

# Mark Scheme with Examiners' Report GCE A Level Accounting (6002)

June 2005

delivered locally, recognised globally

Mark Scheme with Examiners' Report

Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel International centres receive the support they need to help them deliver their education and training programmes to learners.

For further information please call our International Customer Services Unit:

Tel +44 (0) 190 884 7750

Fax +44 (0) 207 190 5700

www.edexcel-international.org

June 2005

Order Code: UO017129

All the material in this publication is copyright

© Edexcel Limited 2005

# **ACCOUNTING 6002, MARK SCHEME**

#### Question1

(a) Reconciliation of operating profit to net cash flow from operating activities.

Net Profit	71 000	✓
Add Interest: 15% x 40 000	6 000	✓
15% x 10 000 ✓ x ½ ✓	750	✓
Loss on sale of fixed asset	3 000	✓
Depreciation (40 000 ✓ + 7 000 ✓)	47 000	
Increase in Stock	(4 000)	✓
Decrease in Debtors	2 000	✓
Increase in Creditors	3 000	<b>√</b>
Net Cash Inflow from Operating Activities	128 750	√ o/f

(Total 6 marks)

(b) Cash Flow statement for the Year ended 31st March 2005 ✓

Wording is required to obtain the mark(s). Also needs to be in correct place.

Net Cash Inflow from Operating Activities	128 750 ✓
	o/f
Returns on Investment and Servicing of Finance ✓	
Interest Paid	(6 750) ✓
	o/f
Taxation	
Tax Paid (15 000 ✓ + 2 000 ✓ ✓)	(17 000)
Capital Expenditure ✓	
Payments to acquire tangible fixed assets (100 000√ + 12 000√)	
Receipts from sales of tangible fixed assets 2 000 ✓	
Net Cash Outflow from Investing Activities	(110 000)
Equity Dividends Paid 🗸	
Final Dividend (4 000) ✓ + Interim Dividend (2 000) ✓	<u>(6 000)</u>
Net Cash Outflow before Financing	(11 000) ✓
	o/f
Financing ✓	
Issue of Ordinary Share capital 10 000 ✓ + 10 000 ✓	
Redemption of Preference Shares (20 000) ✓	
Repayment of Debenture (10 000) ✓	
Net Cash Outflow from Financing	<u>(10 000)</u>
Decrease in Cash ✓	(21 000) ✓
	o/f

(Total 11 marks)

(c) Analysis of Changes in Cash and Bank Balances during year ended March 31 2005

	31 March 2004	31 March 2005	Change in Year
Cash	8 000	11 000 ✓	+ 3 000 ✓
Bank	8 000	(16 000) ✓	(24 000) ✓
Total	16 000	(5 000) ✓	(21 000) ✓

Need first two columns for first ✓

(Total 3 marks)

(d) Four marks maximum available for comments Reward key features only

Answers may include the following:

Current Ratio has fallen from 83 : 45 (1.844:1)  $\checkmark$  which is near perfect  $\checkmark$  to 80:60 (1.33 : 1)  $\checkmark$  which is worrying.  $\checkmark$ 

Acid ratio has fallen from  $43:45\ (0.96:1)$   $\checkmark$  which is nearly perfect  $\checkmark$  to  $36:60\ (0.6:1)$   $\checkmark$  which is worrying.  $\checkmark$ 

Purchase of Fixed Assets at 112 000 may have overextended the firm. ✓✓

Repayment of debenture could have been covered by taking out another loan.  $\checkmark\checkmark$ 

Redemption of preference shares was not very wise  $\checkmark\checkmark$  especially on the same date as repayment of debenture  $\checkmark\checkmark$ 

Issue of Ordinary shares helped liquidity position  $\checkmark \checkmark$  but could have taken place earlier in year, eg to coincide with preference redemption.  $\checkmark \checkmark$ 

No marks for simple repetition of current asset figures or current liability figures from balance sheet, eg Debtors fell by 2 000

**Conclusion** (may be stated at start) has a maximum of **2 marks**. Generally not handled very well  $\checkmark \checkmark$  as funds have fallen by 21 000  $\checkmark$  and firm has an overdraft.  $\checkmark$ 

