Objective:

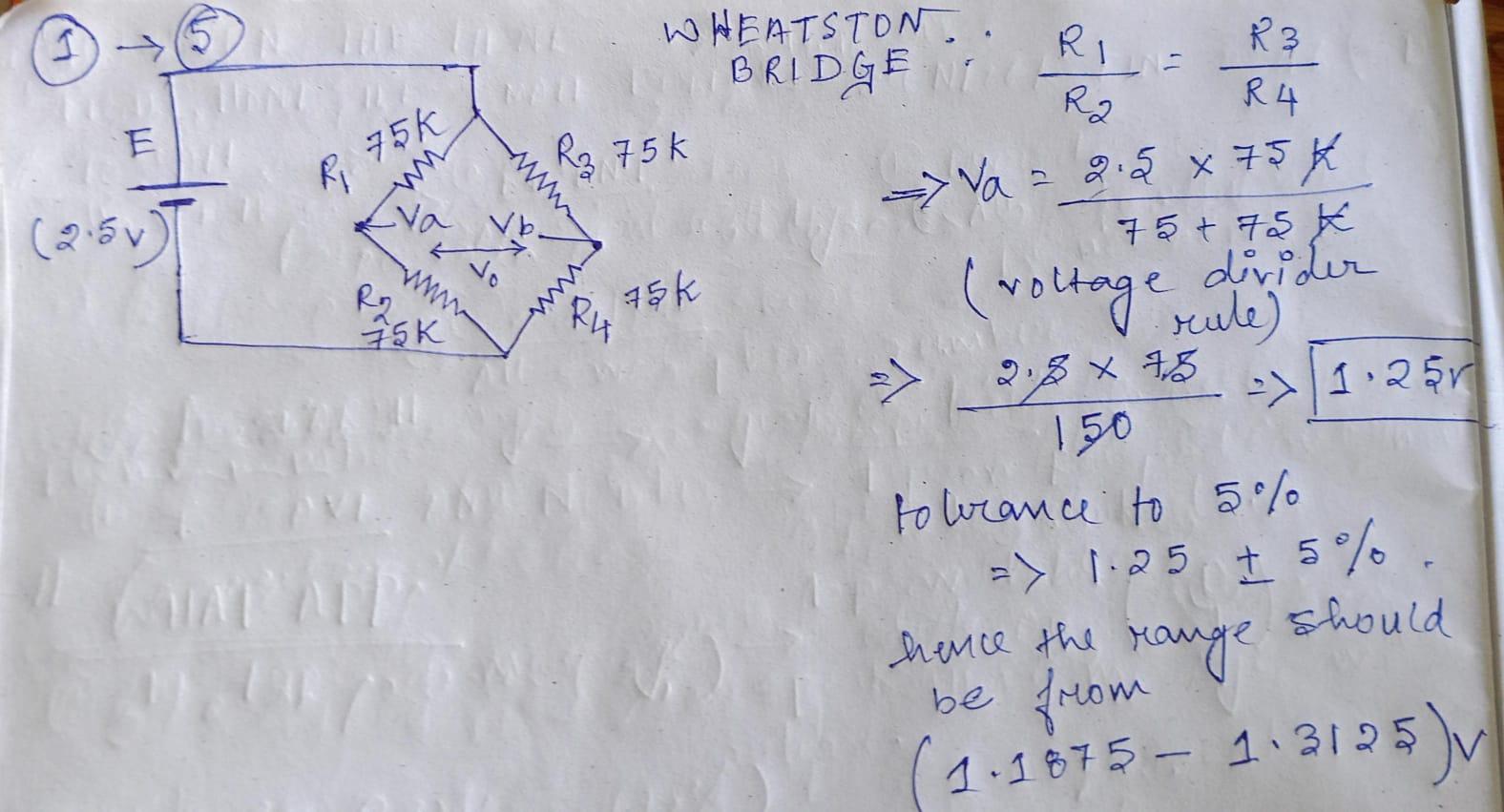
1. To construct a Wheatstone bridge using resistors, calculate and measure the node voltages and its output voltage.
2. Additionally, to investigate the effect of adding a capacitor