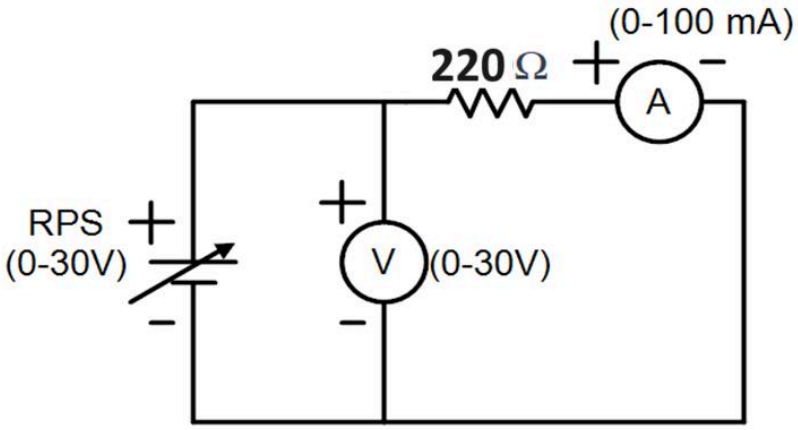
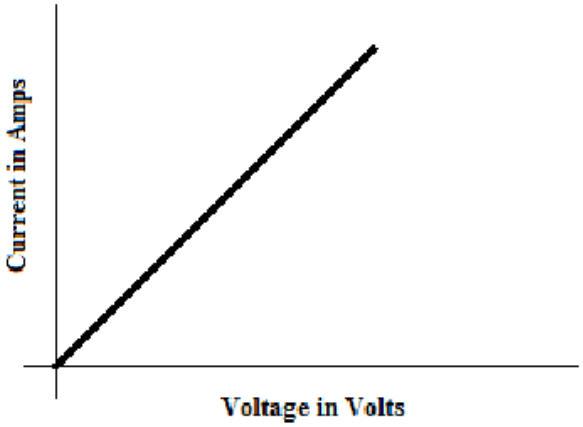
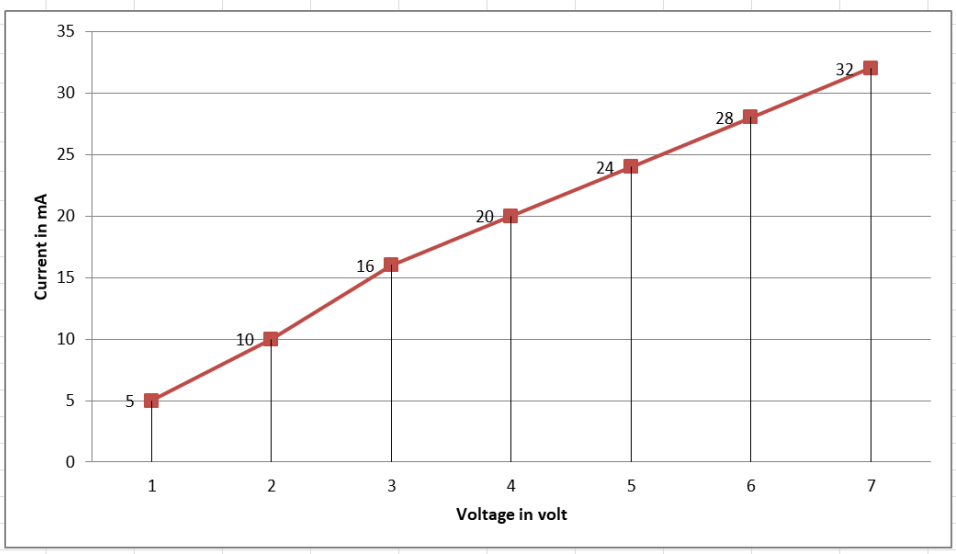
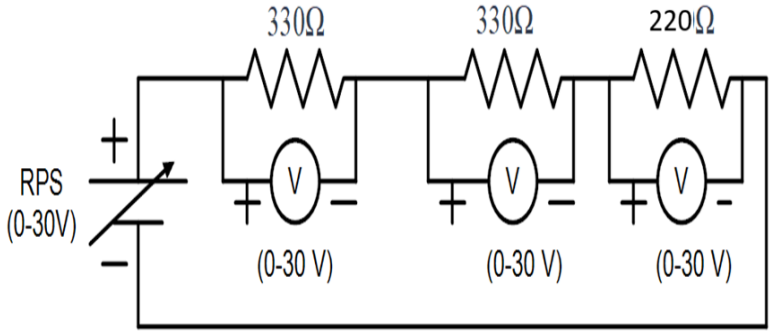
EXP1:


(0-100 mA)
220 Ω
A
RPS
(0-30V)
V
(0-30V)

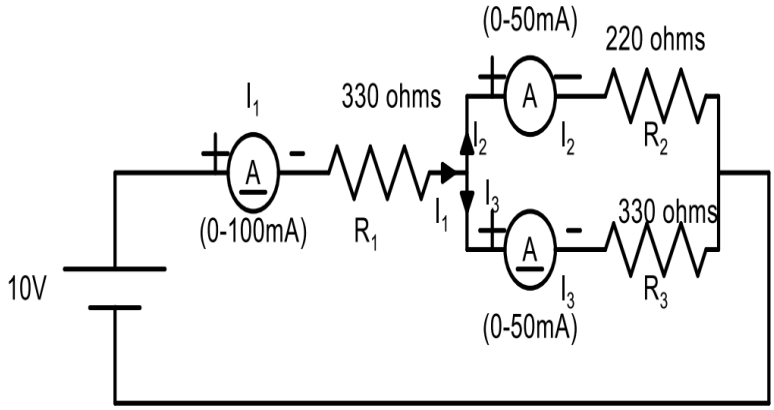

Current in Amps
Voltage in Volts


35
30
25
20
15
10
5
0
Current in mA
5
10
16
20
24
28
32
1
2
3
4
5
6
7
Voltage in volt

EXP 2:

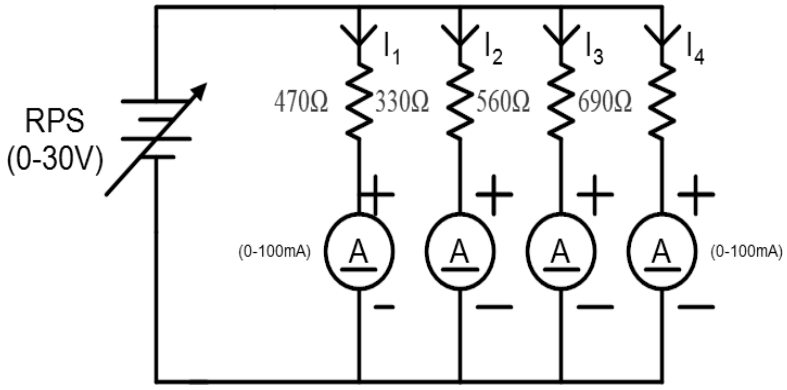

330Ω
330Ω
220Ω
RPS
(0-30V)
V
V
V
(0-30 V)
(0-30 V)
(0-30 V)

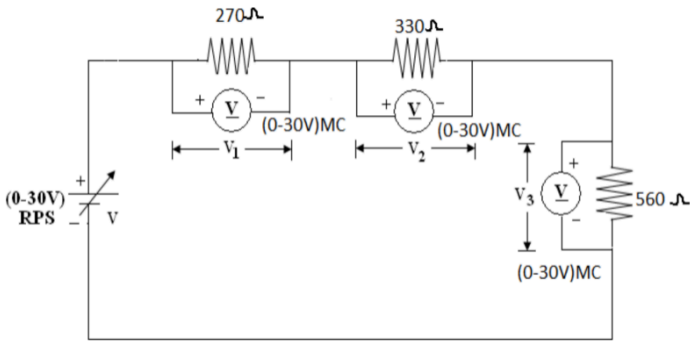
1A)


(0-50mA)
220 ohms
I_1
330 ohms
A
A
I_2
I_2
R_2
I_3
I_1
330 ohms
A
(0-100mA)
R_1
10V
I_3
R_3
(0-50mA)

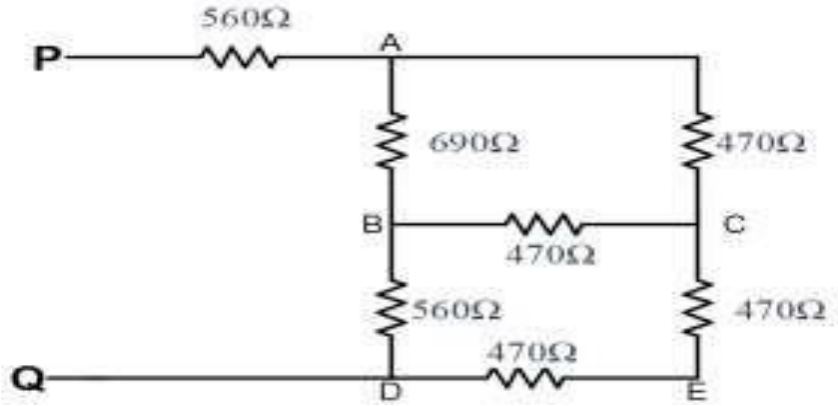
1B)

EXP2:

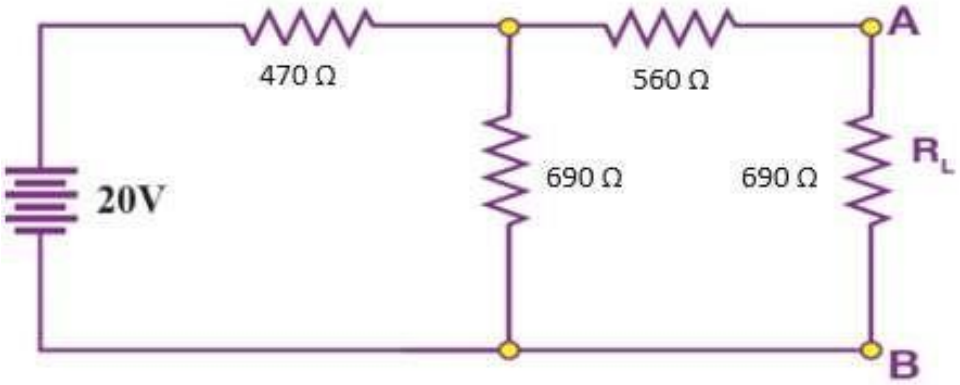

I_1
I_2
I_3
I_4
RPS
(0-30V)
470Ω
330Ω
560Ω
690Ω
(0-100mA)
A
A
A
A
(0-100mA)