(Total 6 marks)

**TOTAL FOR QUESTION 1: 26 MARKS** 

	Absorption		Marginal	
Sales		30 600√		30 600√
		-		,
Direct Materials	8 100 ✓		8 100 ✓	
Direct Labour	10 800 ✓		10 800 ✓	
Variable Factory	3 600 ✓		3 600 ✓	
Overheads				
Fixed factory everboads	6 300 -/		6 300 -/	
Tixed factory overfleads	0 300 7		0 300 7	
Less Closing Stock	(1600) ✓ ✓ ✓ ✓		(1250) ✓ ✓ ✓ ✓	
		27 200		27 550
Profit		3 400 ✓		3 050 ✓
		o/f		o/f
	Direct Materials Direct Labour Variable Factory Overheads Fixed factory overheads Less Closing Stock	Direct Materials 8 100 ✓ Direct Labour 10 800 ✓ Variable Factory 3 600 ✓ Overheads  Fixed factory overheads 6 300 ✓ Less Closing Stock (1600) ✓ ✓ ✓ ✓	Sales 30 600√   Direct Materials 8 100 √   Direct Labour 10 800 √   Variable Factory 3 600 √   Overheads 6 300 √   Fixed factory overheads 6 300 √   Less Closing Stock (1600) √√√√   Profit 27 200   3 400 √	Sales       30 600√         Direct Materials       8 100 √       8 100 √         Direct Labour       10 800 √       10 800 √         Variable Factory       3 600 √       3 600 √         Overheads       6 300 √       6 300 √         Less Closing Stock       (1600) √√√√       (1250) √√√√         Profit       3 400 √

Calculation of Stock value (breakdown of  $\checkmark\checkmark\checkmark\checkmark$  shown above)

Absorption = 
$$\frac{28\ 800\ \checkmark}{900\ \checkmark}$$
 = £32 (o/f) per unit  $\checkmark$  Marginal =  $\frac{22\ 500}{900\ \checkmark}$  = £25 (o/f) per unit  $\checkmark$  £32 x 50 = £1 600 (o/f)  $\checkmark$  £25 x 50 = £1 250 (o/f)  $\checkmark$ 

For Absorption (5 marks)
For Marginal (5 marks)

## (b) Valid Points may include the following:

#### Accept Order = ✓✓

Variable Costs are covered  $\checkmark \checkmark$  ie £30 greater than £25.  $\checkmark \checkmark$  Contribution is made towards paying off fixed overheads.  $\checkmark \checkmark$  But only in the short term  $\checkmark \checkmark$  as total costs must be covered in the l

But only in the short term  $\checkmark \checkmark$  as total costs must be covered in the long term.

Customer may be in a position to buy at a higher price in the future.  $\checkmark\checkmark$  Victoria may be in a position to cut its own costs, eg labour.  $\checkmark\checkmark$ 

#### (Maximum 6 marks)

#### Decline order (Maximum 4 marks)

Total costs are not covered  $\checkmark \checkmark$  ie £30 is less than £32.  $\checkmark \checkmark$  Look around for another customer.  $\checkmark \checkmark$  Try to reduce fixed/variable costs.  $\checkmark \checkmark$ 

If candidate argues both sides, but does not come to a conclusion, Maximum 5 marks

(6 marks)

## (c) Q + R correct = ✓ in column R S + T correct = ✓ in column T

Product	Q	R	S	T
Selling Price	£40	£30	£50	£80
Variable Costs	£30	£20	£30	£50
Contribution per unit	£10	£10√	£20	£30√
Machine hours	5	4	6	10
Contribution per machine hour	£2.00√	£2.50√	£3.33✓	£3.00√
Order	4	3√	1	2√
Sales Possible	2000	1500	1000	800
Machine hours required	10 000	6 000	6 000	8 000
Optimum production hours	5 000√	6 000√	6 000√	8 000√
Optimum production	1 000√	1 500√	1 000√	800√
Contribution	10 000	15 000	20 000	24 000

(8 marks)

Apply o/f rule to table

Total contribution = £69 000 o/f  $\checkmark$  - Fixed Costs £50 000  $\checkmark$  = Profit £19 000 o/f  $\checkmark$   $\checkmark$  C (2 marks)