across the output to filter unwanted AC components.

Materials and Equipment:

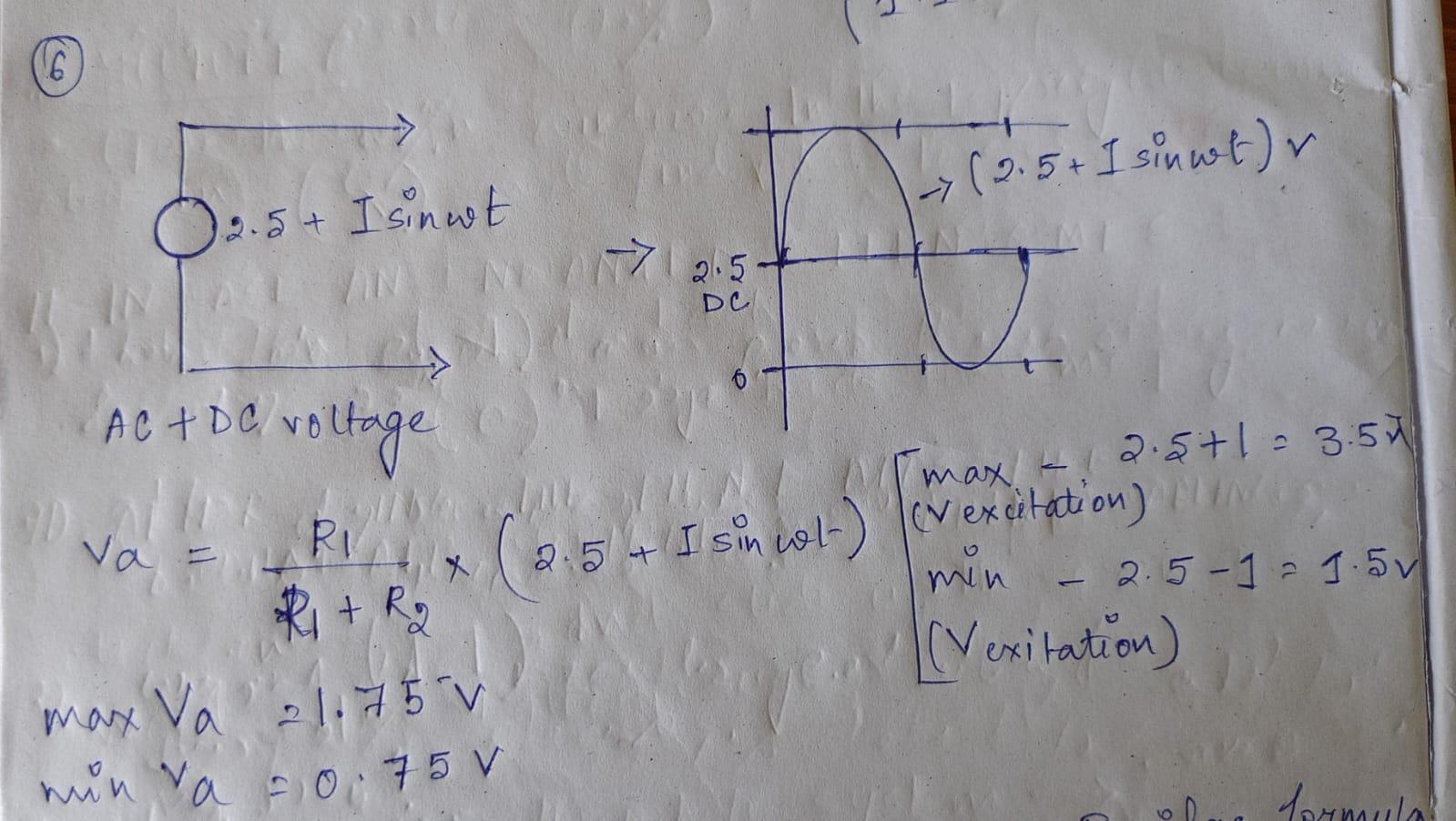
* Four 75 kΩ resistors (R1, R2, R3, R4), Two 1 kΩ resistors , Two 10 kΩ resistors, One 330 ohm and 3300-ohm resistor.
