

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge Ordinary Level

MARK SCHEME for the October/November 2015 series

7101 COMMERCIAL STUDIES

7101/21

Paper 2 (Arithmetic), maximum raw mark 100

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1	(a)	(0).5385	[2]	M1 (0). 53846(....) or 7/13 If 0 scored then B1 for correct rounding from a ≥ 4 dp answer
	(b)	26	[2]	M1 $3\frac{1}{3} \div 100 \times 780$ oe or M1 for 25.9...
	(c)	56.5	[2]	M1 53 seen
2	(a)	£0.46 or 46p	[3]	M1 $2 \times 3.12 (= 6.24)$ M1 – 5.78 or M1 $3.12 - 5.78/2 (= 0.23)$ M1 <i>their</i> 0.23×2
	(b)	27.2	[5]	M1 $650 \times 24 \times 8 (= 124\,800)$ M1 $8 \times 300 (= 2400)$ M1 <i>their</i> $124\,800 + \text{their } 2400$ (= 127200) M1 $\div 1000$ or M1 $650 \times 24 (= 15\,600)$ M1 $+ 300 (= 15\,900)$ M1 <i>their</i> $15\,900 \times 8 (= 127\,200)$ M1 $\div 1000$ or M1 $8 \times 24 (= 192)$ M1 <i>their</i> $192 \times (450 + 200)$ M1 $+ 8 \times 300$ M1 $\div 1000$
3	(a)	3.5	[4]	M1 $8640 - 8337.60 (= 302.40)$ M1 <i>their</i> $302.40 \div 8640$ M1 $\times 100$
	(b) (i)	45	[2]	M1 (for 4 or 5 out of 5 correct) $20 + 14 + 7 + 3 + 1$
	(ii)	11 001 – 14 500	[2]	M1 mention of 22 and 23, or 22.5 or <i>their</i> 45/2s
4	(a)	188	[3]	M1 $4.7 \times 1000 (= 4700)$ M1 $\div 25$
	(b)	6.14	[5]	M1 $4.7 \times 55.2 (= 259.44)$ M1 $\div$ <i>their</i> 188 A1 1.38 M1 $7.52 - \text{their } 1.38$ or M1 $55.20 \div 1000$ M1 $\times 25$ (or M2 $55.2 \div 40$) A1 1.38 M1 $7.52 - \text{their } 1.38$ or M1 $4.7 \times 55.2 (= 259.44)$ M1 $7.52 \times \text{their (a)} (= 1413.76)$ M1 <i>their</i> $1413.76 - \text{their } 259.44$ (= 1154.32) M1 <i>their</i> $1154.32 \div \text{(a)}$
5	(a)	232 000	[4]	M1 $47500 - 33000 (= 14500)$ M1 <i>their</i> $14\,500 \div 6\frac{1}{4}$ M1 $\times 100$
	(b)	295.64	[2]	M1 $7780 \times 3.8 \div 100$

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6	(a)	30	[2]	M1 $108 \div 360 \times 100$
	(b)	79.2	[3]	M1 $12100 \div 55000$ M1 $\times 360$
	(c)	11 000	[3]	M1 $5 \div 2$ M1 $\times 4400$ or M1 $2/10 = 4400$ so $1/10 = 2200$ M1 <i>their</i> 2200×5
	(d)	1858 nfwv	[8]	M1 $560000 \div 10000 \times 18$ A1 1008 M1 $2/100 \times 30000$ A1 600 M1 $1.25/100 \times 20000$ A1 250 M1 Adding their 3 values
7	(a)	Option A 1737.5(0)	[11]	M1 $34000 \times 3\frac{1}{4} \div 100$ M1 $\times 2\frac{1}{2}$ A1 2762.50 M1 $34000 + \text{their } 2762.50$ A1 36762.50 M1 $30 \times 950 (= 28500)$ M1 $+ 10000$ A1 38500 M1 Finding difference between <i>their</i> Option A and <i>their</i> Option B B1 Sensible option stated from their results.
	(b)	28 220	[4]	M1 $100 - 17$ M1 $\div 100 (= 0.83)$ M1 $\times 34000$ or M1 $17/100$ M1 $\times 34000 (= 5780)$ M1 $34000 - \text{their } 5780$
8	(a) (i)	58.32	[2]	M1 $162 \div 175 \times 63$
	(ii)	189	[2]	M1 $100.98 \div 93.50 (= 1.08) \times 175$
	(b)	(0)7:42	[5]	M1 $286/65$ B1 4.4 A1 4h 24m M1 $12:06 - \text{their } 4: 24$ Or M1 $286/65$ B1 4.4 M1 $12.1 - \text{their } 4.4$ A1 7.7
Section B				
9	(a)	62	[7]	M1 $5 \times 18.60 (= 93)$ M1 $5000 \div 100 (= 50)$ M1 $50 \times 0.05 (= 2.50)$ M1 <i>their</i> $93 + \text{their } 2.50 (=$ $95.50)$ M1 $50 \times 3.15 (= 157.50)$ M1 <i>their</i> $157.50 -$ <i>their</i> 95.50 or M1 $5 \times 18.6 (= 93)$ M1 $5000 \div 100 (= 50)$ M1 $3.15 - 0.05$ M1 3.10×50 A1 = 155 M1 $155 - 93$
	(b)	273.75	[5]	M1 $1700 - 9.30$ A1 7.5 M1 $7.5 \times 5 (= 37.5)$ M1 $\times 7.30$ or M1 A1 as above then $7.30 \times 7\frac{1}{2}$ M1 $\times 5$

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10 (a)	0.728(4)	[3]	M1 Adding daily values (= 3.642) M1 $\div 5$	
(b)	4.17	[9]	M1 $76\,500 \div 0.75$ A1 102 000 M1 $76\,500 \div 0.72$ A1 106 250 M1 <i>their</i> 106250 – <i>their</i> 102 000 A1 4250 M1 <i>their</i> $4250/\text{their } 102\,000 \times 100$ (= 4.1666...) B1 Rounding a > 3 fig answer correctly to 3 sf	
11 (a)	4.6	[3]	Allow 4.55 – 4.63 M1 1840/400 (Allow 1820 – 1850)	
(b)	Correct ruled straight line	[5]	M1 400×4.20 oe A1 1680 P1 (400, 1680) plotted – accept plot between 1650 and 1700 A1 Ruled straight line from (0,0) to (400, <i>their</i> 1680)	
(c)	5.2(0)	[4]	M1 $4.41 \div 4.20$ A1 1.05 M1 $5.46 \div 1.05$ or M1 $4.2 \div 4.41$ A1 0.9523(80 9524) M1 $0.9523... \times 5.46$	
12 (a)	25 000	[3]	M1 $9 + 5 + 2$ (= 16) M1 $80\,000 \div \text{their } 16 \times 5$	
(b)	1987.53	[8]	M1 $80\,000 \times 1.045$ (= 83 600) M1 $83\,600 \times 1.045$ (= 87 362) M1 $87\,362 \times 1.045$ (= 91 293.29) M1 $91\,293.29 \times 1.045$ B1 95 401.48(805) or 95 401.49 M1 <i>their</i> $95\,401.48 \div 48$ A1ft 1987.53(1042) If final A1 not awarded then B1 for rounding a ≥ 3 dp answer to 2 dp	
(c)	White	[1]	500 000 scores 0	