



Examination Answer Books

12 Pages

Instructions to Candidates

1. Please give the information requested in the boxes below.
2. Enter your name in the space provided to the right, fold the cover over the name and seal down (using the label provided) to hide your name.
3. The answers must be legibly written. The Examiners can either ignore illegible script or have it typed and the expense of typing charged to the candidate.
4. Write your answers in ink.
5. Begin each answer on a fresh page. Do all rough work in the answer book and cross it through.
6. No part of this book is to be torn out; it must be handed in complete.
7. If more books than one are used, fasten them together using the tags available from the invigilator(s).
8. **Every book must be handed in. In no circumstances may answer books, used or unused, be taken out of the examination venue.**

**Complete, fold and seal
(see note 2 below)**

SURNAME: LAURA

FORENAME(S): Dawid

1	Student Number	1205488
2	Title of Examination Paper	TRANSFORMERS AND SIGNAL CONDITIONING
3	Module Code	ALDA5006
4	Date and Time of Examination	15/05/19 12:00
5	Examination Venue	10
6	Seat Number	
7	Number of Answer Books handed in	1

List the numbers of the questions you have attempted	Office Use
1	4 4
2	3 3
3	1 1/2 1/2
4	2 2
5	2 1/2 2
Total	12 12

(Gweler yr ochr arall am y fersiwn Cymraeg)

28.6 %

28-62



1)

~~Precision~~ = ~~How much room~~ room for random error in a measurement

~~Accuracy~~ Accuracy =

Precision = How much room is there for random error in the measuring device

~~Also~~ Accuracy = how close are the measurements to expected result and how close they are in relation to each other.

Agree

4

4

2)

 21°

$$0.0 + 1.0 + 2.0 + 3.0 + 4.0 = 9$$

$$9 - 5 = 4 \text{ mm O.F.F.}$$

2 X

 35°

$$0.2 + 1.3 + 2.4 + 3.5 + 4.6 = 12$$

$$12 - 5 = 7 \text{ mm O.F.F.}$$

2 X

graph on separate sheet

3

3

3

A)

$$\text{precision} = 0.006 \text{ mm}$$

$$4.292 + 4.295 + 4.296 + 4.293 + 4.292 + 4.294 + 4.293 + 4.290 + 4.294 + 4.291 = 43.13 \text{ m}$$

$$43.13 \text{ m} \div 10 = 4.313 \text{ m}$$

$$43.13 \text{ m} \div 20^\circ\text{C} = 2.156 \text{ m}$$

$$43.13 \text{ m} \div 10 = 0.037 \text{ mm}$$

B)

$$4.292 + 4.295 + 4.296 + 4.293 + 4.292 + 4.294 + 4.293 + 4.290 + 4.294 + 4.291 = 43.13 \text{ m}$$

$$43.13 \text{ m} \div 20^\circ\text{C} = 2.156 \text{ m}$$

C)

$$4.425 + 4.429 + 4.426 + 4.426 + 4.430 + 4.427 + 4.426 + 4.425 + 4.422 + 4.424 + 4.428 = 44.27 \text{ m}$$

$$44.27 \text{ m} \div 30^\circ\text{C} = 1.475 \text{ m}$$

$$1.475 \text{ m} \div 10 = 0.0147 \text{ mm}$$

D)

CALIBRATION

1/2

1/2



4

OCCUR

Random Errors = ~~OR These Errors~~ ~~APPEAR~~ Randomly And ARE NOT CAUSED BY The Equipment Used

