



Oxford Cambridge and RSA Examinations

General Certificate of Secondary Education

Mathematics C (Graduated Assessment)
INTERMEDIATE TIER TERMINAL PAPER

1966/2343(I)

MARK SCHEME

Specimen Paper 2003

SECTION A

1		1400	W1	
		175.50×36	M1	Long multiplication with at most 2 errors
		6318	A2	Answer only W3
		7718	A1	
			[5]	
<hr/>				
2	(a)	3	W1	
	(b)	$5x - 3x = 9 + 2$	M1	
		5.5	A1	Answer only W2
			[3]	
<hr/>				
3	(a)	35000 and 50 seen	W1	
		$35000 \div 50$	M1	
		700	A1	
	(b)	$132 \div 1.5$	M2	M1 for $132 \div 1$ hour 32 mins
		88	A1	Answer only W3
			[6]	
<hr/>				
4	(a)	Correct reflection	W1	
	(b)	Rotation or turn	M1	
		Clockwise 90°	A1	
		About (0, 0)	A1	
	(c)	Correct enlargement	W3	W2 for the correct centre but the wrong size or W1 for the correct size in the wrong place or W1 for 2 correct sides in the correct place
			[7]	
<hr/>				
5		The scale does not start from zero	W1	
		The width of the bars are not the same	W1	
			[2]	
<hr/>				
6	(a)	$180 - (90 + 55)$	M1	
		35	A1	Answer only W2
	(b)	Angle between tangent and radius	W1	
		$= 90^\circ$		
			[3]	

7	(a)	7	W2	W1 for 15 or –8 seen
	(b)	–12	W2	W1 for 84 seen
[4]				
8	(a)	33.5	W1	
		34.5	W1	Accept 14.499...
	(b)	103.497 to 103.5	W1	
[3]				
9	(a)	$6x + 3 - 2x + 2$	M1	
		$4x + 5$	A1	Answer only W2
	(b)	$A - \pi r^2 = 2\pi rh$	M1	
		$h = \frac{A - \pi r^2}{2\pi r}$	A1	Answer only W2
[4]				
10		28, 25.6, 26.6	W3	Allow M1 for $\frac{27+24+31+30+28}{5}$
[3]				
11		0.6, 0.7 seen	W1	
		$0.4 \times 0.7 + 0.6 \times 0.3$	M2	
		0.46	A1	Answer only W3
[4]				
12	(a)	$xy(x + 4)$	W1	
	(b)	$\frac{2a^3b}{3}$	W2	W1 for a correct first step
	(c)	$(x + 3)(x + 4)$	M2	M1 for $(x \pm 3)(x \pm 4)$
		–3 and –4	A1	Answer only W3
	[6]			

Section A total: 50

SECTION B

13	(a)	225×11.7 2632.5	M1 A1	Answer only W2
	(b)	$680 \div 11.70$ 58.12	M1 A2	A1 for 58.11... Answer only W3 for 58.12 W2 for 58.11...
[5]				
14		Correct diagram	W3	W2 for 2 correct sectors W1 for 1 correct sector
[3]				
15	(a)	6 points plotted	W2	W1 for 4 or 5 correct
	(b)	Positive correlation or 'greater the height the greater the stride length'	W1	
[3]				
16	(a)(i)	$9x$	W1	
	(ii)	$8e + 2f$	W2	W1 for $4e + 4e + f + f$
	(b)	$3x - 6$	W1	
[4]				
17	(a)	$1800 \times \frac{5}{6}$ 1500	M1 A1	Answer only W2
	(b)	$1850 \times \frac{1}{5}$ 370	M1 A1	Answer only W2
[4]				
18		380	W3	M1 for $\pi \times 11 \times 11$
[3]				
19		One value between 1 and 2 correctly substituted	W1	Accept to the nearest integer or better
		An improved value correctly substituted	W1	Accept to 1 d.p. or better
		Correct substitution of a number between 1.6 and 1.7	W1	Accept to 1 d.p. or better
		1.62	W1	Dep on at least 2 other marks
[4]				
20	(a)	758.8	W1	
	(b)	$(14 \times 54.2 + 11 \times 59.2) \div 25$	M1	