* Capacitor (in nF range) and one Multimeter.
* Analog Board (ADALM 1000)

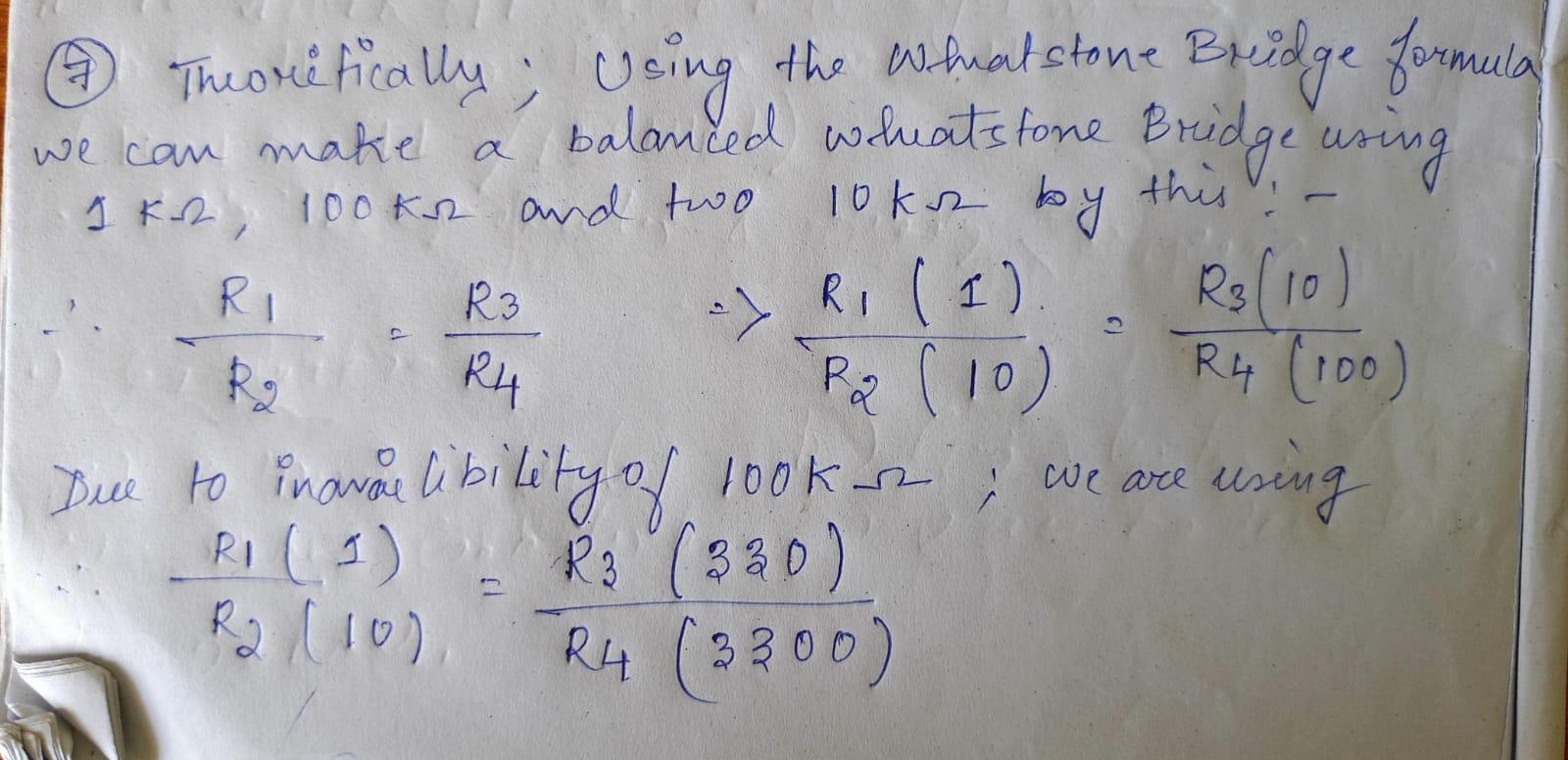
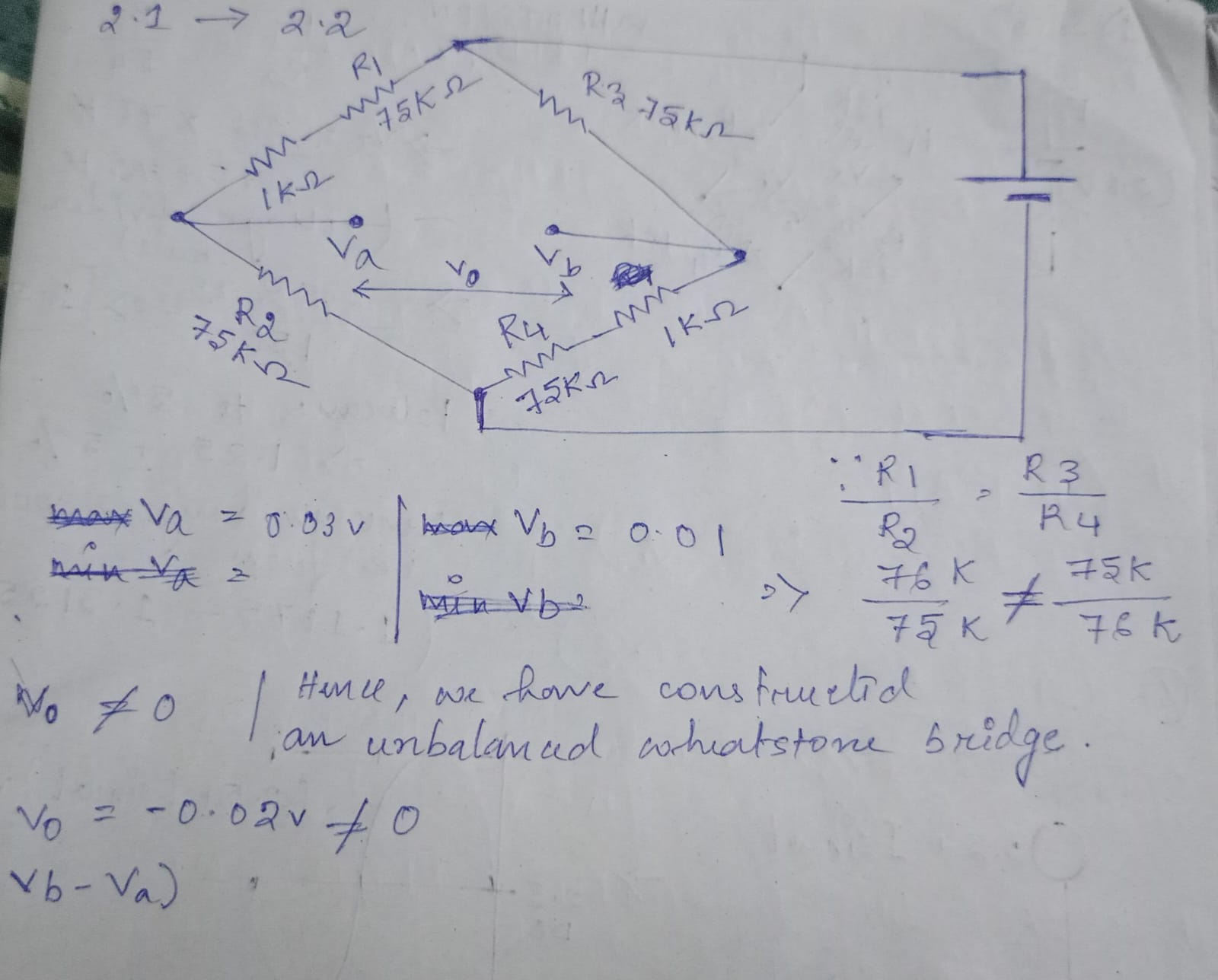
**Part 1  
1.1- 1.5)**

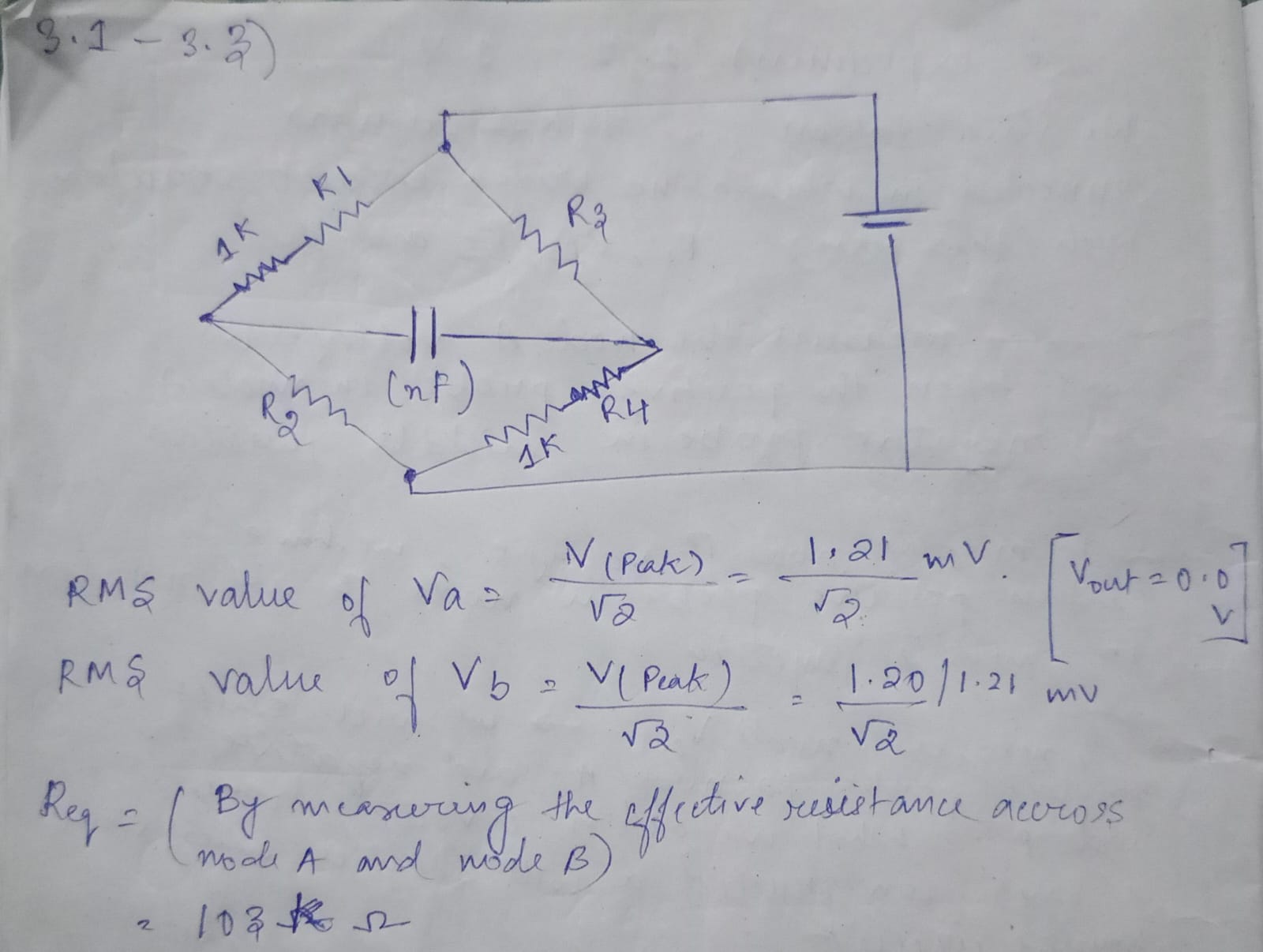
[**https://drive.google.com/file/d/1G7wQuqfPQFNOn8VbKAQ5y0bL7\_Jkjy1q/view?usp=sharing**](https://drive.google.com/file/d/1G7wQuqfPQFNOn8VbKAQ5y0bL7_Jkjy1q/view?usp=sharing)



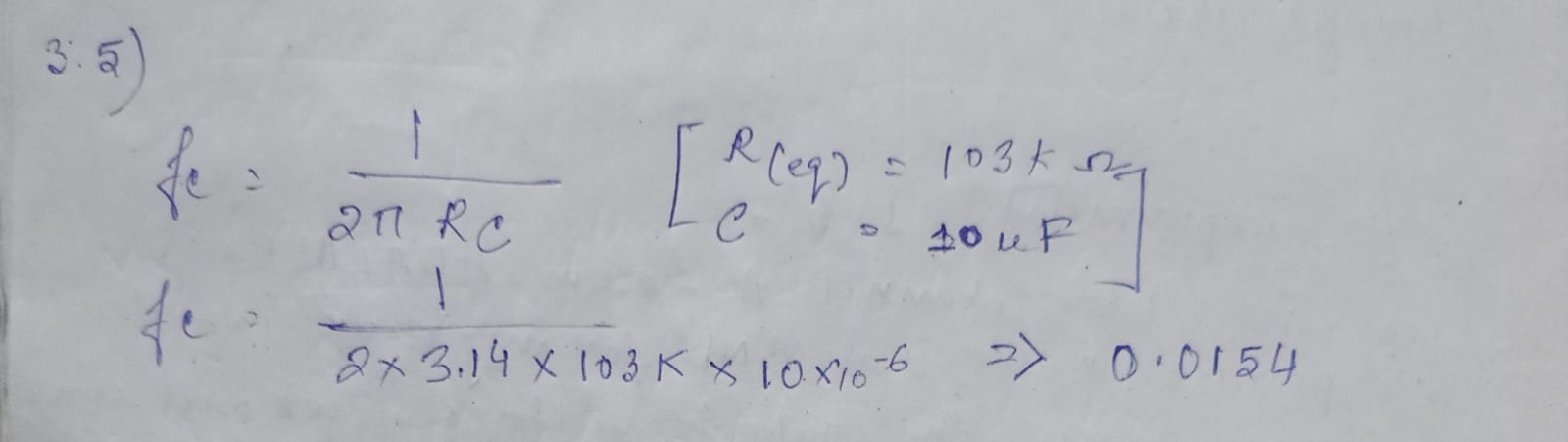