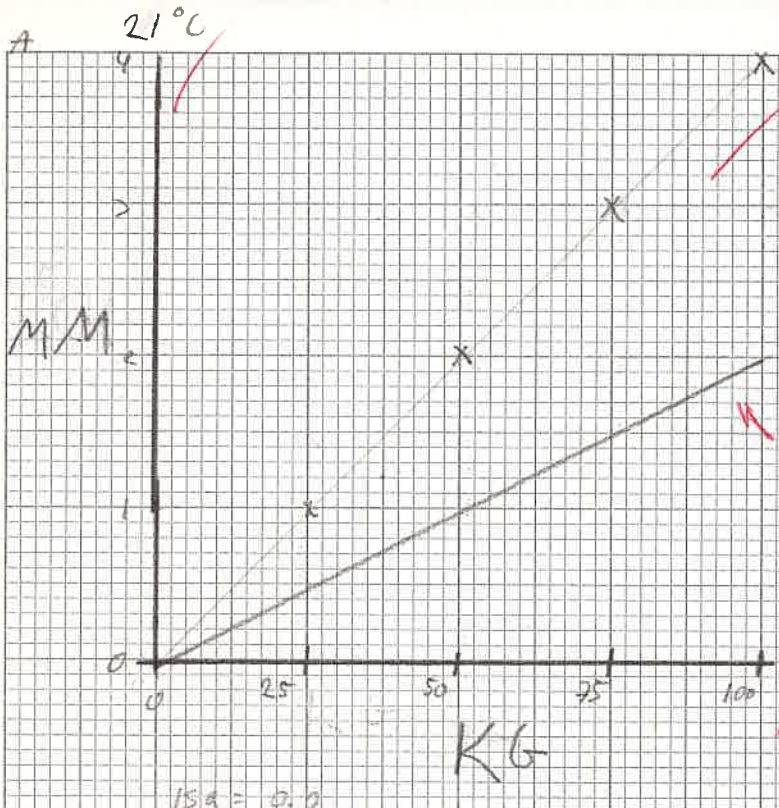
~~OR These Errors~~ ~~DO~~

These Errors DO OCCUR Randomly And CAN'T Be Predicted. Most Common Cause is Wear and Tear of measuring device OR the imperfections in the object being measured

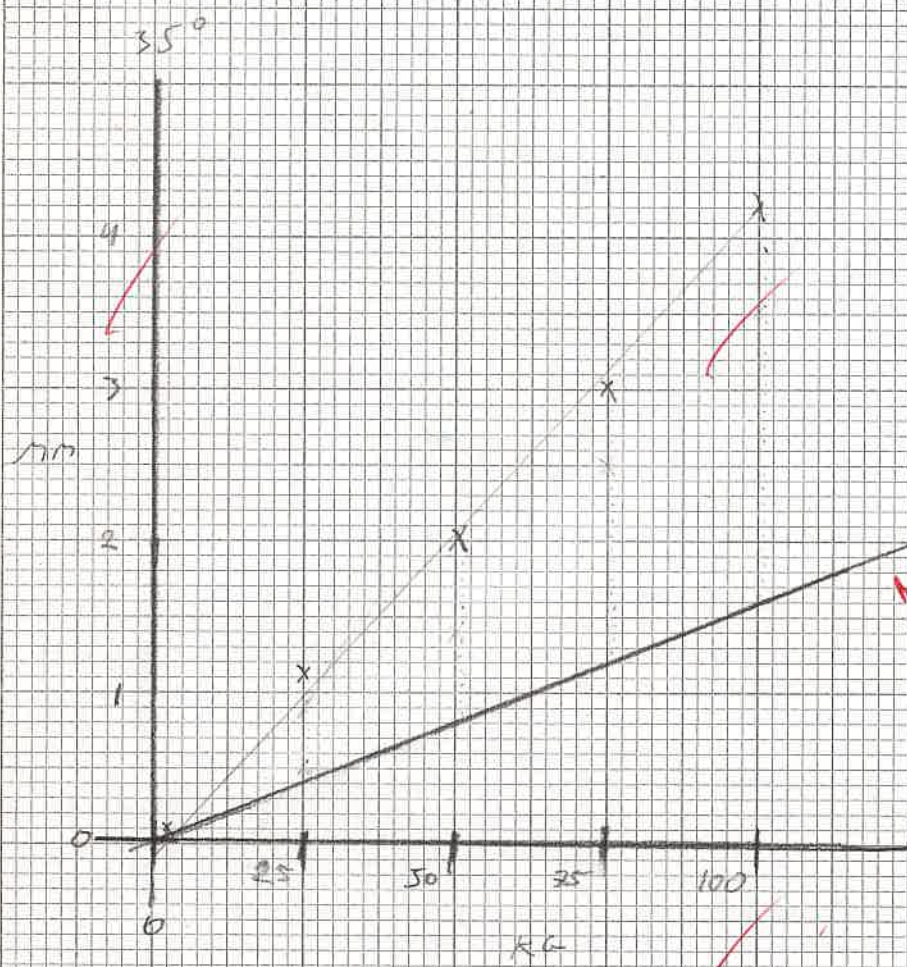
Systematic Errors = These Errors DO OCCUR AS ~~ARE~~ ~~DUE TO~~ ~~System~~ Along A Specific Pattern And CAN Be Predicted. Most Common Cause is known or predicted faults with measuring equipment OR passage of time, causing equipment to de-calibrate itself.

Q5 graph on separate sheet (2 1/2)

Q4 = (2)



SHOULD BE ON SAME AXIS. *Agree*



3

7

WHAT IS THIS LINE?
Yes, exactly

Q 5

MAHARASHTRA 1203488

