

LCR - Report Structure.

1) TITLE

2) ABSTRACT ~~4~~ sentences

main:

A) AIM

B) OBSERVATION

C) RESULT

D) INFERENCE

3) INTRODUCTION

A) BACKGROUND THEORY ($\frac{1}{2}$ page)

- LAWS.

- FITTING EQUATION

- DESCRIBE DEPENDENT & INDEPENDENT VARIABLES

4 FITTING PARAMETER (4 AUXILIARY PARAMETERS)

- RELATE BACK TO MEASUREMENTS

B) MATERIALS & METHODS ($\frac{1}{2}$ page)

- APPARATUS ($\frac{1}{4}$)

- PROCEDURE ($\frac{1}{4}$)

4) RESULTS

A) TRANSIENT DECAY (RC) ($\frac{1}{2}$ page)

(measurement - vs - simulation)

4 lines (τ_{meas} , RC, comparison, justification).

B) DC (SQ. WAVE) ($1\frac{1}{2}$ page)

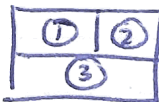
- RC (meas. - vs - simulation) (4 lines) ($\frac{1}{2}$ pg)

- LR

- LC

C) AC [SINE WAVE] for RC, LR, LCR.

- 3 diagrams ($\frac{1}{2}$ page)



(-ve) (+ve) (-ve \rightarrow +ve)

① τ_{meas} - vs - f

② $\phi_{th.}$ - vs - f ($f = \frac{\omega}{2\pi}$)

③ phase - vs - f

5) UNCERTAINTY [1/4 pg]

6) DISCUSSION. [1/4 pg]

- ACCURACY
(DC)

$$\frac{|y_{th} - y_{exp.}|}{y_{th}} \times 100\% \rightarrow \text{INSTRUMENT}$$

- PRECISION

$$\frac{\text{unc. exp}}{y_{exp}} \times 100\% \rightarrow \text{PROCEDURE}$$

7) APPENDIX