

Report Format

Cover page:

- Title and Course number
- Names and Student numbers
- Lab date
- Submission Date

Note:

- Only one report per group,
- Both hand-written and typed reports are acceptable,
- Please don't use a lab book for the report,
- The lab report is due 2 weeks after your lab session.

-Introduction and a brief explanation of the lab purpose.

1- DC Motor Calibration

Numerical Values:

DC-MOTOR Number	G_{pot}	O_{pot}	K_0	K_3

Potentiometer Characteristic
Voltage v.s. Shaft-Angle
(Angle=-360 +360 degrees)
Note: The voltage range of the
potentiometer output is (-5v...+5v)

2- DC Motor Model Identification

$$\text{O.S.}\% = (\text{formula})$$

$$t_{\text{peak}} = (\text{formula})$$

$$\delta = (\text{in terms of O.S.\% and } t_{\text{peak}})$$

$$\omega_n = (\text{in terms of O.S.\% and } t_{\text{peak}})$$

$$K_p = (\text{in terms of } \delta \text{ and } \omega_n \text{ and } K)$$

$$T = (\text{in terms of } \delta \text{ and } \omega_n \text{ and } K)$$

Numerical Values:

K	O.S.%	t_{peak}	δ	ω_n	K_p	T

Numerical Values:

Open Loop Poles	Closed Loop Poles
,	,

Closed loop step response graph.
(Real data and Simulated)

Questions:

1-

2-

Summary or Conclusion: