## Oxford Cambridge and RSA Examinations

General Certificate of Secondary Education
Mathematics C (Graduated Assessment)
1966/2331A
MODULE M1 - SECTION A

## Specimen Paper 2003

Candidates answer on the question paper.
Additional materials:
Geometrical Instruments
Tracing Paper (optional)
TIME 30 minutes


## INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer all the questions.
- Write your answers, in blue or black ink, in the spaces provided on the question paper.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- There is a space after most questions. Use it to do your working. In many questions marks will be given for a correct method even if the answer is incorrect.


## INFORMATION FOR CANDIDATES

- 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 .

| For Examiners Use |  |
| :---: | :---: |
| Section A |  |
| Section B |  |
| Total |  |

## WARNING

You are not allowed to use a calculator in Section A of this paper.

## FORMULAE SHEET: FOUNDATION TIER

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


1 Find the missing numbers in each of these.
(a) $20-12=$

(a)

$\qquad$ [1]
(b) $15+\square=32$
(b) $\square=$
(c) $\bigcirc-16=7$
(c)

$\qquad$ [1]
(d) $? \div 6=3$
(d) ? $=$ $\qquad$ [1]
4

(a) In Year Seven of a school there are 69 boys and 82 girls.

How many pupils are there altogether in Year Seven?
(a)
(b) In Year Eight there are 19 more boys than girls.

There are 92 boys.
How many girls are there in Year Eight?
(b)

3 Look at these numbers.

| 7 | 16 | 23 | 45 | 59 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- |

(a) Which numbers are even?
(a)
(b) Which numbers can be divided by 5 exactly?
(b)
(b) Lizzie earns $£ 60$ per week.

She spends $\frac{3}{4}$ of this on clothes.
How much does she spend on clothes per week?
(b) $£$

5 Shauna buys some sweets.
She pays with a $£ 1$ coin.
She is given these coins for her change.

(a) How much change is Shauna given?
(a)
(b) Work out the cost of the sweets.
(b)


2


6 Here is the start of a number pattern.

$$
4, \quad 11, \quad 18, \quad 25
$$

(a) What is the next number in the pattern?
(a)
(b) Explain how you worked out your answer.
$\qquad$
$\qquad$

7 Eggs are sold in boxes. Each box has six eggs.

(a) Graham buys 7 boxes of eggs.

How many eggs is this?
(a)
(b) Mary needs 30 eggs.

How many boxes must she buy?
(b)

8 (a) Which of these shapes has the larger area?
Give a reason for your answer.

$\qquad$ because $\qquad$
(b) Write down the area of this shape.

(b)
squares [1]

9 This graph shows the number of pupils served by a school tuck shop during a week.

(a) How many pupils were served on Monday?
(a)
(b) On one day 45 pupils were served.

Which day was that?
(b)
(c) On Friday 35 pupils were served.

Draw a line on the graph to show this.

## Oxford Cambridge and RSA Examinations

General Certificate of Secondary Education
Mathematics C (Graduated Assessment)
1966/2331B
MODULE M1 - SECTION B
Specimen Paper 2003
Candidates answer on the question paper.
Additional materials:
Geometrical Instruments
Tracing Paper (optional)
Electronic Calculator
TIME 30 minutes


## INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer all the questions.
- Write your answers, in blue or black ink, in the spaces provided on the question paper.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- There is a space after most questions. Use it to do your working. In many questions marks will be given for a correct method even if the answer is incorrect.


## 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 .


## FORMULAE SHEET: FOUNDATION TIER

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


10 Teresa uses her calculator to work out her shopping bill. The calculator shows the answer in pounds.


How much money does the calculator show?
$£$ $\qquad$ [1]

11 This clock shows the time that assembly starts.

(a) At what time does assembly start?
(a)
(b) Assembly lasts 20 minutes.

At what time does assembly finish?
(b)

12 Colin has a bag of marbles.
Eight are blue and two are yellow.
He takes out one marble.

Look at these words.