**TOTAL FOR QUESTION 2: 26 MARKS** 

## Question 3

 $240 \times 40 \times £15 = £144000$ 

 $240 \times 50 \times £18 = £216000$ 

## (a) (i) Payback Period

Year	Cash Inflow	Cash Outflow	Net Cash Flow
0		(120 000)	(120 000) ✓
1	144 000 o/f ✓	(130 000) ✓	14 000 o/f ✓
2	144 000 o/f ✓	(130 000) ✓	14 000 o/f ✓
3	216 000 o/f ✓	(150 000) ✓	66 000 o/f ✓
4	216 000 o/f ✓	(150 000) ✓	66 000 o/f ✓
- 5	216 000 o/f ✓	(150 000) ✓	66 000 o/f ✓

Pay back is after 3 and  $\frac{26}{66}$  years = 3 years 4.72 months o/f

(Total 10 marks)

#### (ii) Net Present Value

Year	Net Cash Inflow	Discount Factor	Discount Cash	
			Flow	
0	(120 000)	1	(120 000)	11
1	14 000 o/f	0.909	12 726 o/f	✓
2	14 000 o/f	0.826	11 564 o/f	<b>√</b>
3	66 000 o/f	0.751	49 566 o/f	<b>✓</b>
4	66 000 o/f	0.683	45 078 o/f	✓
5	66 000 o/f	0.621	40 986 o/f	<b>√</b>
NPV			39 920 o/f	11
				✓C

(Total 5 marks)

## (iii) Average Rate of Return

Total Surplus of Project = £226 000 - £ 120 000 = £ 106 000 
$$\checkmark$$
 o/f  $\checkmark$  o/f

Average Annual return = 
$$\underline{£106\ 000}$$
 o/f  $\checkmark$  = £ 21 200 per year o/f  $\checkmark$  5 years  $\checkmark$ 

Accounting rate of return = 
$$\underbrace{£21\ 200}_{}$$
 o/f  $\checkmark$  x 100 = 17.7% o/f  $\checkmark$   $\checkmark$ C  $\underbrace{£120\ 000}_{}$   $\checkmark$ 

Other methods of calculating the Average Rate of Return could achieve the full 5 marks.

(Total 5 marks)

#### (b) Evaluation

3 marks available for a decision for each appraisal method - 1 per method.

#### **PLUS**

3 marks available for making extra point concerning an appraisal method - 1 per method.

#### AND/OR

3 marks available for making a relevant comment.

#### Answers may include:

Payback method do not invest  $(\checkmark\checkmark)$  o/f. But project profitable overall  $(\checkmark\checkmark)$  or challenge 3 year payback period  $(\checkmark\checkmark)$ .

NPV method states invest  $(\checkmark \checkmark)$  o/f. Includes falling value of money over time $(\checkmark \checkmark)$  etc.

ARR states do not invest  $(\checkmark \checkmark)$  o/f. But challenge high ARR figure of 20%  $(\checkmark \checkmark)$ .

#### Other Relevant Points:

Accuracy of predictions  $(\checkmark\checkmark)$ 

Chance of renewal of contract after 5 years (✓✓)

Other possible investment projects available  $(\checkmark\checkmark)$ 

Objectives/strategy of company ( $\checkmark\checkmark$ )

(Total 6 marks)

**TOTAL FOR QUESTION 3: 26 MARKS** 

(i) Standard hours =  $(9 \times 5 \times 8) \checkmark \times 4 \checkmark = 1440 (= \checkmark\checkmark)$ (a)

Actual Hours =  $1440 \checkmark o/f + 45 \checkmark = 1485 o/f (= \checkmark\checkmark)$ 

(2 marks)

(ii) Labour Efficiency Variance = (1440 - 1485) ✓ o/f x £5.50 ✓ = £247.50 o/f  $\checkmark$  o/f Adverse  $\checkmark$ 

(2 marks)

(iii) Standard Wages Cost =  $(9 \times 40 \times 4) \text{ o/f} \checkmark \times £5.50 \checkmark = £7920 (= \checkmark\checkmark)$ Actual Wages Cost = £7920  $\checkmark$  o/f + (9 x £45)  $\checkmark$  = £8325 o/f(=  $\checkmark\checkmark$ )