270Ω
330Ω
V
V
(0-30V)MC
(0-30V)MC
V_1
V_2
(0-30V)
RPS
V
V_3
V
560Ω
(0-30V)MC

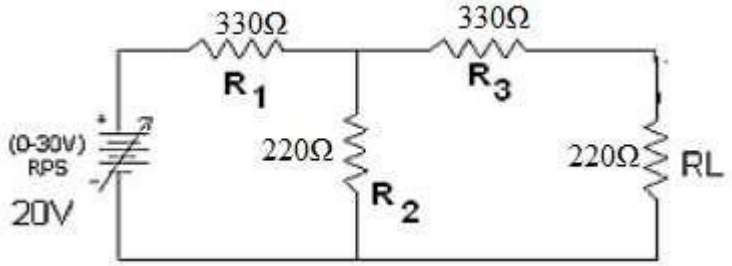
EXP3:



EXP 4:

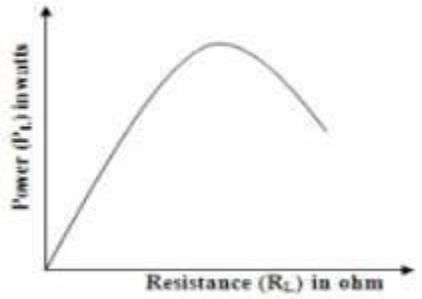


EXP 5:

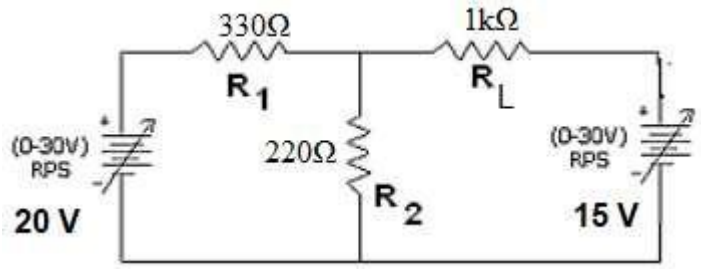


A)

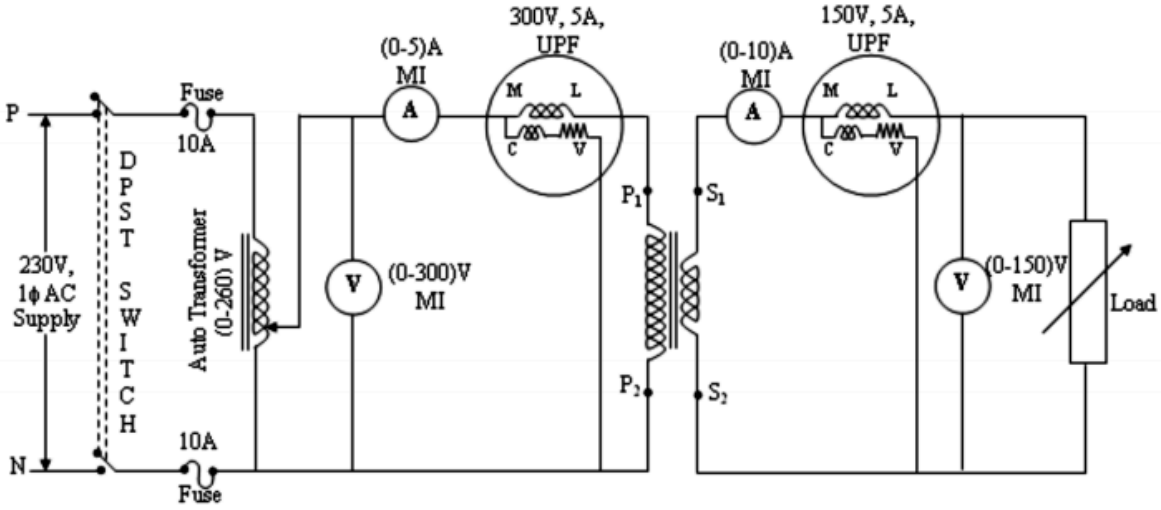
MODEL GRAPH:

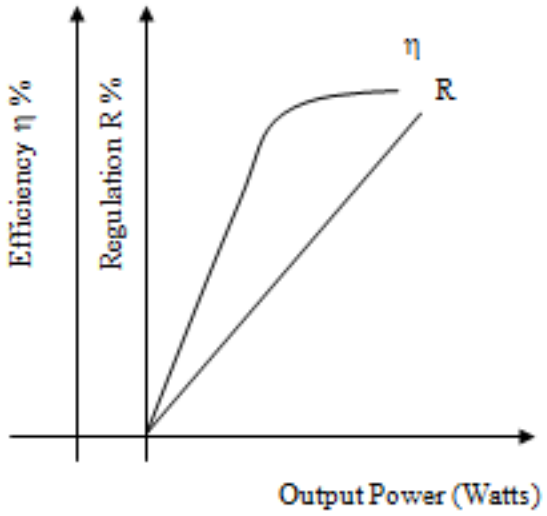


B)

