

# Wednesday 5 June 2019 – Morning

## A Level Mathematics B (MEI)

## H640/01 Pure Mathematics and Mechanics

### Printed Answer Booklet

#### Time allowed: 2 hours



You must have:	
Question Paper H640/01	(inserted)

You may use:

· a scientific or graphical calculator



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Centre number						Candidate number		
First name(s)								
Last name								

#### INSTRUCTIONS

- The Question Paper will be found inside the Printed Answer Booklet.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer all the questions.
- Write your answer to each question in the space provided in the Printed Answer • Booklet. If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
- You are permitted to use a scientific or graphical calculator in this paper.
- Final answers should be given to a degree of accuracy appropriate to the context.
- The acceleration due to gravity is denoted by  $gm s^{-2}$ . Unless otherwise instructed, when a numerical value is needed, use q = 9.8.

#### INFORMATION

- You are advised that an answer may receive no marks unless you show sufficient detail of the working to indicate that a correct method is used. You should communicate your method with correct reasoning.
- The Printed Answer Booklet consists of 20 pages. The Question Paper consists of 8 pages.

Section A (25 marks)

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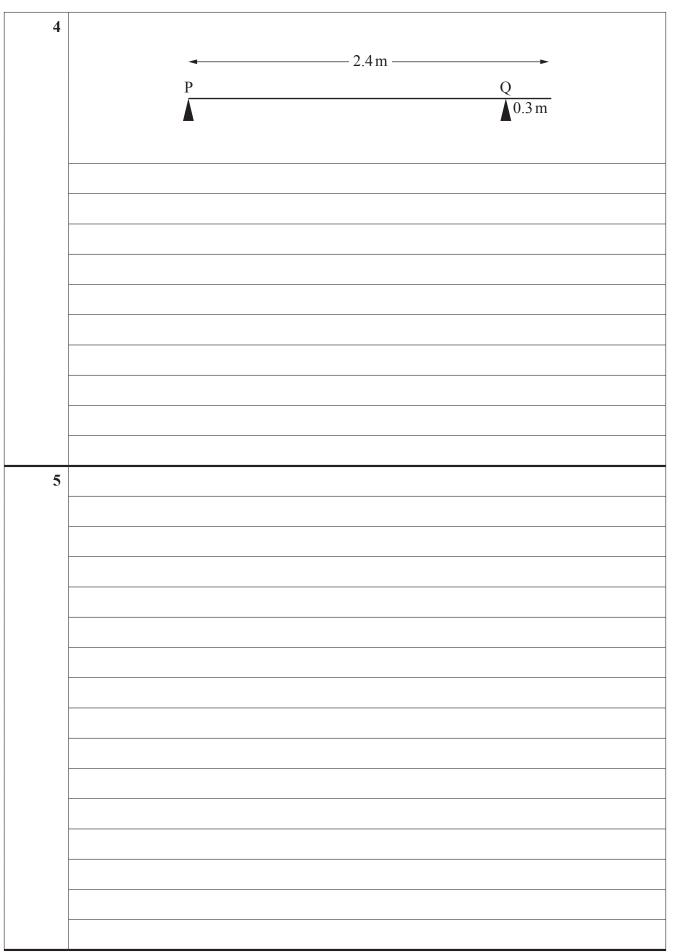
3

<b>3(a)</b>	
<b>3</b> (b)(i)	
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6(a)	
6(b)	

Section B (75 marks)

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<b>8</b> (a)	
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<b>8(b)</b>	

9(a)	
9(b)	

10(b)	
10(b)	

11(a)	
11(L)	
11(b)	

12(a)	
12(b)	

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13(a)	
13(b)	
13(c)	
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14(a)

14(b)	
14(c)	

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15(b)	
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15(c)	
15(d)	

16(a)	
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16(b)	
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16(d)	

#### ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).



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