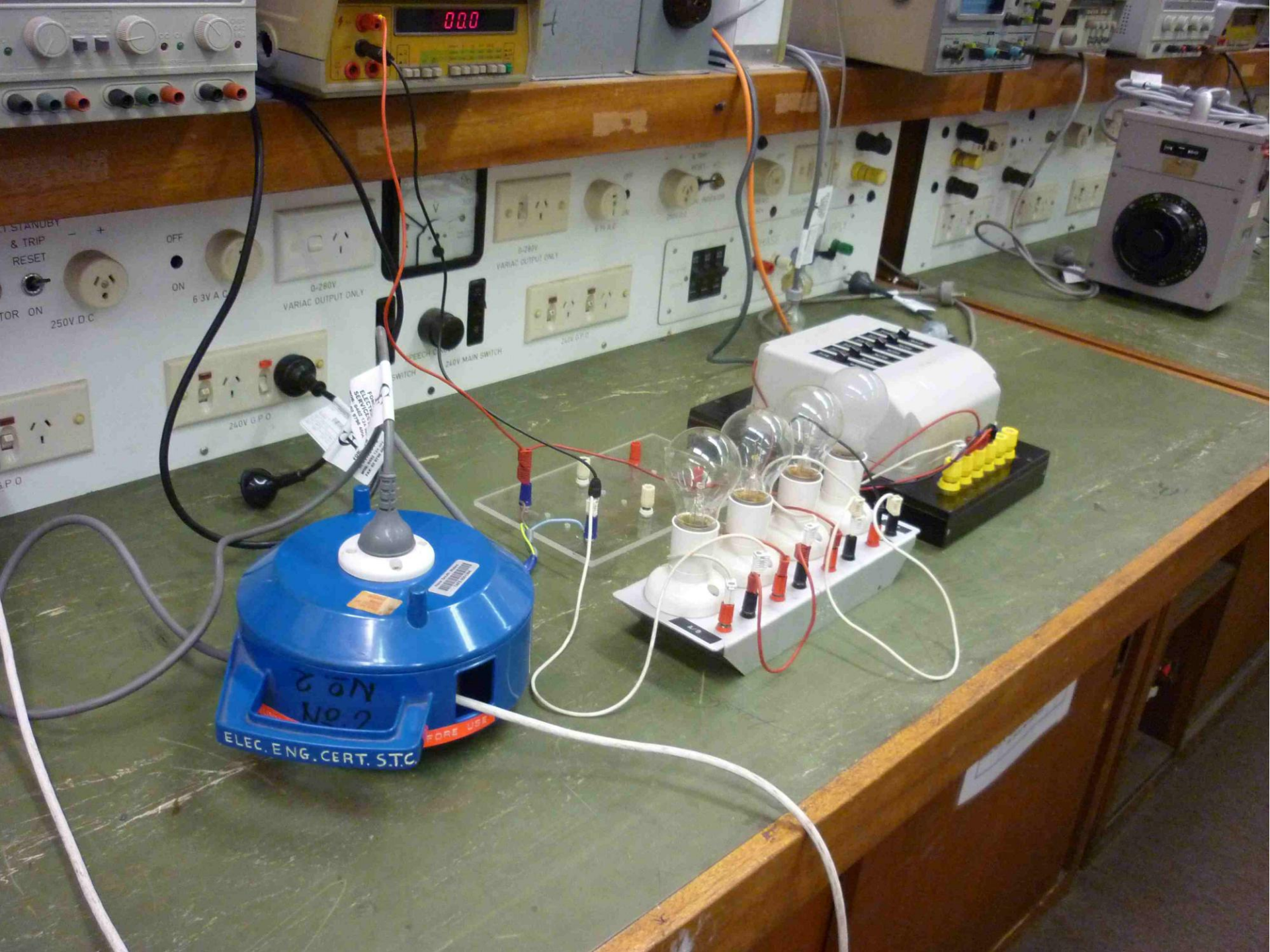
⑦ INCREASE THE LOADS AND NOTE TERMINAL VOLTAGE, FILL THE TABLE

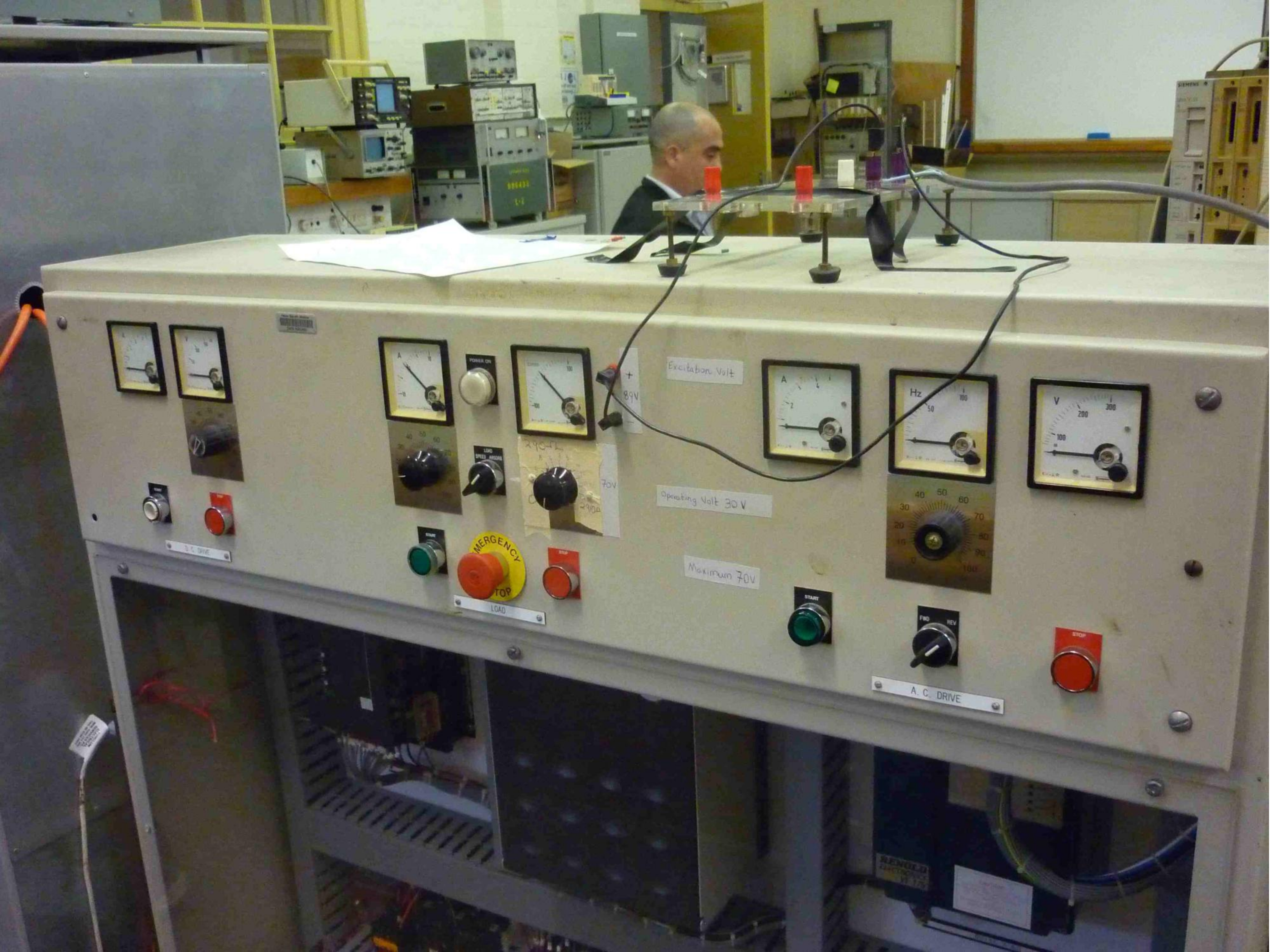
LOAD LAMP	V_1
1	
2	
3	
4	

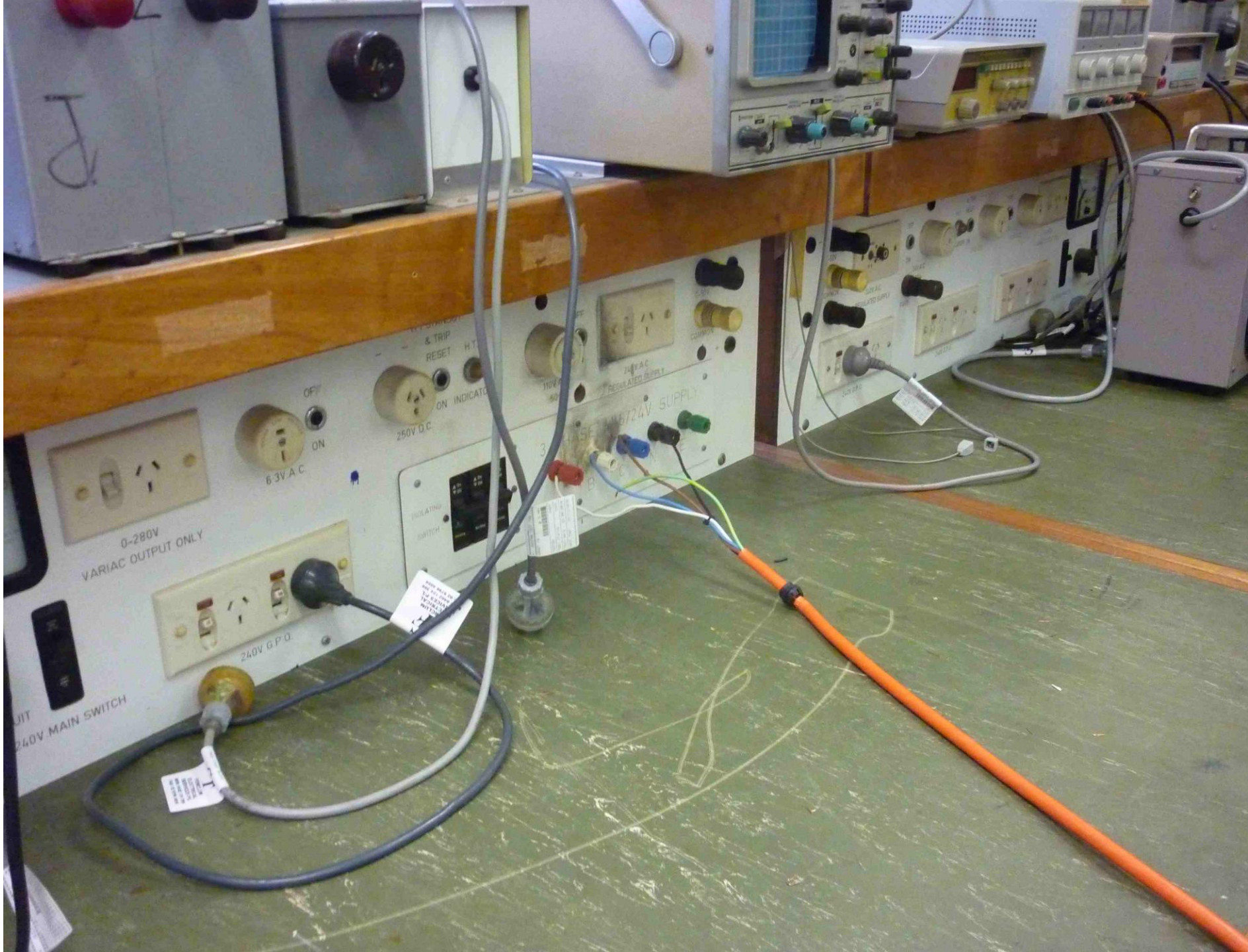
PLOT LOAD VS TERMINAL VOLTAGE

PLOT FIELD CURRENT VS TERMINAL VOLTAGE




ELEC. ENG. CERT. S.T.C.


POWER ON
Excitation Volt
Operating Volt 30 V
Maximum 70V
70V
START
STOP
EMERGENCY STOP
LOAD
D.C. DRIVE
FWD
REV
A. C. DRIVE
Hz
V


& TRIP
RESET
OFF
ON
6.3V A.C
250V D.C
0-280V
VARIAC OUTPUT ONLY
240V G.P.O.
240V MAIN SWITCH


START
STOP
D. C. DRIVE
LOAD
SPEED
ABSORB
START
STOP
LOAD