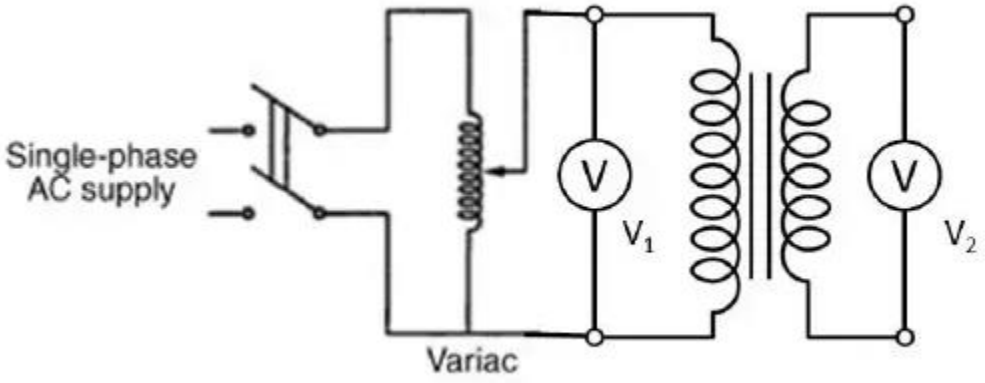

330Ω
R1
1kΩ
RL
220Ω
R2
(0-30V)
RPS
20 V
(0-30V)
RPS
15 V

EXP 6:


P
N
230V,
1ϕ AC
Supply
DPST SWITCH
Fuse
10A
10A
Fuse
Auto Transformer
(0-260) V
(0-5)A
MI
A
(0-300)V
MI
V
300V, 5A,
UPF
M
L
C
V
P1
P2
S1
S2
(0-10)A
MI
150V, 5A,
UPF
(0-150)V
MI
Load

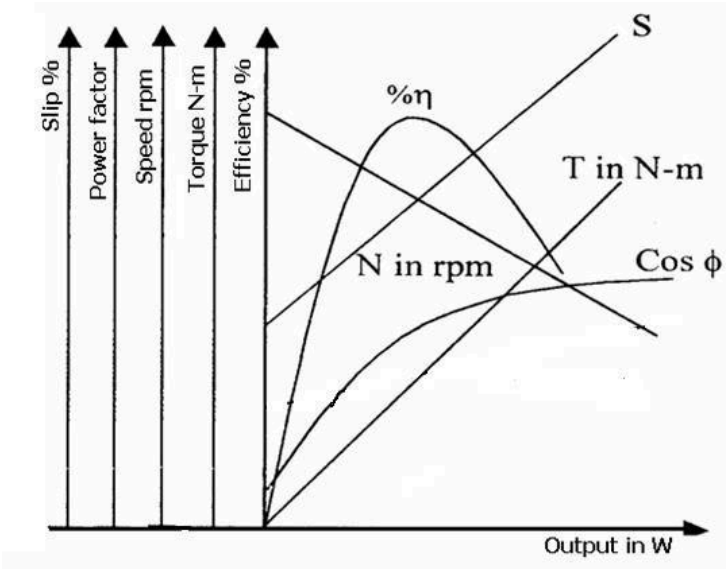

η
R
Efficiency η %
Regulation R %
Output Power (Watts)

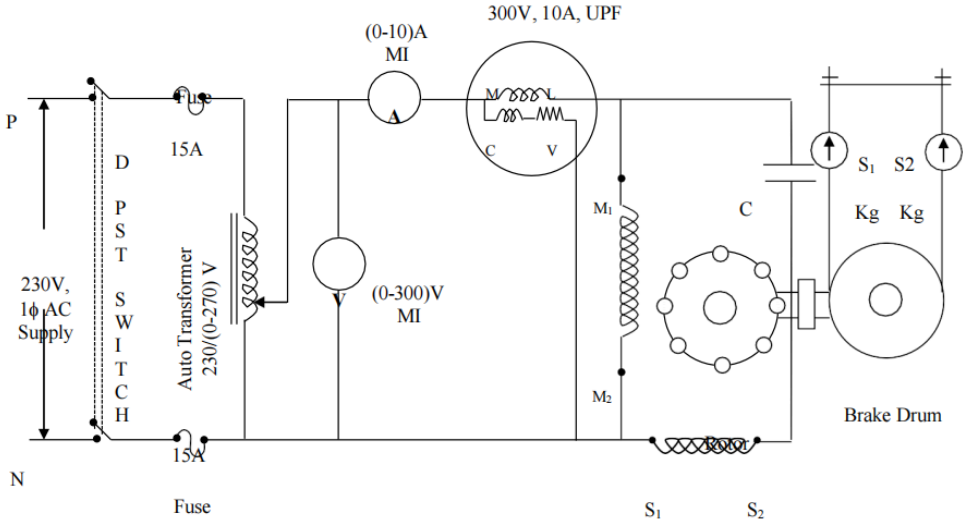
EXP 8:



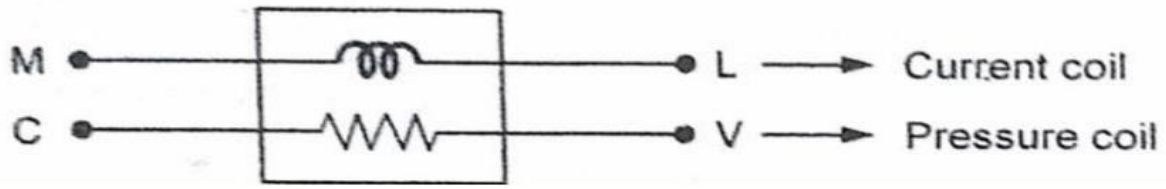
EXP 9:

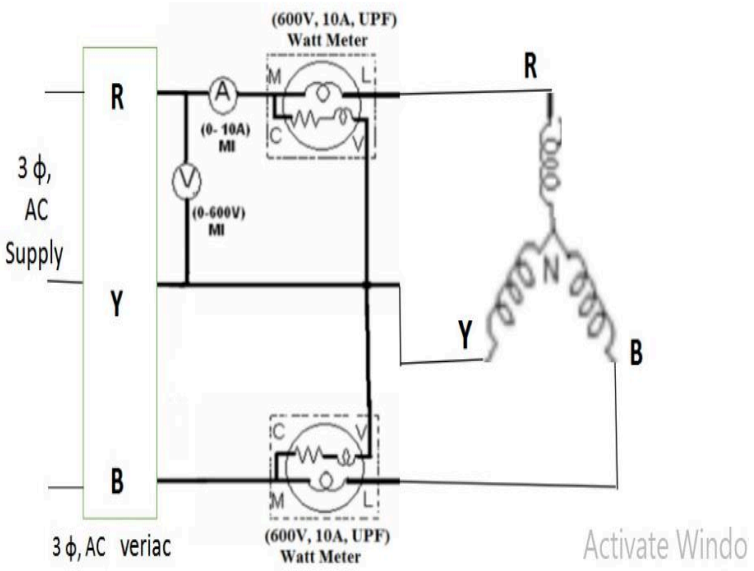
V volts	I Amps	Speed N (rpm)	Wattmeter reading		Spring balance readings			torque (T) = 9.81* R * (S1 ~ S2)	output power O/P= 2ΠNT / 60	Power factor cos Φ= W/VI	% efficiency η= OP/IP	Slip= S = Ns – N / Ns * 100%
					S1	S2	S1~S2					
			OBS	ACT								
220	6.2	1470	40	160	0	0	0	0	0	0	0	0.02
220	6.5	1460	130	520	0.6	2.6	2	2.23	341.84	0.364	65.73	0.026
218	7.0	1450	180	720	0.8	3.4	2.6	2.90	441.34	0.472	61.30	0.033
218	7.5	1440	220	880	1.0	4.2	3.2	3.78	570.78	0.538	64.86	0.040
218	8.0	1430	250	1000	1.2	5.4	4.2	4.97	743.88	0.573	74.39	0.046
216	8.5	1420	290	1160	1.4	5.8	4.4	5.20	773.90	0.632	66.72	0.053
216	9.0	1410	315	1260	1.6	6.2	4.6	5.44	803.43	0.648	63.76	0.06
214	9.5	1400	350	1400	1.8	6.8	5	5.91	867.04	0.689	61.93	0.067





EXP12:

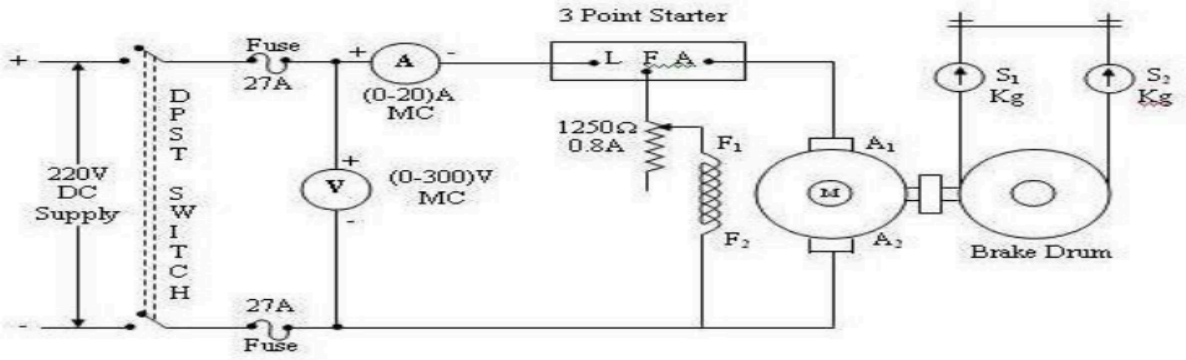




Activate Windo
Go to Settings to acti

:

EXP14



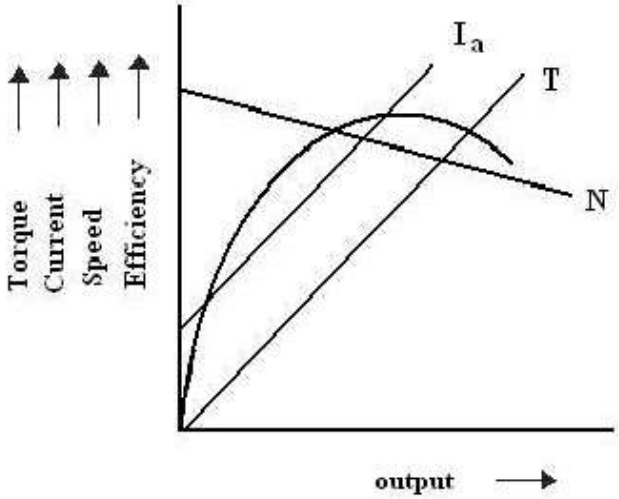
FUSE RATING:

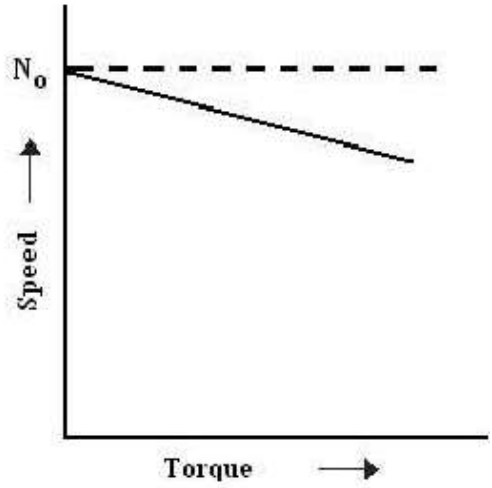
125% of rated current

$$\frac{125 \times 21}{100} = 26.25A$$

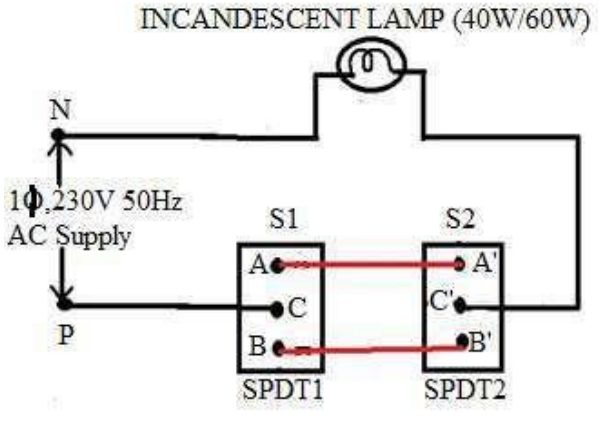
NAME PLATE DETAILS:

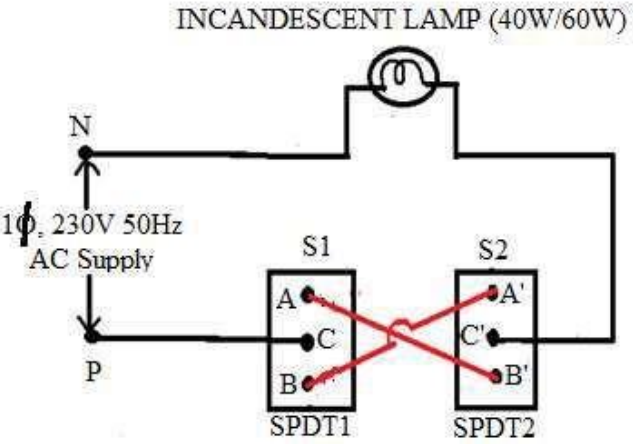
Rated Voltage : 220V
Rated Current : 21A
Rated Power : 3.5KW
Rated Speed : 1500 RPM