## unlikely

## certain


impossible
likely

Choose the best words to complete the sentences below.
(a) It is $\qquad$ that Colin will take out a blue marble.
(b) It is $\qquad$ that Colin will take out a green marble.

13 Maria has to do three jobs.
She has to clean the car (C),
mow the lawn (M),
and wash the dishes (W).
List all the possible orders in which she could do the jobs.
One way has been done for you.

You may not need to use all the lines

| Erist |  |  |
| :---: | :---: | :---: |
| C | $M$ | W |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

14 (a) Frank draws this shape.
All sides are 2 cm long.

(i) Write down the name of this shape.
(a)(i)
(ii) Work out the perimeter of the shape.

## (ii)

(b) Peggy has drawn this shape.

(i) One of the sides is 2.7 cm long.

Complete this sentence.
2.7 cm is the same as $\qquad$ mm
(ii) Measure the length of the side $x$.
(ii) $x=$ $\qquad$ [2]

15 (a) This table shows the lengths of five rivers.

| River | Length (km) |
| :---: | :---: |
| Amazon | 6570 |
| Amur | 4410 |
| Missouri | 4320 |
| Nile | 6695 |
| Niger | 4184 |

Write these lengths in order of size, starting with the longest.
$\qquad$
(b) The River Amazon is 6570 kilometres long.

Write this length to the nearest 100 kilometres.
(b)
(c) The River Missouri is 4320 kilometres long.

Write 4320 in words.


The points $\mathrm{P}, \mathrm{Q}$ and R are three corners of a square.
(a) Write down the co-ordinates of P .
(a) $\qquad$ ,
(b) Mark the fourth corner S .

Draw the square.
(c) Write down one fact that is true about all squares.
$\qquad$

17 Draw an enlargement of this shape.
Make each line 3 times as long.


18 There are 250 people altogether in a cinema.
There are 140 children. They pay $£ 2$ each.
The rest are adults. They pay $£ 3 \cdot 50$ each.
How much do the people pay altogether?
£

RECOGNISING ACHIEVEMENT

Oxford Cambridge and RSA Examinations
General Certificate of Secondary Education
Mathematics C (Graduated Assessment) 1966/2331
MODULE M1
MARK SCHEME
Specimen Paper 2003

## SECTION A

| 1 | (a) | 8 | W1 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | (b) | 17 | W1 |  |
|  | (c) | 23 | W1 |  |
|  | (d) | 18 | W1 |  |
|  |  |  | [4] |  |
| 2 | (a) | 151 | W2 | M1 $69+82$ |
|  | (b) | 73 | W2 | M1 92-19 |
|  |  |  | [4] |  |

3 (a) 16, 80
(b) 45,80

W1
W1 S/C W1 one correct answer in each part, no extras
[2]

4 (a) Correct shading
W1
(b) 45

W2 W1 15 seen
[3]
$5 \quad$ (a) 39 p
W1
(b) 61 p

W1

## [2]

$6 \quad$ (a) 32
W1
(b) Add on 7

W1

## [2]

$7 \quad$ (a) $\quad 42$
W1
(b) 5

W1
[2]

8
(a) B ,
W1
more squares
W1
(b) 7 W1
[3]

9
(a) 55 W1
(b) Wednesday

W1
(c) Line

W1
[3]

## Section A total: $\mathbf{2 5}$

## SECTION B

10 £16.70 W1
[1]

11 (a) $8.55(\mathrm{am})$, o.e.
W1
(b) $\quad 9.15(\mathrm{am})$, o.e.