56.4

A1 f.t. from (a), answer only W2

[3]

21	(a)	-20.22	W1
	(b)	96	W1
	(c)	78.935	W1

[3]

22	Multiplication of equation (1) by 3 or Multiplication of equation (1) by 2 Adding or subtracting equations		M1 At least two terms correct or $y =$ $2x - 6$ substituted in second equation.
	$x = 2.5$		M1 At least two terms correct or brackets removed if substitution method used.
	$y = -1$		A1 Answer only W1

[3]

23	(a)	0.8 seen or used	W1
		$\sqrt{(1.7^2 - 0.8^2)}$ or complete trig method	M2 Answer only W2
		$\frac{1.5}{2 + 2.8} \times 1.5$	W1 M1 for $1.7^2 - 0.8^2$ or $\sin = \frac{0.8}{1.7}$ or $\cos = \frac{0.8}{1.7}$
		3.6	A1 Answer only W4
	(b)	$\tan = \frac{0.8}{1.5}$	M2 Accept correct equivalents
		28 to 28.1	A1 Answer only W3

[10]

24	(a)	$\frac{1.1983 \times 10^8 - 1.15 \times 10^8}{1.15 \times 10^8} (\times 100)$	M1
		4.2	A1 Answer only W2
	(b)	$6.12 \times 10^7 + 7.24 \times 10^6 + 2.16 \times 10^8$	M1 Intention to divide
		2.8×10^8 or 2.84×10^8	A1 Answer only W2
	(c)	$6.12 \times 10^7 \div 213000$	M1
		287	A1 Answer only W2

[6]**Section B total: 50****Total mark available: 100**

Paper 1966 Specimen Intermediate Terminal

Question	Topic	Syll ref	Mod ref	Number	Manip Alg	Other Alg	Shape	Data	UA1	UA2	UA3	Multistep	Accuracy	Units	Eff calc	Grade E	Grade D	Grade C	Grade B	Common to H	Common to F
1	Hire purchase	H2/1a, 3c, 4a	N5.4	5					4			5				5					5
2	Simple equations	H2/5f	A5.1		3											1	2				3
3	Estimation & averages	H2/3h, H2/4a, H3/4a	N5.1, S6.8	6												3	3				6
4	Transformations	H3/1d, 3b, 3c	S4.4, S6.6, S5.7				7			3						1	6				
5	Misleading diagrams	H4/1c, 1d, 5b	D4.2					2			2						2				2
6	Circles	H3/2h	S7.1				3				1							3			
7	Substitution	H2/3a	A7.1			4										2		2			
8	Limits	H3/4a	S8.1				3											3		3	
9	Simplification and subject of formula	H2/5b, H2/5g	A8.2, A7.3		4													4		4	
10	Moving average	H4/4f	D8.4					3											3		
11	Probabilities	H4/4h	D8.1					4											4		
12	Factorising and solving equations	H2/5d, H2/5k	A8.2		6														6	5	
			Section A total	11	13	4	13	9	4	3	3	5				12	13	12	13	12	16
13	Rates of exchange	H2/4a	N5.4	5												5					
14	Symmetry	H3/3a	S5.7				3									3					3
15	Scatter diagram	H4/4a, 4c	D6.2					3									3				3
16	Expressions	H2/5b	A5.2		4						1					3	1				3
17	Ratios	H2/3d, 4a	N6.3	4													4				4
18	Area of circle	H3/4d	S6.2				3						1				2				2
19	Trial and improvement	H2/5m	A8.6			4												4		4	
20	Means	H4/1a	D5.2					3	1			2				1	2				
21	Use of calc	H2/3d	N7.1	3											3	1		2		2	
22	Simultaneous equations	H2/5l	A8.3		3														3		
23	Area, Pythagoras & trigonometry	H3/4d, H3/2f, H3/1a, H3/2g	S6.4, S7.2, S8.5				9		5			7		1				7	3	9	
24	Standard form	H2/2b, H2/3h, H2/1g	N8.5	6						1									6	6	
			Section B total	18	7	4	15	6	6	1	1	9	1	1						21	15
			Total	29	20	8	28	15	10	4	4	14	1	1	3	13	12	13	12	33	31