

Tuesday 19 June 2018 – Afternoon

A2 GCE MATHEMATICS (MEI)

4753/01 Methods for Advanced Mathematics (C3)

PRINTED ANSWER BOOK

Candidates answer on this Printed Answer Book.

OCR supplied materials:

- Question Paper 4753/01 (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 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 barcodes.
- 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 **16** pages. The Question Paper consists of **8** pages. Any blank pages are indicated.



Section A (36 marks)

1 (i)	
1(1)	
1 (ii)	

2	Function	Odd (Yes/No)	Even (Yes/No)	Periodic (Yes/No): if Yes state the period
	$f(x) = \frac{x}{1 - 2x^2}$			
	$g(x) = 1 + \sin 2x$			
	$h(x) = 3e^{-2x^2}$			
				·,

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

4	

5(i)	
5(ii)	

6(i)	
<i>C</i> (**)	
6(ii)	

7	

Section B (36 marks)

0.0	
8 (i)	

8(ii)	
o(II)	
8 (iii)	
	(answer space continued on next page)

8(iii)	(continued)

	I
9(i)	
9(ii)	

9(iii)	

1	
9(iv)	

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).



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