(2 marks)

(iv) Total Wages Cost Variance = £7920  $\checkmark$  o/f - £8325  $\checkmark$  o/f = £405 o/f  $\checkmark$ Adverse ✓

(2 marks)

Actual wage rate = £8325 o/f  $\checkmark$  = £5.61 per hour o/f  $\checkmark\checkmark$ (v) 1485 o/f ✓

(2 marks)

(vi) Wage rate variance =  $(£5.61 \text{ o/f} - £5.50 \checkmark) \times 1485 \text{ o/f} \checkmark$ = £163.35 o/f ✓ Adverse ✓

(2 marks)

One tick  $\checkmark$  for recognition and one tick  $\checkmark$  for development.

Possible answers may include:

Anything that benefits the firm will benefit the workers  $(\checkmark)$  eg for job security, pay, bonuses etc  $(\checkmark)$ 

Helps to establish production targets ( $\checkmark$ ) that may be comfortable for workers  $(\checkmark)$  eg numerical example  $(\checkmark)$  or difficult to achieve  $(\checkmark)$ 

May be basis of possible bonus for production targets met etc (✓) which may see workers taking home more pay  $(\checkmark)$  or missing targets  $(\checkmark)$  and taking home less **(**✓)

(Total 4 marks)

**TOTAL FOR QUESTION 4: 16 MARKS** 

(a) Sales Budget for July to December ✓

	July	August	Sept	Oct	Nov	Dec	
Europe	800	800	800	800	800	800	<b>√</b> √
Africa	400	440	484	532	586	644	<b>V V V</b>
America	300	285	271	257	244	232	<b>√√√</b>
Asia	360	340	320	300	320	340	<b>√√√</b>
Total	1860	1865	1875	1890	1950	2016	<b>√√</b>

Apply pro rata for each row, eg 2 correct for Africa =  $\checkmark$  Need 4 correct for =  $\checkmark\checkmark$  Apply o/f rule for table.

(Total 7 marks)

## (b) Production Budget for Europa for July to September

	July	August	Sept	
Europe	800	800	800	✓
Africa	440	484	532	<b>√</b> √
America	285	271	257	<b>√√</b>
Asia	320	300	320	<b>V</b>
From Stock	-100	-100	-100	<b>√</b> √
Total	1745	1755	1809	✓

Apply pro rata for each row, eg 2 correct for Africa =  $\checkmark$  Need 3 correct for =  $\checkmark\checkmark$  Apply o/f rule for table.

(Total 5 marks)

(c) Sales first ✓ as this is key budget that determines all other budgets. ✓
Then stock ✓ at a level determined by management. ✓
Then production ✓ in order to meet sales and required stock level. ✓
Then cash ✓ as required to meet production demands and as generated by sales. ✓

(4 marks)

**TOTAL FOR QUESTION 5: 16 MARKS** 

#### **Ouestion 6**

(a) (i) **Fixed Costs**  Variable costs per unit

Rent

£8 000 per year ✓ Total £ 1.75 per unit ✓

Water

Depreciation £3 000 per year ✓✓ £5 000 per year ✓

Contribution per unit

Total FC

£16 000 p.a. ✓

£3.00  $\checkmark$  - £1.75 = £1.25  $\checkmark$ 

Break Even Point =  $16\,000$  o/f  $\checkmark$  = 12 800 units o/f  $\checkmark\checkmark$ 1.25 o/f ✓

(6 marks)

(ii) Profit Contribution 1.25 x 20 000 = £ 25 000 o/f  $\checkmark$ Less FC = £ 16 000 o/f ✓ Profit = £9 000 o/f ✓✓

(2 marks)

(b) (i) Fixed Costs now £11 000 o/f ✓ Variable costs per unit now £2.05 ✓ Contribution per unit £3.00 - £2.05 = £0.95  $o/f \checkmark$ 

Break even Point = 11 000 = 11 579 o/f units ✓ 0.95

(2 marks)

(ii) Profit Contribution 0.95 x 20 000 = £19 000 o/f  $\checkmark$ Less FC = £11 000 o/f ✓ Profit = £8 000 o/f ✓✓

(2 marks)

Valid answers may include: (o/f applies) (c)

> Measured charge sees break even point reduced ( $\checkmark$ ) by 1 221 units ( $\checkmark$ ) which is beneficial to firm  $(\checkmark\checkmark)$ .

However, profits are reduced ( $\checkmark$ ) by £1 000 ( $\checkmark$ ) which is not good for the firm

This reduction in profits is more important than reducing the break even point

So new charging method must be rejected ( $\checkmark\checkmark$ ).

Maximum of two marks if candidate argues for the new charge. Maximum of three marks if candidate argues both sides but makes no recommendation.

(Total 4 marks)

**TOTAL FOR QUESTION 6: 16 MARKS** 

(a) (i)  $\frac{10}{500} \checkmark = 2 \checkmark$  pence per share  $\checkmark$ 

(2 marks)

(ii)  $\frac{2}{80} \checkmark \text{ o/f } \times 100 \checkmark = 2.5\% \text{ o/f} \checkmark$  dividend yield

(2 marks)

(b) (i) March 1st ✓ 14% Bank loans ✓ 600 ✓ 2005 Ordinary shares of £1 ✓ 600 ✓

Being conversion of 14% Bank loans into £1 Ordinary Shares

(3 marks)

(ii) £1 Ordinary Shares Account

Jan 1<sup>st</sup> 2005 Bal b/d ✓ 500 ✓ Mar 1<sup>st</sup> 2005 14% Bank Loan ✓ 600 ✓

(2 marks)

(c) Debt  $\checkmark$  = 200  $\checkmark$  x 100  $\checkmark$  = 15.4 % o/f  $\checkmark$  1300  $\checkmark$ 

OR  $\frac{\text{Debt}}{\text{Equity}} \checkmark \qquad = \frac{200}{1100} \checkmark \text{ x } 100 \checkmark = 18.2 \% \text{ o/f } \checkmark$ 

(3 marks)

(d) Valid points may include:

As less interest to pay  $(\checkmark)$ , of £84 million  $(\checkmark\checkmark)$  and less capital repayments to make,  $(\checkmark)$  so more available for dividends  $(\checkmark)$  so better off  $(\checkmark)$ 

Ownership diluted  $(\checkmark\checkmark)$  and smaller share of votes.  $(\checkmark)$  so worse off  $(\checkmark)$  More shareholders  $(\checkmark)$  available to receive dividends  $(\checkmark)$  so dividends per share may be less  $(\checkmark)$  so worse off  $(\checkmark)$  Share price will fall  $(\checkmark\checkmark)$  as more shares/on the open market  $(\checkmark)$  so worse off  $(\checkmark)$ 

(4 marks)

**TOTAL FOR QUESTION 7: 16 marks** 

## **ACCOUNTING 6002, CHIEF EXAMINER'S REPORT**

#### **General Comments**

It was good to see that most centres had prepared their students well for the first examination of the 6002 syllabus. All seven questions were attempted by candidates, with no one question proving markedly unpopular.

Whilst standards were good, the points listed below are areas where candidates may look to improve performance.

- Evaluation usually involves a judgement on figures already calculated, rather than mere repetition of those figures without judgement on their meaning.
- When evaluating accounting information, part of that evaluation may often include making a decision, for example, to accept an order or decline an order.
- At the end of an evaluation, the candidate may have to form an overall conclusion, for example, liquidity was not handled well over the trading year.

#### **Ouestion 1**

Generally candidates handled figures well in part (a), with the exception of the debenture interest. Usually this figure was left out, but good practice would be to look through the balance sheet to check if debentures are present and adjust accordingly by adding on the interest. The cash flow statement in part (b) was usually in a fairly accurate format, with a small number of candidates achieving full marks. With part (c), candidates must remember to include the change in the year, as well as opening and closing balances. Part (d) saw too many scripts describing how the firm could improve liquidity in the future, rather than answering the question set, by looking back over the year.

Common errors were:

- failure to add back interest to the net profit when reconciling to net cash flow from operating activities
- incorrect calculation of debenture interest
- inaccurate headings in the cash flow statement
- failure to distinguish between bank and cash balances during analysis of changes.

