



Oxford Cambridge and RSA

# AS Level Further Mathematics A

## Y534/01 Discrete Mathematics

### Printed Answer Booklet

# Thursday 17 May 2018 – Afternoon

## Time allowed: 1 hour 15 minutes



**You must have:**

- Question Paper Y534/01 (inserted)
- Formulae AS Further Mathematics A

**You may use:**

- a scientific or graphical calculator



First name										
Last name										
Centre number						Candidate number				

### 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.
- Complete the boxes provided on the Printed Answer Booklet with your name, centre number and candidate number.
- 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.
- 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.
- The acceleration due to gravity is denoted by  $g\text{ms}^{-2}$ . 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.

<b>1(i)</b>	
	Crate 1:
	Crate 2:
	Crate 3:
	Crate 4:
	Crate 5:
	Crate 6:
	Crate 7:
<b>1(ii)</b>	
<b>1(iii)</b>	

<b>2(i)</b>	
<b>2(ii)</b>	
<b>2(iii)</b>	

<b>3(i)</b>				
		P	Q	R
	X	(1, 4)	(5, 3)	(2, 6)
	Y	(5, 2)	(1, 3)	(0, 1)
	Z	(4, 3)	(3, 1)	(2, 1)
<b>3(ii)</b>				
<b>3(iii)</b>				
<b>3(iv)</b>				

<b>4(i)</b>	
<b>4(ii)</b>	
<b>4(iii)(a)</b>	
<b>4(iii)(b)</b>	
	Weight =

<b>5(i)</b>	
<b>5(ii)(a)</b>	
<b>5(ii)(b)</b>	
<b>5(iii)</b>	
<b>5(iv)</b>	Handmade =
	Flowers =
	Animals =
	Others =



<b>6(i)</b>																			
	Minimum project completion time =																		
	Critical activities:																		
	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 15%;">Activity</td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> <td style="width: 10%;"></td> </tr> <tr> <td>Float (days)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	Activity									Float (days)								
Activity																			
Float (days)																			
<b>6(ii)</b>																			
<b>6(iii)</b>																			



<b>6(iv)(a)</b>	
<b>6(iv)(b)</b>	
<b>6(iv)(c)</b>	





