

## A Level Mathematics B (MEI)

H640/01 Pure Mathematics and Mechanics

Printed Answer Booklet

### Date – Morning/Afternoon

Time allowed: 2 hours

**You must have:**

- Question Paper H640/01 (inserted)

**You may use:**

- a scientific or graphical calculator



First name

Last name

Centre  
number

Candidate  
number

### 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.
- Complete the boxes provided on the Printed Answer Booklet with your name, centre number and candidate number.
- Answer **all** the questions.
- **Write your answer to each question in the space provided in the Printed Answer Booklet.** Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the bar codes.
- 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  $g \text{ m s}^{-2}$ . Unless otherwise instructed, when a numerical value is needed, use  $g = 9.8$ .

### 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 **12** pages.

Section A (20 marks)

1	
2	

Specimen

3

4 (a)

Specimen

4 (b)

5 (a)

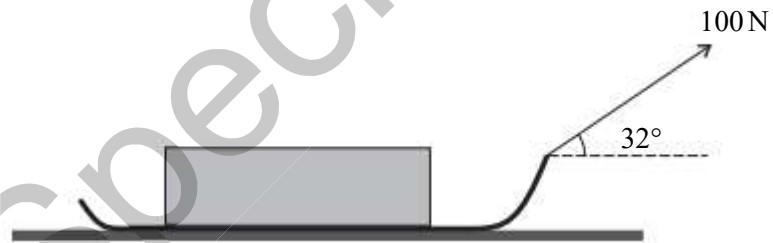


Fig. 5

5 (b)

## Section B (80 marks)

6 (a)	
6 (b)	
6 (c)	
7 (a)	

Specimen

7 (b)	
7 (c)	

Specimen

8

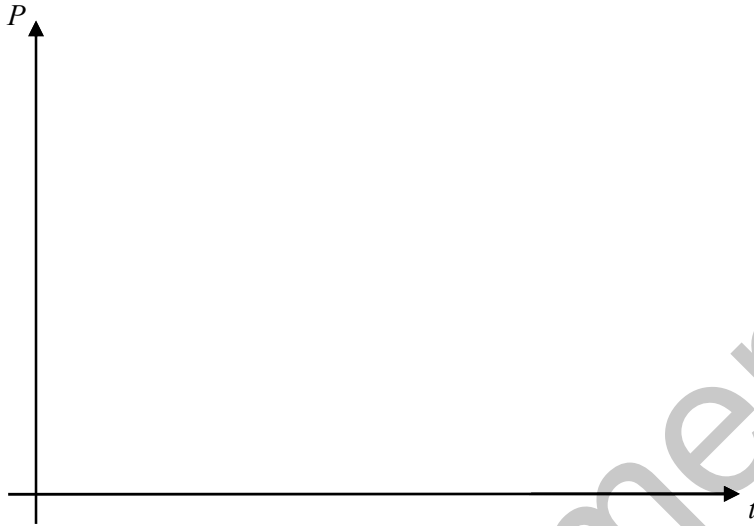
Specimen

<b>9 (a)(i)</b>	
<b>9 (a)(ii)</b>	
<b>9 (b)</b>	

Specimen



**10 (a)**  
**(i)**



**10 (a)**  
**(ii)**

**10 (b)**

<b>10 (c)</b>	
<b>10 (d)</b>	

Specimen

10 (e)

Specimen

<b>11 (a)</b>	

Specimen

<b>11 (b)</b>	
<b>12 (a)</b>	
<b>12 (b)</b>	

Specimen

12 (c)	

Specimen

13	

Specimen

**PLEASE DO NOT WRITE IN THIS SPACE**

<b>14 (a)</b>	

Specimen



14 (b)

Specimen

15

Specimen

Specimen

Specimen

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