

ADVANCED SUBSIDIARY GCE MATHEMATICS (MEI)

4761

Mechanics 1

PRINTED ANSWER BOOK

Candidates answer on this printed answer book.

OCR supplied materials:

- Question paper 4761 (inserted)
- MEI Examination Formulae and Tables (MF2)

Other materials required:

· Scientific or graphical calculator

Thursday 16 June 2011 Afternoon

Duration: 1 hour 30 minutes



Candidate forename				Candidate surname			
Centre numb	er			Candidate nu	ımber		

INSTRUCTIONS TO CANDIDATES

These instructions are the same on the printed answer book and the question paper.

- The question paper will be found in the centre of the printed answer book.
- Write your name, centre number and candidate number in the spaces provided on the printed answer book.
 Please write clearly and in capital letters.
- Write your answer to each question in the space provided in the printed answer book. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Answer all the questions.
- 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 FOR CANDIDATES

This information is the same on the printed answer book and the question paper.

- The number of marks is given in brackets [] at the end of each question or part question on the question paper.
- 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 being used.
- The total number of marks for this paper is 72.
- The printed answer book consists of 16 pages. The question paper consists of 8 pages. Any blank pages are indicated.

Section A (36 marks)

1	

2	
ļ	

3 (i)	
3 (ii)	

4 (i)	
	15 kg
	1.3 kg
	Fig. 4
4 (ii)	

5	

5	(continued)

6 (i)	

6 (ii)	

Section B (36 marks)

7 (*)	
7 (i)	
7(ii)(A)	
7 (ii)(A)	
7(ii) (A)	
7(ii)(A)	

7(ii) (<i>B</i>)	
7 (iii)	

7 (iv)	

7 (v)	

8 (i)	
8 (ii)	
8 (iii)	

8 (iv)	
8 (v)	
	(answer space continued overleaf)

8 (v)	(continued)

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