OCR
Oxford Cambridge and RSA

Wednesday 8 June 2016 – Morning

AS GCE MATHEMATICS (MEI)

4752/01 Concepts for Advanced Mathematics (C2)

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:
* Question Paper 4752/01 (inserted)
* MEI Examination Formulae and Tables (MF2)

Other materials required:
* Scientific or graphical calculator

Duration: 1 hour 30 minutes

Candidate forename		Candidate surname	

Centre number						Candidate number					

INSTRUCTIONS TO CANDIDATES

These instructions are the same on the Printed Answer Book and the Question Paper.

* The Question Paper will be found inside 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.** If additional space is required, you should use the lined page(s) at the end of this booklet. The question number(s) must be clearly shown.
* 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 **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.

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 **12** pages. The Question Paper consists of **8** pages. Any blank pages are indicated.

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Turn over

Section A (36 marks)

1 (i)	
1 (ii)	
2 (i)	
2 (ii)	
3	

4

5 (i)

5 (ii)

6 (i)

6 (ii)

7 (i)

7 (ii)

8 (i)

8 (ii)

Section B (36 marks)

9 (i)

x	0	1	2	3	4	5	6
y	0	4.0	4.9	5.0	4.9	4.0	0

9 (ii) (A)

9 (ii) (*B*)

10 (i)

10 (ii)

10 (iii)

10 (iv)

11 (i)

11 (ii) | **First complete the copy of the table on the next page.**

log *y*

2.8

2.6

2.4

2.2

2

1.8

1.6

1.4

1.2

1

0.8

0.6

0.4

0.2
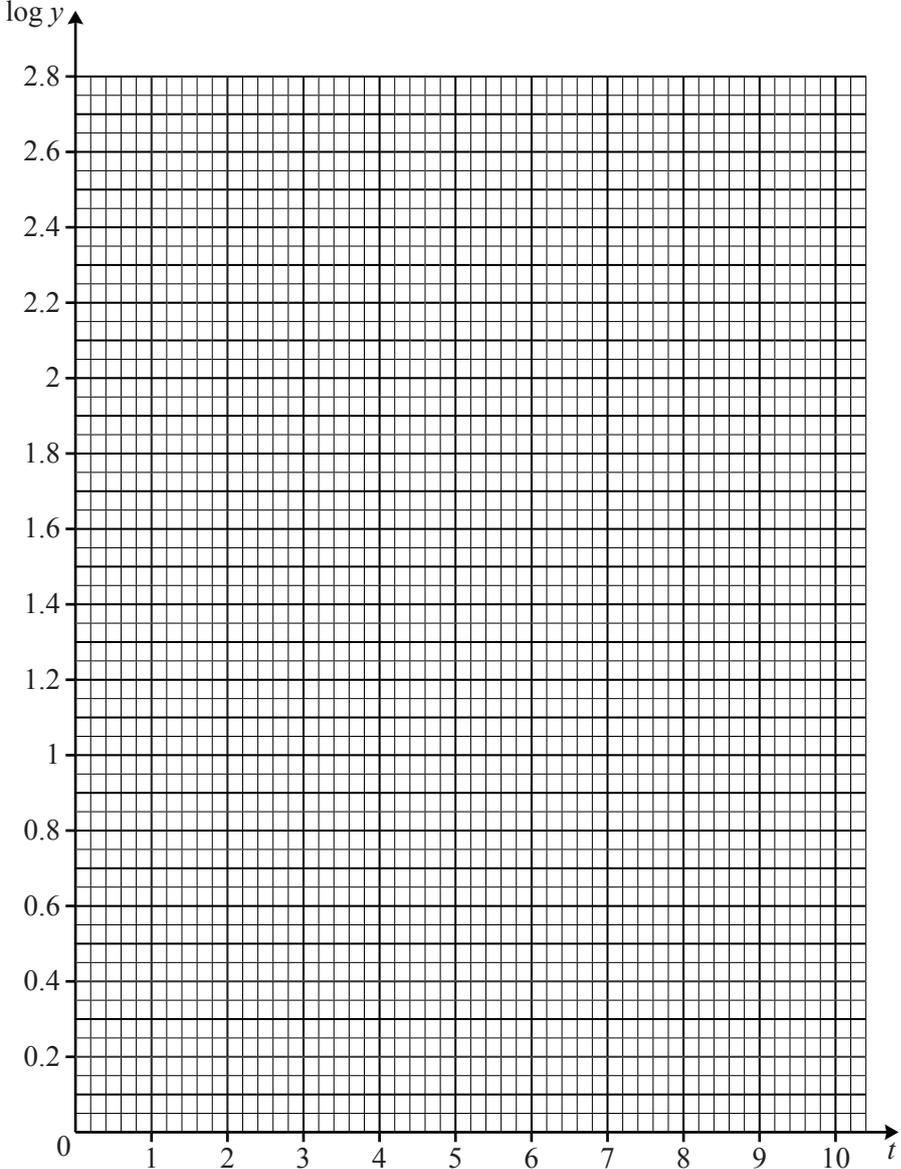
0   1   2   3   4   5   6   7   8   9   10   *t*

The work space for this part is continued on the next page.

11 (ii) continued

t	1	2	3	4	5	6	7	8	9	10
y	7	10	24	32	40	38	63	96	234	480
$\log_{10}y$	0.85	1	1.38	1.51	1.60					

11 (iii)

ADDITIONAL ANSWER SPACE

If additional space is required, you should use the following lined page(s). The question number(s) must be clearly shown in the margin(s).