

MARK SCHEME for the October/November 2007 question paper

7101 COMMERCIAL STUDIES

7101/02

Paper 2 (Arithmetic), maximum raw mark 100

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the October/November 2007 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2	Mark Scheme	Syllabus	Paper
	GCE O LEVEL – October/November 2007	7101	02

1	(a) £1.98	3	M1 $\frac{450}{1000}$ M1 $\times 4.40$
	(b) 31.75 or $31\frac{3}{4}$	3	B1 39.1 B1 7.35 or B1 $\frac{782}{20}$ B1 $\frac{147}{20}$ oe
	(c) \$2800	3	M1 $\frac{6000}{15}$ M1 400×7 or M2 $(\frac{7}{15}) \times 6000$
2	(a) 1.47	2	B1 1.47(0588...) seen SC1 $\sqrt{}$ their value to 1dp
	(b) $\frac{17}{25}$	2	M1 for $\frac{85}{125}$ or $\frac{68}{100}$ or $\frac{34}{50}$ oe <u>fractions</u>
	(c) 125	3	M1 $\frac{250}{200}$ M1 $\times 100$
3	(a) 54	5	M1 $8\frac{1}{2}$ M1 $\times 5$ M1 $+ 7\frac{1}{2}$ M1 $+ 4$
	(b) 352.50	4	M1 50×0.175 M1 $+ 50$ M1 "58.75" $\times 6$ or
	(c) 22.4	2	M1 $\frac{14}{5} \times 8$ M1 50×6 M1 $6 \times 50 \times 17.5/100$ M1 adding both
4	(a) 7281	4	M1 $\frac{6000 \times R \times 6.1}{100}$ R = 0.5, 3.5, 4, 4.5 or 5 allow 6/12 for 0.5 M1 uses R = 3.5 or R=4 – R=0.5 M1 $+ 6000$ (1281) (1464) - (183)
	(b) 7320.86	6	B1 1.051 M1 $\times 1.051$ A1 6306 M1 $\times 1.051 = 6627.61\sqrt{}$ M1 $\times 1.051 = 6965.61\sqrt{}$ or $6000(1 + 5.1/100)^4$ M1 M1 M1 M1 B1 1.051 The B1 of 1.051 can be implied by the answer
5	(a) 1005 cao or $\sqrt{}$	5	M1 350×2.9286 A1 1025.01 M1 1025.01×0.98 A1 1004.5098 or 1004.51
	(b) (i) S\$18.50	5	M1 9×0.40 M1 15×0.50 M1 $+ 5$ M1 $+ 2.40$
	(ii) S\$ 20.35	2	M1 "18.50" $\times 1.1$ or "18.50" $+ "18.50" \times 10/100$

Page 3	Mark Scheme	Syllabus	Paper
	GCE O LEVEL – October/November 2007	7101	02

6	(a) (i) bar chart	4	B2 all heights correct (B1 3 or 4 correct) B1 equal widths B1 scales correct
	(ii) 4	1	M1 18 th term ** any working must be correct
	(iii) 5**	2	M1 3 × 3 + 4 × 12 etc A1 174 M1 5 × 36 A1 180 M1 180 – “174”
	(b) 6**	6	
7	(a) (i) 75.60	2	M1 $73.5 \times \frac{108}{105}$ or $\frac{7938}{105}$ $70 \times \frac{108}{100}$
	(ii) 115	2	M1 $\frac{80.50}{73.50} = \frac{R}{105}$ or $\frac{8452.5}{73.50}$ or $\frac{80.5 \times 108}{73.50}$ oe
	(b) (i) £2190	8	M1 400 + 1% of 8000 A1 480 B1 280 -> 250 M1 400 + 2% of 11000 A1 620 M1 400 + 1% of 4000 M1 adding all 4
	(ii) 5.92 or 5 + 34/37 cao	2	M1 “2190”/37000

Page 4	Mark Scheme	Syllabus	Paper
	GCE O LEVEL – October/November 2007	7101	02

Section B

8	(a) \$199	6	M1 40×3.50 A1 140 M1 1800×0.02 A1 36 M1 + 18 + 5
	(b) \$223.86	6	M1 1.30×0.8 A1 1.04 M1 $205 \times "1.04"$ A1 213.20 M1 $"213.20" \times 1.05$
9	(a) (i) 32000	2	M1 50×640
	(ii) 13500	5	M1 A1 $32000 \times 0.75 = 24000$ M1 24000×0.75 M1 18000×0.75
	(iii) 57.8(125)	2	M1 $(32000 - "13500")/32000$
	(b) 20	3	M1 $10125/337.50$ A1 30 or M1 337.50×50 M1 $(16875 - 10125)/337.5$
10	(a) £ 2043.52	5	M1 1600×1.24 A1 1984 M1 1.03 M1 1984×1.03
	(b) £661.48	7	M1 1600×5 or 1600×0.05 A1 £80 or 8000p M1 1600×1.65 A1 £2640 M1 $2640 + 80 - 15$ M1 - "2043.52"
11	(a) 0.7125	2	M1 $57000/80000$
	(b) 104025	2	M1 57000×1.825
	(c) 60304.35 cao	2	M1 (b)/1.725
	(d) £46618.(94)	6	M1 $"60304" \times 0.7482$ A1 45119.71 M1 $80000 - "45119.71"$ M1 $34880.29 \div 0.7482$ B1 $\sqrt{\text{profit or loss}}$