UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary and Advanced Level

MARK SCHEME for the June 2004 question papers

9706 ACCOUNTING

9706/01	**Paper 1 (Multiple Choice), maximum raw mark 30**
9706/02	**Paper 2 (Structured Questions), maximum raw mark 90**
9706/03	**Paper 3 (Multiple Choice), maximum raw mark 30**
9706/04	**Paper 4 (Problem Solving), maximum raw mark 120**

These mark schemes are published as an aid to teachers and students, to indicate the requirements of the examination. They show the basis on which Examiners were initially instructed to award marks. They do not indicate the details of the discussions that took place at an Examiners' meeting before marking began. Any substantial changes to the mark scheme that arose from these discussions will be recorded in the published *Report on the Examination*.

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 discussion or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the June 2004 question papers for most IGCSE and GCE Advanced Level syllabuses.

UNIVERSITY of CAMBRIDGE
International Examinations

Grade thresholds taken for Syllabus 9706 (Accounting) in the June 2004 examination.

	maximum mark available	minimum mark required for grade:		
		A	B	E
Component 1	30	21	19	14
Component 2	90	64	58	38
Component 3	30	22	20	14
Component 4	120	88	79	45

The thresholds (minimum marks) for Grades C and D are normally set by dividing the mark range between the B and the E thresholds into three. For example, if the difference between the B and the E threshold is 24 marks, the C threshold is set 8 marks below the B threshold and the D threshold is set another 8 marks down. If dividing the interval by three results in a fraction of a mark, then the threshold is normally rounded down.

JUNE 2004

GCE A AND AS LEVEL

MARK SCHEME

MAXIMUM MARK: 30

SYLLABUS/COMPONENT: 9706/01

ACCOUNTING
Paper 1 (Multiple Choice)

UNIVERSITY of CAMBRIDGE
International Examinations

Question Number	*Key*	*Question Number*	*Key*
1	**B**	16	**B**
2	**D**	17	**B**
3	**A**	18	**D**
4	**D**	19	**A**
5	**B**	20	**D**
6	**B**	21	**C**
7	**B**	22	**C**
8	**A**	23	**A**
9	**C**	24	**A**
10	**C**	25	**A**
11	**C**	26	**B**
12	**A**	27	**C**
13	**C**	28	**B**
14	**A**	29	**A**
15	**C**	30	**B**

TOTAL 30

JUNE 2004

GCE A AND AS LEVEL

MARK SCHEME

MAXIMUM MARK: 90

SYLLABUS/COMPONENT: 9706/02

ACCOUNTING
Paper 2 (Structured Questions)

UNIVERSITY of CAMBRIDGE
International Examinations

AS ACCOUNTING - SUMMER 2004

Al

		2002	2003
(a)			
(i)	Acid Test (Liquid) Ratio = CA-stock:CL,	1.61 :1	0.68 :1
(ii)	Stock turnover = CoGS/Ave stock	16.43 times	8.40 times
		22.21 days	43.45 days
(iii)	Debtors collection period = Debtorsx365/sales	61.64 days	89.43 days
(iv)	Gross Profit Ratio = GPx100/Sales	30.00 %	24.17 %
		0.30 :1	0.24 :1
(v)	Net Profit Ratio = NPx100/Sales	11,11 %	8.83 %
		0.11	0.08 :1
(vi)	ROCE = NP before int x100/Cap employed	12.17 %	12.05 %

1 for each correct ratio to a maximum of (12)

If no suffix, award 1 for each correct pair:
If answer not to 2 decimal places, but correct working shown, full marks.

(b) Acid test worse, due to lack of cash because of expenditure on stock
Stockturn worse due to surplus unsold stock
Debtors collection worse due to poor credit control.
GP ratio worse due to increased cost price not passed on to customer.
NP ratio worse due to increased operating expenses.
ROCE almost unchanged/slightly worse due to similar rates of change in capital and net profit

2 for each, maximum (12)
These answers are not exclusive - use your judgement.

(c) Advantages

Show trends

Help compare with
- (i) earlier years
- (ii) other businesses

Help decision making

Show particular problem areas

Maximum (3)

Disadvantages

Comparisons may be difficult due to
- (i) changes in the economy
- (ii) changes in technology
- (iii) changes in Staff
- (iv) changes in company policy

Reasons for changes are not always obvious

Accuracy of information may be a problem

Historic cost used - takes no account of inflation

Maximum (3)

These answers are not exclusive - use your judgement.

A S ACCOUNTING - SUMMER 2004 - 9706/2
A2

(a) Working for Goodwill

		Introduced	Titus	Ronicus	Net effect
			$	$	$
$30 000 worth	**$**45 000	Titus	15 000 Cr		15 000 Cr
$27 100 worth	$30 000	Ronicus		2 900 Cr	2 900 Cr
		Titus	9 000 Dr	6 000 Dr	15 000 Dr
		Ronicus	1 740 Dr	1 160 Dr	2 900 Dr
		Net	4260 Cr	4 260 Dr	

Must have same amount total of goodwill on both sides and must cancel out or no marks as Goodwill would otherwise have to appear as an account.

Capital Accounts

	Titus $	Ronicus $			Titus $	Ronicus $		
Goodwill		4 260	**2**	Sundries	45 000	30 000	**2**	
Balance c/d	49 260	25 740	**1**	Goodwill	4 260		**2**	
	49 260	30 000			49 260	30 000		
				Balance b/d	49 260	25 740	**1 OF**	**(8)**

Alternative Capital Accounts

	Titus $	Ronicus $			Titus $	Ronicus $		
Goodwill	1 740	6 000	**2**	Sundries	45 000	30 000	**2**	
Balance c/d	49 260	25 740	**1**	Goodwill	6 000	1 740	**2**	
	51 000	31 740			51 000	31 740		
				Balance bid	49 260	25 740	**1 OF**	**(8)**

	Titus	Ronicus			Titus	Ronicus		
Goodwill	10 740	7 160	**2**	Sundries	45 000	30 000	**2**	
Bal cid	49 260	25 740	**1**	Goodwill	15 000	2 900	**2**	
	60 000	32 900			60 000	32 900		
				Bal b/d	49 260	25 740	**1 OF**	**(8)**

(b) Profit and Loss Appropriation Account for the year ended 30 September 2004

		$	$	$		
Net Profit		56 000**(1)** + 1050 **(2)**		57 050	**3**	
Interest on Drawings	Titus	450				
	Ronicus	250		700	**1 Not 2**	
				57 750		
Interest on Capital	Titus	2 463			**1 OF**	
	Ronicus	1 287	3 750		**1 OF**	
Partner's Salary	Ronicus		20 000	23 750	**1**	
				34 000		
Share of Residue	Titus	20 400	unless		**1 OF**	
	Ronicus	13 600	aliens	34 000	**1 OF**	(9)

(c)

Current Accounts

	Titus $	Ronicus $			Titus $	Ronicus $	
Drawings	9 000	5 000	2	Share of Residue	20 400	13 600	**2**
Int on drawings	450	250	2	Int on Capital	2 463	1 287	**2**
Goods taken	600	450	2	Salary		20 000	**1**
Balance c/d	12813	29187	1				
	22863	34 887			22 863	**34 887**	
				Balance b/d	12 813	29 187	**1** (13)

A/S ACCOUNTING SUMMER 2004 - 9706/2

Hours worked = 30 workers x 30 hours x 50 weeks = 45000 =10 hours/unit = $6/hour

A3				$	$	
(a)	Sales		4500 x 250		1,125,000	**1**
	Direct Materials	4500 x 35		157,500		**1**
	Direct Labour	45000 x 6		270,000		**2**
	Variable Costs					
	V Overheads	4500 x 12		54,000		
	Administration	4500 x 14		63,000		**1**
					544,500	
					580,500	
	Fixed Costs					
	Fixed o'heads			125,000		**1**
	Administrative			70;000		**1**
	Advertising			150,000		**1**
	Total Fixed Costs				345,000	
	Net Profit				235,500	**1**
						(10)
(b)(i)	Sales		5000 x 250		1,250,000	**1**
	Direct Materials	5000 x 35		175,000		
	Basic D Labour	4.5000 x 6		270,000		**1**
	5000 extra hours	5000 x 9		45,000		**1**
	Extra costs	5000 x 1.5		7,500		**1**
	VO			60,000		
	V Admin 0			70,000		
	Fixed costs		125,000			**)**
			70,000			**)1**
			150,000	345,000	972,500	**)**
	Net Profit				277,500	**1** + **1 of**
						(7)
(b)(ii)	Sales				1,250,000	
	DM			157,500		
	DL			270,000		
	VO			54,000		
	V Admin 0			63,000		
	Fixed Costs			345,000		**1**
	Lease			50,000		**2**
					939,500	
	Net Profit				310,500	**1** + **1of**
	NB No marks for profit if market research included					**(5)**

Due to wording of question, accept any figures in (a) or (b) for variable costs.

(b)(iii)	Sales				1,250,000	
	DM			157,500		
	DL			270,000		
	VO			54,000		
	V Ad O			63,000		
	Fixed Costs			345,000		**1**
	Cost of buying in	500 x 200		100,000		**2**
					989,500	
	Net Profit				260,500	**1** +**1of**

Fixed costs will have to be calculated in most cases. **(5)**

(c) Option 1
Second most profitable option, but could lead to employees expecting overtime in future.

Option 2
Market research costs already spent, so no further outlay, and best net profit. But there may be teething troubles and possible re-training problems.

Option 3
No additional capital outlay, but possible problems of quality control.

Any three relevant points **(3)**

If unit costing used, award where correct.

JUNE 2004

GCE A AND AS LEVEL

MARK SCHEME

MAXIMUM MARK: 30

SYLLABUS/COMPONENT: 9706/03

ACCOUNTING
Paper 3 (Multiple Choice)

UNIVERSITY of CAMBRIDGE
International Examinations

Question Number	*Key*	*Question Number*	*Key*
1	**A**	16	**B**
2	**C**	17	**A**
3	**A**	18	**A**
4	**C**	19	**B**
5	**D**	20	**A**
6	**B**	21	**D**
7	**D**	22	**B**
8	**B**	23	**C**
9	**C**	24	**B**
10	**D**	25	**D**
11	**B**	26	**C**
12	**B**	27	**C**
13	**C**	28	**C**
14	**C**	29	**B**
15	**C**	30	**B**

JUNE 2004

GCE A AND AS LEVEL

MARK SCHEME

MAXIMUM MARK: 120

SYLLABUS/COMPONENT: 9706/04

ACCOUNTING
Paper 4 (Problem Solving)

UNIVERSITY of CAMBRIDGE
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1(a).

Capital Accounts

	Argy $	Bargy $		Argy $	Bargy $
Drawings	18 000 **(1)**	12 000 **(1)**	Balances b/d	50 000 **(1)**	25 000 **(1)**
Shares in Shindig Ltd	30 000 **(1)**	15 000 **(1)**	Loan	4 000 **(1)**	
Debentures	5 000 **(1)**				
Bank	11 000 **(1)**	3 000 **(1)**	Profit on realisation	10 000	5 000 **(6)**
	64 000 **(1)**	30 000 **(1)**		64 000 **(1)**	30 000 **(1)**

Profit on realisation	$	
Assets at book value		
Freehold land	5 000	
Freehold buildings	20 000	
Equipment	8 000	
Stock	11 000	
Debtors	6 000	
	50 000 **(1)**	
Deduct creditors	3 000 **(1)**	
Net assets sold	47 000	
Sale proceeds	62 000 **(1)**	
Profit on realisation	15 000 **(1)(OF)**	
Argy $^2/_3$	10 000 **(1)**	
Bargy $^1/_3$	5 000 **(1)**	

Allocation of shares	**$**
Purchase consideration	62 000
Debentures (4000 X5/4)	5 000
Cash	12 000
Shares	45 000
	62 000

[20]

(b)(i)

Shindig Ltd

Balance Sheet immediately after acquisition of partnership

		$	$
Fixed assets:	Goodwill (see below)		20 000 **(3)**
	Freehold land		10 000 **(1)**
	Freehold buildings		16 000 **(1)**
	Leasehold buildings		10 000 **(1)**
	Equipment		5 000 **(1)**
	Office furniture		2 000 **(1)**
			63 000
Current assets:	Stock (20 000 + 9 000)	29 000 **(1)**	
	Debtors (12 000 + 5 000)	17 000 **(1)**	
	Bank (24 000 – 12 000)	12 000 **(1)**	
		58 000	
Less Current liabilities			
	Creditors (14 000 + 3 000)	17 000 **(1)**	41 000
			104 000
Less Long term liability: 10% debentures			5 000 **(1)**
			99 000
Share capital and reserves			
	Ordinary shares of $1 (50 000 + 30 000)		80 000 **(1)**
	Share Premium account		15 000 **(1)**
	Retained profit		4 000
			99 000

[15]

Note **(1)** **(1)** **(1)**

Goodwill $[62 000 – (45 000 – 3 000)] = $20 000

(ii)

Shindig Ltd would not have purchased Goodwill.**(1)** The purchase of assets does not give rise to payment for Goodwill **(1)** Goodwill is only relevant when a company acquires a business as a going concern. **(1)**

The settlement would more likely to have been made in cash. **(1)**

The partnership business would not have been terminated **(1)** **[5]**

2 (a) Budget statement for the production of 10 000 units

	Process 1 $		Process 2 $	
			From process 1	1 230 000 **(1)(OF)**
Materials (10 000 X 4 X $12)	480 000	**(1)**	(10 000 X 3 X $7)	210 000 **(1)**
Labour (10 000 X 3 X $15)	450 000	**(1)**	(10 000 X 5 X $10)	500 000 **(1)**
Overhead (30 000 X $10)	300 000	**(1)**	(50 000 X £16)	800 000 **(1)**
Transferred to process 1	1 230 000	**(1) (OF)**	Finished goods	2 740 000 **(1)(OF)**

[9]

(b) Flexed budget statement for the production of 9 500 units [9000 + (1000 X 50%)]

		Process 2 $
From process 1 (9500 X 123)		1 168 500 **(1(OF)**
Materials	(9500 X 3 X $7)	199 500 **(1)**
Labour	(9 500 X 5 X $10)	475 000 **(1)**
Overhead	(9 500 X 5 X £16)	760 000 **(1)**
		2 603 000 **(1) (OF)**

[5]

(c) Process accounts for actual production

Process 1 account (10 000 units)

	$		$	
Material (10 000 X 4.2 X $13.5)	567 000	**(1)**		
Labour (10 000 X 2.8 X $15.75)	441 000	**(1)**	Production transferred	
Overhead (10 000 X 2.8. X $10)	280 000	**(1)**	process 2	1 288 000 **(1)**
	1 288 000			1 288 000

Process 2 account (9 500 complete units)

	$		$	
Materials from process 1	1 288 000	**(1)(OF)**		
Added materials (9500 X 2.9 X $7.3)	201 115	**(1)**		
Labour (9500 X 5.25 X $9)	448 875	**(1)**	Finished goods (note)	2 530 980 **(1)(OF)**
Overhead (9500 X 5.25 X $16)	798 000	**(1)**	Work in progress c/d (note)	205 010 **(1)(OF)**
	2 735 990			2 735 990

[10]

Note	Finished goods $		Work in progress $
($1 288 000 X .9)	1 159 200	($1 288 000 X .1)	128 800
($1 447 990 X 9/9.5)	1 371 780	($1 447 990 X .5/9.5)	76 210
	2 530 980		205 010

(d) (i) Materials price variance $(12.0 – 13.5)42 000 $63 000 A **(2)***
(ii) Materials usage variance (40 000 – 42 000)$12 $24 000 A **(2)***
(iii) Labour efficiency variance (47 500 – 49 875)$10 $23 750 A **(2)***
(iv) Labour rate variance $(10 – 9)49 875 $49 875 F **(2)*** **[8]**

* 1 mark only if $ sign omitted; no mark if A or F omitted.

(e)(i) By-products are products which arise incidentally in the processing of the main product(s). **(1)**

They have low sales value compared to the main products. **(1)**

(ii) Waste products are processing debris. **(1)**

Revenue derived from the sale of by-products and waste is deducted from total process costs. **(1)**

[4]

(f) Advantages of using standard costs

- Standard cost can be used to facilitate the preparation of realistic budgets
- Variances between budgeted and actual activity may identified/explained
- Responsibility for variances may be allocated to persons involved
- Standard costs facilitate the preparation of estimates for new products\quotations for jobs.

(1 mark for each point. Maximum 4 points) **[4]**

3 (a) Calculation of ARR

	$	$
Annual revenue		160 000 **(1)**
expenditure	80 000 **(1)**	
depreciation	50 000 **(1)**	130 000
Annual profit		30 000 **(1)(OF)**

Average investment $(250 000 X ½ + 40 000) = $165 000 **(1)**
(1) **(1)**
ARR = $^{30\,000}/_{165\,000}$ X 100 = 18% **(1)**

OR $(300 000 X ½ + 40 000) = $190 000 **(1)**
(1) **(1)**
ARR = $^{30\,000}/_{190\,000}$ X 100 = 15.79% **(1)**

OR $(350 000 X ½ + 40 000) = $215 000 **(1)**
(1) **(1)**
ARR = $^{30\,000}/_{215\,000}$ X 100 = 13.96% **(1)** **[10]**

(b) Calculation of discounted payback period

	$	
Net outlay	300 000 **(1)**	
Years 1 – 4 $80 000 X 3.169	(253 520) **(1)**	
	46 480 **(1)**	
Year 5 $130 000 X 0.621	80 730 **(1)**	$^{46\,480}/_{80\,730}$ X 12 = 7 months

Discounted payback period = 4 years 7 months. **(1)** **[5]**

(c) (i) Calculation of IRR

		$			$
10%		(300 000)	20%		(300 000)
Years 1 – 4	$80 000 X 3.169	253 520	Years 1 – 4	$80 000 X 2.588	207 040 **(4)**
5	$130 000 X 0.621	80 730 **(1)**	5	$130 000 X 0.402	52 260 **(1)**
	NPV	34 250 **(1) (OF)**			(40 700) **(1)(OF)**

IRR = 10% + (10% X $^{34\,250}$ / $_{74\,950}$) **(1)** = 14.6% **(1)(OF)** **[10]**

(ii) The directors may purchase the machine because the ARR is well above the rate currently being earned by the company **(1)** and
The IRR at 14.7% is almost in line with the rate currently being earned. **(1)**
The payback period is acceptable **(1)** because it is within the life of the project **(1)** **[3]**

(d) Accounting rate of return

Advantages

- profitability of a project may be compared with present profitability of business
- it is relatively easy to calculate

Disadvantages

- average annual profit may not be typical of any year
- timing of cash inflows and outflows is ignored
- it ignores the payback risk factor
- it ignores the time value of money
- 'profit' is subjective (provisions for depreciation, bad debts etc.)
- no commonly accepted method of calculating capital employed
- ignores duration of project

Payback period

Advantages

- it is relatively easy to calculate
- calculation of net cash flows is less subjective than calculation of profitability
- where competing projects are being considered, the risk factors may be compared
- short payback periods benefit business's liquidity and facilitate faster growth

Disadvantages

- life expectancy of project is ignored
- different projects may have similar payback periods but different patterns of cash flows
- time value of money may be ignored

Internal rate of return

Advantages

- indicates return actually to be expected from expenditure
- may assist in ranking different proposals
- often used in businesses
- recognises time value of money

Disadvantages

- more difficult to calculate than NPV
- NPV is usually more useful in ranking different projects

(1 method discussed – maximum 8
2 methods discussed – maximum 10
3 methods discussed – maximum 12)

[12]