

Surname	Centre Number	Candidate Number
Other Names		2



## GCE A LEVEL

1420U50-1A



## PHYSICS – A2 unit 5 Practical Examination

### Experimental Task TEST 1

TUESDAY, 24 APRIL 2018

1 hour 30 minutes

For Teacher's use only	
Award a mark of 0 or 1 for each of the following	
Risk assessment correct – (a)	
Circuit set up correctly – (a)	

For Examiner's use only	
Mark awarded	
<b>Total</b>	

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01

### ADDITIONAL MATERIALS

In addition to this examination paper you will require a calculator and a **Data Booklet**.

### INSTRUCTIONS TO CANDIDATES

Use black ink or black ball-point pen. Pencil may be used to draw tables and graphs.  
Write your name, centre number and candidate number in the spaces at the top of this page.  
Write your answers in the spaces provided in this booklet.

### INFORMATION FOR CANDIDATES

The total number of marks available for this task is 25.  
Your teacher will directly assess your practical skills in part (a).  
The number of marks is given in brackets at the end of each question or part question.  
You are reminded of the necessity for orderly presentation in your answers.

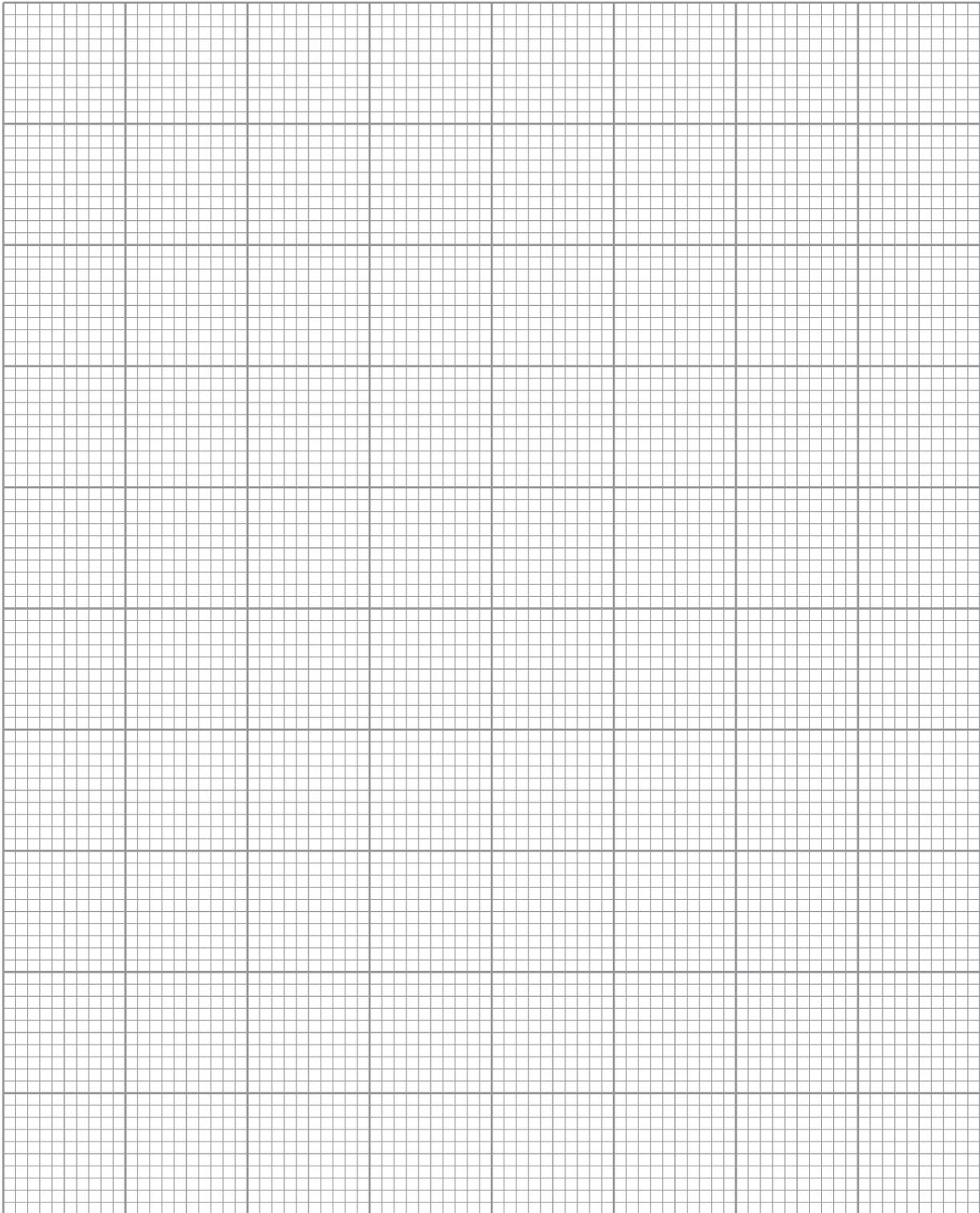
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(c) Draw a suitable graph to determine  $n$  and  $k$ . Error bars are not required.

[4]

Examiner  
only


(d) Use your graph to determine values for  $n$  and  $k$ .

[4]

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(e) Write an equation for the relationship between power and potential difference for your filament lamp using your values for  $n$  and  $k$ .

[1]

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(f) Emily suggests that the same equation that you have written in part (e) will apply for the **combination** of two of these lamps connected in parallel. Discuss whether Emily's suggestion is correct.

[4]

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**END OF PAPER**

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