GENERAL CERTIFICATE OF SECONDARY EDUCATION MATHEMATICS C (GRADUATED ASSESSMENT)

MODULE M6 - SECTION B
MONDAY 22 JANUARY 2007

Candidates answer on the question paper.
Additional materials: Geometrical instruments Tracing paper (optional) Scientific or graphical calculator


Candidate Name


Centre
Number


Candidate Number


## INSTRUCTIONS TO CANDIDATES

- Write your name, Centre Number and Candidate Number in the boxes above.
- Answer all the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- In many questions marks will be given for a correct method even if the answer is incorrect.
- Do not write in the bar code.
- Do not write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.


## INFORMATION FOR CANDIDATES

- You are expected to use a calculator in Section B of this paper.
- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this Section is 25.
- Section B starts with question 7.
- Use the $\pi$ button on your calculator or take $\pi$ to be 3.142 unless the question says otherwise.

| For Examiner's Use |
| :--- |
| Section B |

This document consists of 8 printed pages.

## Formula Sheet

Area of trapezium $=\frac{1}{2}(a+b) h$


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7 (a) Calculate the volume of this cuboid.

(a)
$\mathrm{cm}^{3}$
(b) The cuboid below has the same volume as the cuboid in (a).


Work out the height, $h$.
(b) $\qquad$ cm [2]

8 (a) Complete the table of values for $x+y=6$.

| $x$ | 0 | 2 | 4 | 6 |
| :--- | :--- | :--- | :--- | :--- |
| $y$ |  |  | 2 |  |

(b) Draw the graph of $x+y=6$.


9 Calculate.
(a) $48.3-6.7 \times 4.8$
(a)
(b) $\frac{7 \cdot 5}{15-3 \cdot 4}$

Give your answer correct to 2 decimal places.

10 Solve.
(a) $8 x+11=3 x+21$
(a)
[3]
(b) $2(2 x-3)=8$
(b)

11 Dave changed $£ 65$ into euros.
He received $€ 91$.
At the same time, Graham changed $£ 75$ into euros.
How many euros did Graham receive?

## $€$

12 This is a sketch of the trapezium ABCD.


Not to scale
(a) Draw accurately the trapezium ABCD.

The side AB has been drawn for you.

B
(b) (i) Measure the length DC on your diagram.
(b)(i). $\qquad$ cm
(ii) Work out the area of the trapezium ABCD .
(ii) $\qquad$ $\mathrm{cm}^{2}$


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