#### **Ouestion 2**

Candidates had problems calculating stock values, but were otherwise able to draw up a profit and loss statement. The weakest part of this question was part (b) where many candidates failed to use marginal costing as the decision-making tool. The order should have been accepted in the short run, as variable costs were covered. In the long run, the fixed costs would have to be covered as well. Too many students tried to calculate a profit and loss account for April, despite not having enough information to do so. Part (c) was completed well, with a number of candidates obtaining full marks.

Common errors were:

- inability to correctly calculate closing stock values
- non-application of marginal costing technique to determine whether order should be taken.

Many candidates were able to successfully calculate the payback period and the net present value. The average rate of return gave a mixed response, with a variety of methods used. All of these methods allowed candidates to obtain full marks. In part (b), candidates correctly stated that, for instance, the net present value was positive, but failed to state whether this meant the investment should go ahead. Very few candidates mentioned the merits or drawbacks of the appraisal method. Common errors were:

- inability to correctly treat depreciation, that is, deduct £18 000 per year from running expenses to give cash flow
- failure to state whether appraisal method would result in project going ahead or not
- ignoring company policy with regard to investment decision.

#### **Question 4**

Most candidates were able to score good marks in part (a), as they had learnt the formulae and applied it well. Section (b) was poorly answered, with many failing to consider the effects on the workers, usually relating standard costing to the firm. Common errors were:

- calculating the standard and actual hours worked for only one worker, not the factory
- merely adding £5.50 basic wage to £9 overtime rate to give the actual wage rate, instead of dividing total hours by total wages paid
- failure to evaluate effects of costing on the workers, concentrating on the firm instead.

#### Question 5

Part (a) was usually answered well, with candidates correctly interpreting the trends and the calculations. The delivery time was often ignored altogether in part (b) which usually meant low marks. Few candidates were able to treat the stock adjustment correctly, even though it only involved subtracting 100 units each month. A range of answers was offered for the order of budgets in part (c), despite candidates having just calculated sales budget before stock and production figures. Common errors were:

- incorrect layout of table with months running down the side, which usually meant no monthly total was calculated
- inability to account for the delivery time when producing the production budget
- poor treatment of stock adjustment
- inaccurate order of budget preparation.

#### Question 6

Candidates were generally good at calculating break even point, with the correct formula used. However, often the figures put into the formula were wrong, as a failure to correctly identify fixed and variable costs was prevalent. Calculations of profit were very accurate. It was pleasing to see in part (c) that most candidates correctly identified the fixed option as best, because it gave the highest profit, ignoring the distractor of break even at the start of the question.

- Common errors were:
- inability to distinguish correctly between fixed and variable costs
- failure to express break even point in units, as required.

This question was answered well in general terms, but often the attention to detail was missing. It was good to see most candidates could correctly apply a formula for gearing in part (c) although numbers inserted were not always correct. Some good responses were given in part (d), regarding the changes, but they could have been improved by saying whether the original shareholders were better or worse off. Common errors were:

- expressing the dividend per share in pounds, rather than pence per share as required
- omission of narrative and date in journal entry
- confusion between Bank Loan account and Bank account in journal entry
- failure to express figures in millions in the ledger accounts, and omission of dates
- overlooking the fact that the £10 million profit and loss reserve had been distributed, when calculating gearing.

## **ACCOUNTING 6002, GRADE BOUNDARIES**

Grade	A	В	С	D	E	N
Lowest mark for award of grade	67	59	51	43	36	29

**Note:** Grade boundaries may vary from year to year and from subject to subject, depending on the demands of the question paper.

Further copies of this publication are available from Edexcel International Publications, Adamsway, Mansfield, Notts, NG18 4FN, UK Telephone: +44 (0) 1623 450 781 Fax: +44 (0) 1623 450 481 Email: intpublications@linneydirect.com

Order Code: UO017129

For more information on Edexcel International, please contact our International Customer Services Unit on +44 (0) 190 884 7750 or visit www.edexcel-international.org
Edexcel Limited. Registered in England and Wales No. 4496750
Registered Office: 190 High Holborn, London WC1V 7BH,UK

