Title of the experiment: - FAMILIARISATION EXPERIMENT (**Variac & Potential Divider**)
Name: -
Enrollment No.: - Date: - 22/04/2021
Apparatus used: -

Sl. No.	Item	Range	Maker's Name
1	Ammeter (MIA)	0-1-2 A	Automatic Electric Ltd.
2	Voltmeter (MIV)	0-125-250-500 V	Automatic Electric Ltd.
3	Ammeter (MCA)	0-1-2 A	Automatic Electric Ltd.
4	Voltmeter (MCV)	0-125-250-500 V	Automatic Electric Ltd.
5.	Variac	1-ph, 50 Hz, 0-270 V, 8A	GE
6.	Potential Divider	50 Ω, 5A each	GE

Experimental Data

TABLE-I (Using Variac)

No. Of Obvs.	Reading Of				Remarks
	MCA (Amp)	MIA (Amp)	MCV (Volt)	MIV (Volt)	
1	0	1.0	0	200	Supply voltage is AC. MCA and MCV does not give any value.
2	0	1.2	0	200	
3	0	1.4	0	200	
4	0	1.6	0	200	
5	0	1.8	0	200	

TABLE-II (Using Variac)

METER	Normal Connection	Reverse Connection
MCA	Zero reading	Zero reading
MIA	Positive deflection	Positive deflection
MCV	Zero reading	Zero reading
MIV	Positive deflection	Positive deflection

TABLE-I (Using Potential Divider)

No. Of Obvs.	Reading Of				Remarks
	MCA (Amp)	MIA (Amp)	MCV (Volt)	MIV (Volt)	
1	1.0	1.0	200	200	Supply voltage is DC.
2	1.2	1.2	200	200	
3	1.4	1.4	200	200	
4	1.6	1.6	200	200	
5	1.8	1.8	200	200	

TABLE-II (Using Potential Divider)

METER	Normal Connection	Reverse Connection
MCA	Positive deflection	Negative deflection
MIA	Positive deflection	Positive deflection
MCV	Positive deflection	Negative deflection
MIV	Positive deflection	Positive deflection

Title of the experiment: - FAMILIARISATION EXPERIMENT (**Wattmeter**)

Name: -

Enrollment No.: - Date: - 22/04/2021

Apparatus Used: -

Sl. No.	Item	Range	Maker's Name
1	Ammeter (MIA)	0-1-2 A	Automatic Electric Ltd.
2	Voltmeter (MIV)	0-125-250-500 V	Automatic Electric Ltd.
3	Variac	1-ph, 50 Hz, 0-270 V, 8A	GE
4	Wattmeter	0-1-2 A, 0-125-250-500 V, P.F.-1	GE

Experimental Data: -

TABLE-I

No. of Obvs.	Current range	Voltage Range	Wattmeter reading	Multiplying factor (M_f)	Power
1	1 A	125 V	120 W	1	120 W
2	1 A	250 V	60 W	2	120 W
3	1 A	500 V	29 W	4	118 W
4	2 A	125 V	60 W	2	120 W
5	2 A	250 V	29 W	4	118 W

TABLE-II

No of Obvs.	Item	Deflection (Indicate positive or negative)
1	Current coil terminal "**M**" connected to Pressure coil. Terminal "**COM**" as in fig.-1	Positive
2	Current coil reversed, pressure coil as in fig.-1	Negative
3	Current coil as in fig.-1 but pressure coil is reversed.	Negative
4	Both current and pressure coil is reversed.	Positive