W1
[2]

12 (a) Likely
W1
(b) Impossible

W1
[2]

13 All five orders
W2 Ignore repeats
W1 3 correct orders
[2]

14 (a) (i) Octagon
W1
(ii) 16

W1
(b) (i) 27
(ii) 4.5 cm or 45 mm

W1
W2 W1 4.5 or 45
[5]

15 (a) $6695,6570,4410,4320,4184$
W1 Accept names
(b) 6600

W1
(c) Four thousand three hundred \& twenty

16 (a) $(3,5)$ W1
(b) Square drawn W1
(c) One fact e.g. four right angles W1
[3]

17 Correct enlargement

| W3 | W1 | vertical or horizontal edge correct |
| :--- | :--- | :--- |
| W1 each sloping line |  |  |

[3]

18665
$\begin{array}{lll}\text { W4 } & \text { W1 } & 110 \text { adults seen } \\ & \text { M1 } & \text { their ' } 110 \text { ' } \times 3.5(385) \text { or } 140 \times 2(280) \\ & \text { M1 } & \text { their 'adult total + child total' }\end{array}$
[4]

## Section B total: $\mathbf{2 5}$

Total mark available: 50

| MODUE: M1 |  |  |  | 22 | 0 | 6 | 14 | 7 | 3 | 2 | 2 | 4 |  |  | Grades |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Question | Topic | Syll ref | Mod Ref | N | Man A | nMan A | SSM | HD | UA1 | UA2 | UA3 | Multi-s | Units | Acc | $<\mathrm{G}$ | G | F |
| 1 | Inverses | F2/5a | A1.2 |  |  | 4 |  |  |  |  |  |  |  |  |  | 4 |  |
| 2 | Addition/Subtraction | F2/3a, 3j | N1.3 | 4 |  |  |  |  |  |  |  |  |  |  |  | 4 |  |
| 3 | Types of number | F2/1j | N1.2 | 2 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
| 4 | Fractions | F2/3c | N1.5 | 3 |  |  |  |  |  |  |  |  |  |  | 1 | 2 |  |
| 5 | Money | F2/3a | N1.4 | 2 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
| 6 | Number patterns | F2/1j, 6a | A1.1 |  |  | 2 |  |  |  |  | 1 |  |  |  |  | 2 |  |
| 7 | Tables | F2/3g | N1.3 | 2 |  |  |  |  |  |  |  |  |  |  |  | 2 |  |
| 8 | Area | F3/4f, 1i | S1.4 |  |  |  | 3 |  |  |  | 1 |  |  |  |  | 3 |  |
| 9 | Graph | F4/4a, 5b | D1.3 |  |  |  |  | 3 |  |  |  |  |  |  | 3 |  |  |
|  | Section A |  |  | 13 |  | 6 | 3 | 3 |  |  | 2 |  |  |  | 8 | 17 |  |
| 10 | Calc rounding | F2/4d | N1.4 | 1 |  |  |  |  |  | 1 |  |  |  |  | 1 |  |  |
| 11 | Time | F2/4a | N1.6 | 2 |  |  |  |  |  |  |  |  |  |  | 2 |  |  |
| 12 | Probability | F4/5g | D1.1 |  |  |  |  | 2 |  |  |  |  |  |  |  | 2 |  |
| 13 | Arrangements | F4/4e | D1.2 |  |  |  |  | 2 |  |  |  |  |  |  |  | 2 |  |
| 14 | Lengths | F3/4a, 4d | S1.3 |  |  |  | 5 |  |  |  |  |  | 1 |  | 1 | 4 |  |
| 15 | Numbers | F2/2a | N1.1 | 3 |  |  |  |  |  |  |  |  |  |  |  | 3 |  |
| 16 | Co-ordinates | F3/3e/1f | A1.3 |  |  |  | 3 |  |  | 1 |  |  |  |  |  | 3 |  |
| 17 | Enlargements | F3/3c | S1.6 |  |  |  | 3 |  |  |  |  |  |  |  |  | 3 |  |
| 18 | Money | F2/3a | N1.4 | 4 |  |  |  |  | 4 |  |  | 4 |  |  |  | 4 |  |
|  | Section B |  |  | 10 |  |  | 11 | 4 | 4 | 2 |  | 4 | 1 |  | 4 | 21 |  |
|  | Total |  |  | 23 |  | 6 | 14 | 7 | 4 | 2 | 2 | 4 | 1 |  | 12 | 38 |  |

