

**Wednesday 16 May 2012 – Morning**

**A2 GCE MATHEMATICS (MEI)**

**4758/01** Differential Equations

**PRINTED ANSWER BOOK**

Candidates answer on this Printed Answer Book.

**OCR supplied materials:**

- Question Paper 4758/01 (inserted)
- MEI Examination Formulae and Tables (MF2)

**Other materials required:**

- Scientific or graphical calculator

**Duration:** 1 hour 30 minutes



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**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. HB 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 any **three** 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  $g\text{ms}^{-2}$ . 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 **4** pages. Any blank pages are indicated.



<b>1(ii)</b>	
<b>1(iii)</b>	

<b>1(iv)</b>	

<b>1(v)(A)</b>	

<b>1(v)(B)</b>	

<b>2(i)</b>	

**(answer space continued overleaf)**

<b>2(i)</b>	<b>(continued)</b>
<b>2(ii)</b>	
<b>2(iii)</b>	







<b>3(i)</b>	<b>(continued)</b>
<b>3(ii)</b>	

<b>3(ii)</b>	
<b>3(iv)</b>	



<b>4(i)</b>	<b>(continued)</b>







<b>4(iv)</b>	<b>(continued)</b>



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