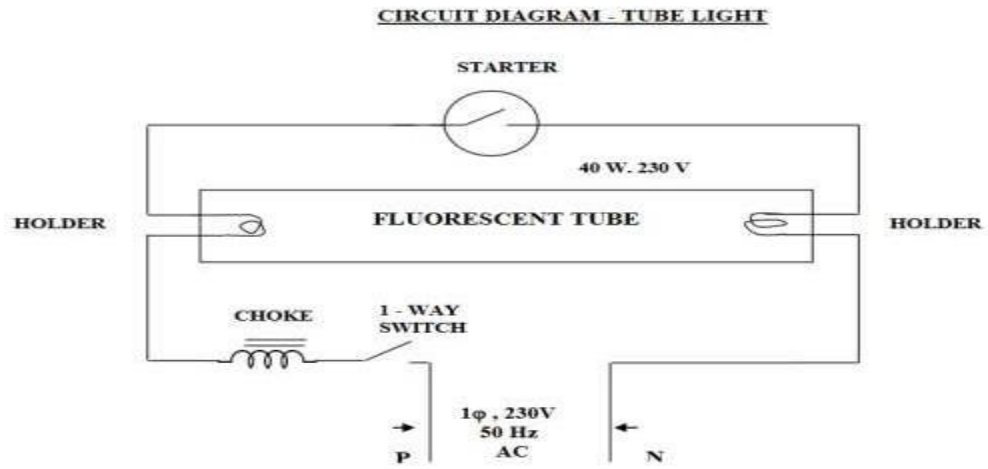




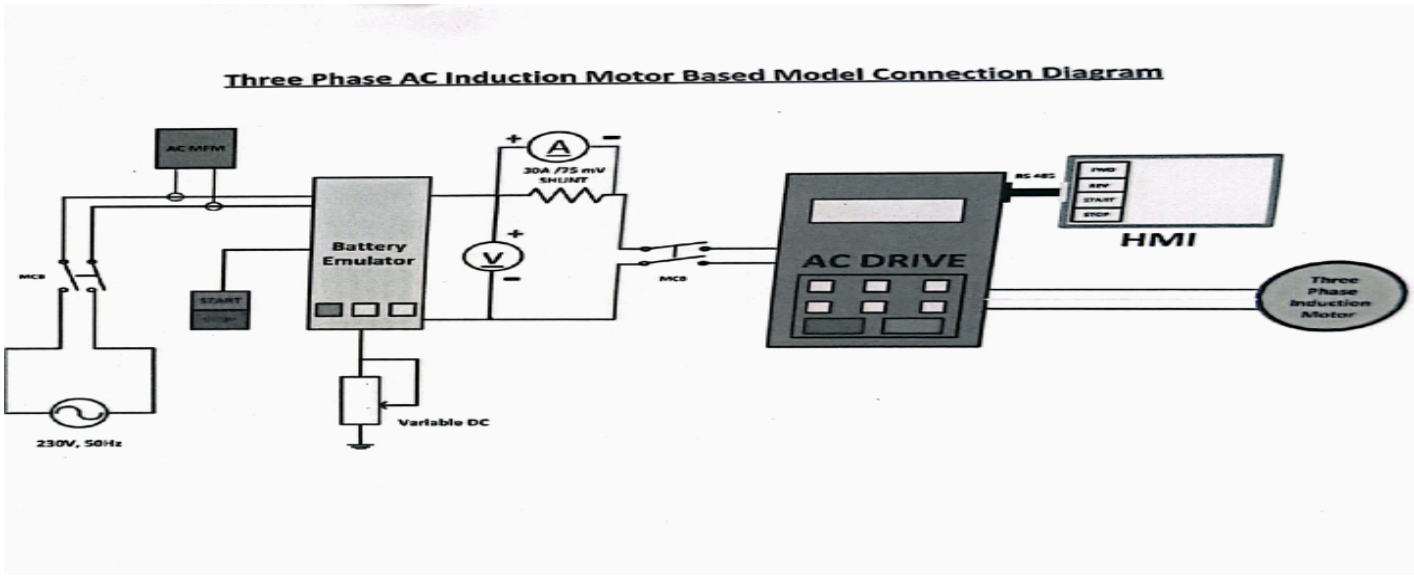
EXP15:

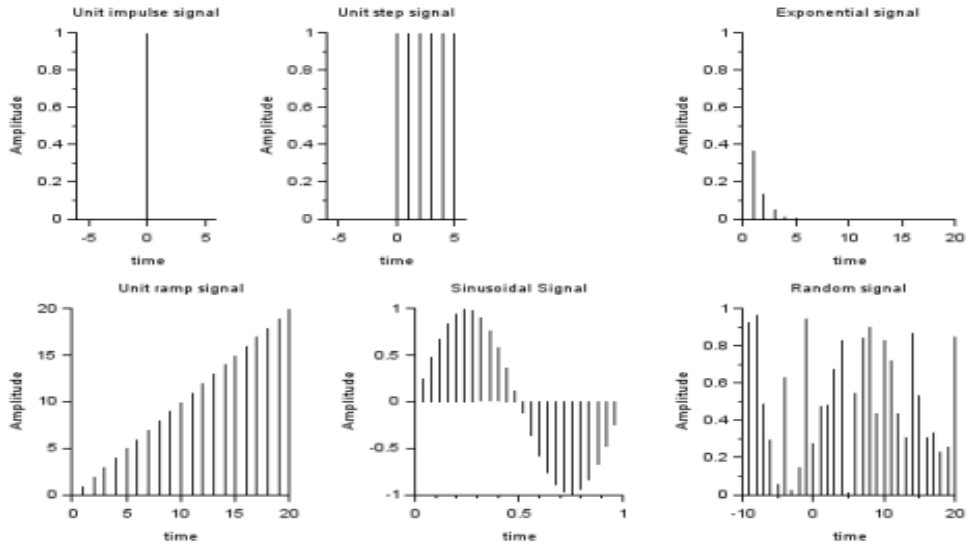





CIRCUIT DIAGRAM - TUBE LIGHT
STARTER
40 W. 230 V
HOLDER
FLUORESCENT TUBE
HOLDER
CHOKE
1 - WAY
SWITCH
1φ , 230V
50 Hz
AC
P
N