**1.6)**[**https://drive.google.com/file/d/1C55LdGTuwnGUL1ifgOqNZd0t1CwUIn\_w/view?usp=drive\_link**](https://drive.google.com/file/d/1C55LdGTuwnGUL1ifgOqNZd0t1CwUIn_w/view?usp=drive_link)

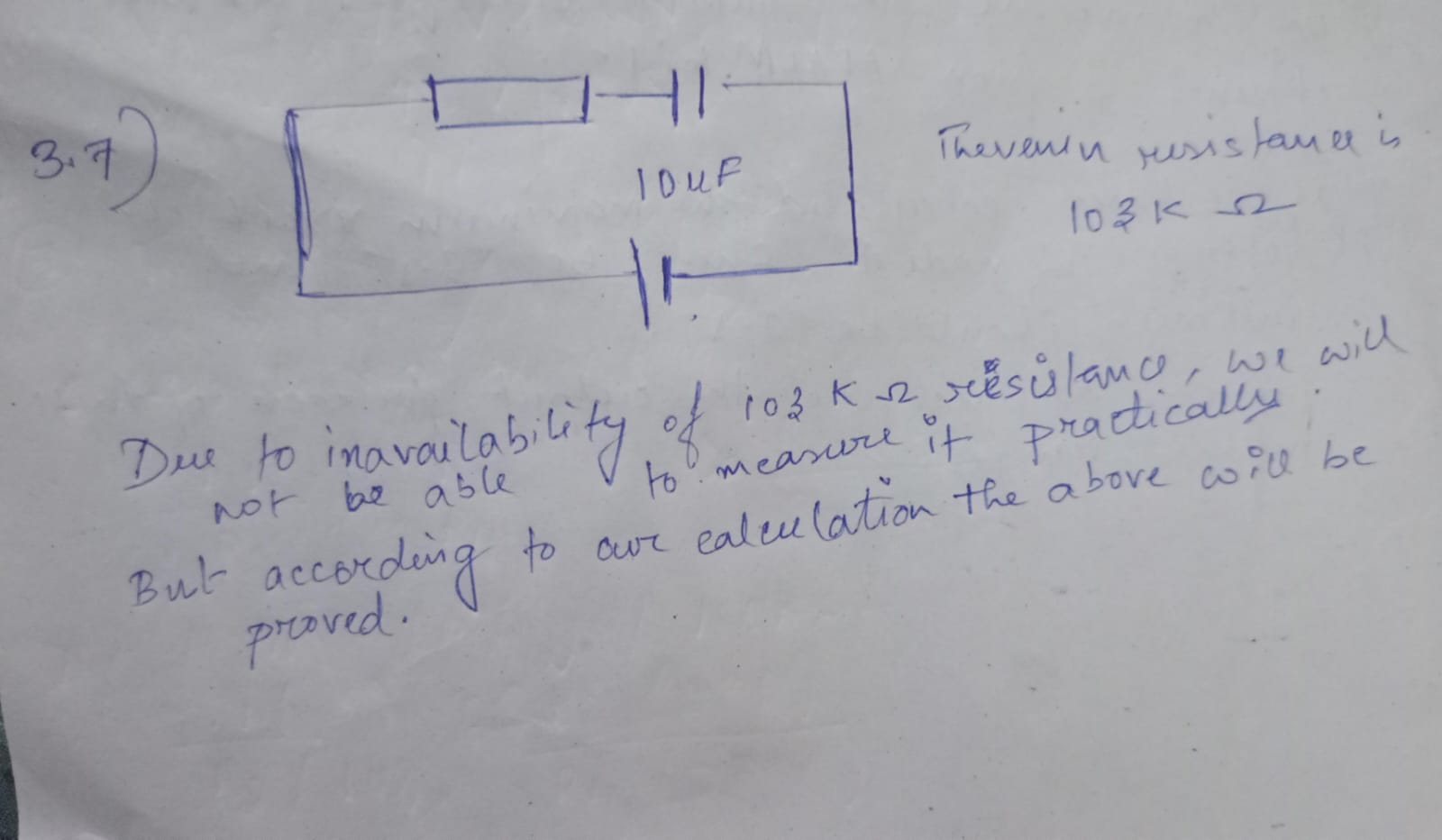
 **1.7) (Extra use of 330 ohm and 3300 ohm resistors)**

 **Part 2  
2.1- 2.4)**[**https://drive.google.com/file/d/1eNiYFPheslhCQx56CrjoOOGS4gOGS5JI/view?usp=drive\_link**](https://drive.google.com/file/d/1eNiYFPheslhCQx56CrjoOOGS4gOGS5JI/view?usp=drive_link) ****

**Part 3  
3.1-3.4)   
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**3.5-3.6)**

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**3.7-3.12)  
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