



Oxford Cambridge and RSA

Thursday 20 June 2019 – Morning

A Level Further Mathematics A

Y544/01 Discrete Mathematics

Printed Answer Booklet

Time allowed: 1 hour 30 minutes



You must have:

- Question Paper Y544/01 (inserted)
- Formulae A Level Further Mathematics A

You may use:

- a scientific or graphical calculator



Please write clearly in black ink. **Do not write in the barcodes.**

Centre number

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Candidate number

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First name(s)

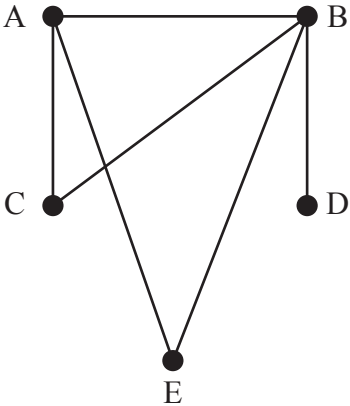
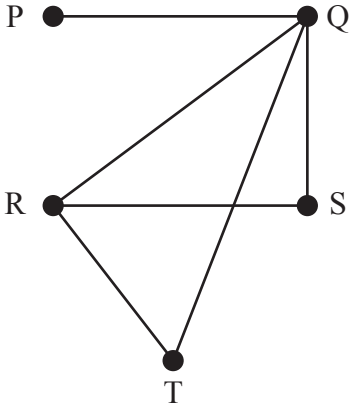
Last name

INSTRUCTIONS

- The Question Paper will be found inside the Printed Answer Booklet.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- **Write your answer to each question in the space provided in the Printed Answer Booklet.** If additional space is required, you should use the lined page(s) at the end of the Printed Answer Booklet. The question number(s) must be clearly shown.
- You are permitted to use a scientific or graphical calculator in this paper.
- Give non-exact numerical answers correct to 3 significant figures unless a different degree of accuracy is specified in the question.
- The acceleration due to gravity is denoted by $g \text{ m s}^{-2}$. Unless otherwise instructed, when a numerical value is needed, use $g = 9.8$.

INFORMATION

- **You are reminded of the need for clear presentation in your answers.**
- The Printed Answer Booklet consists of **12** pages. The Question Paper consists of **8** pages.

1(a)(i)	<div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  </div> <div style="text-align: center;">  </div> </div>									
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4(b)														
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5(d)	

5(e)(i)	

5(e)(ii)	

6(a)**6(b)****6(c)**

	X	Y	Z
A	$(x, 1)$	$(4, -2)$	$(2, 0)$
B	$(3, -1)$	$(6, -4)$	$(-1, 3)$

6(d)

	X	Y	Z
A			
B			

7(a)	
7(b)	
7(c)	