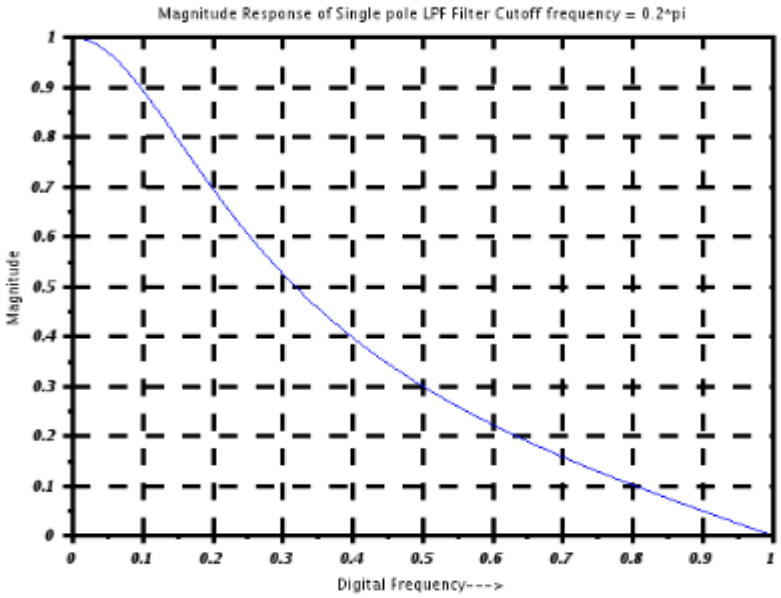
EXP16:


Three Phase AC Induction Motor Based Model Connection Diagram
AC MFM
A
30A /75 mV
SHUNT
Battery
Emulator
V
MCB
START
230V, 50Hz
Variable DC
MCB
AC DRIVE
RS 485
HMI
Three
Phase
Induction
Motor

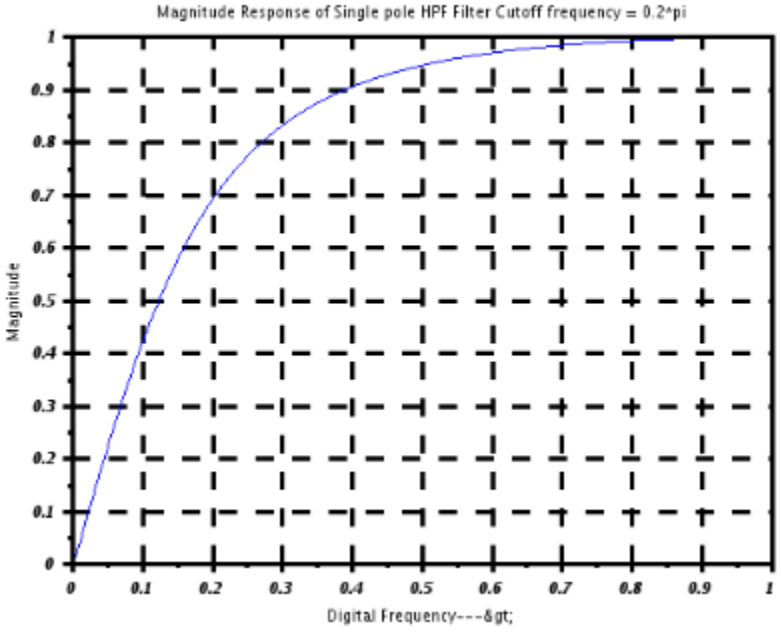

Unit impulse signal
Unit step signal
Exponential signal
Unit ramp signal
Sinusoidal Signal
Random signal
Amplitude
time

EXP17:

EXP19:

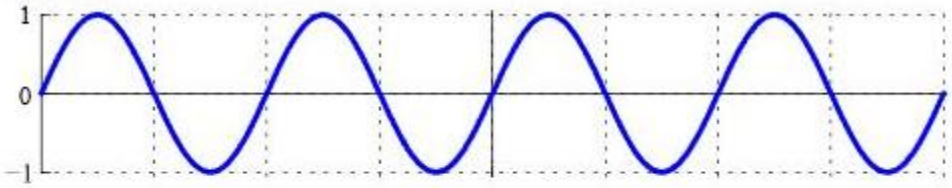

Magnitude Response of Single pole LPF Filter Cutoff frequency = 0.2*pi
Magnitude
Digital Frequency--->
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

:

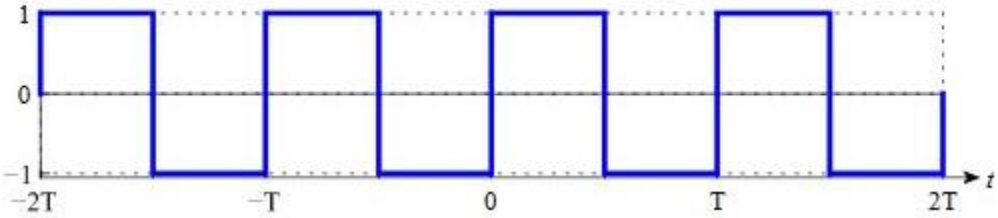
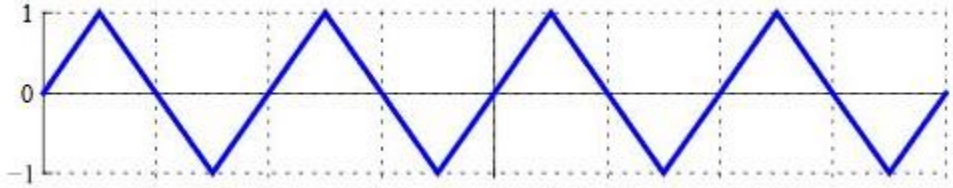

Magnitude Response of Single pole HPF Filter Cutoff frequency = 0.2*pi
Magnitude
Digital Frequency--->
0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1

EXP 20:

Sine wave



Square wave



Triangle wave