

Chapter 1

- Q1** In your own words, define the term “accounting” and explain why accounting (and accountants) is/are necessary.
- Q2** Companies operate within a legal framework and enter into financial transactions with a variety of parties (e.g. customers, employees and suppliers). A large company may have a significant impact on the society within which it operates.

Explain the role of accounting in relation to:

- (a) compliance with the legal framework
 - (b) the processing of financial transactions
 - (c) the monitoring of a company’s impact on society.
- Q3L** It could be argued that accounting is even more important in the 21st century than it was in the past. Explain why this is the case and indicate some of the main limitations of accounting.

Chapter 2

Q1 A product has the following variable costs per unit of production:

	£
Materials	1.10
Labour	1.40
Power and other variable costs	0.50

So long as annual production is between 25,000 and 50,000 units, fixed costs are £150,000 per annum.

- (a) Calculate the variable cost per unit of production.
 - (b) Calculate the total cost per unit of production if 25,000 units are produced in the year.
 - (c) Calculate the total cost per unit of production if 50,000 units are produced in the year.
 - (d) Calculate the contribution per unit of production if each unit is sold for £8.
 - (e) Determine the break-even point.
- Q2**
- (a) A business buys stock from suppliers and then sells the stock to customers at a 25% markup. What is the gross margin?
 - (b) A business achieves a gross margin of 15% when selling stock bought for resale. What is the markup?
 - (c) Explain why (in general) markup is always greater than gross margin.

Q3L A product has variable costs of £12 per unit of production. The product sells for £20 per unit and fixed costs are £20,000 per month. Calculate:

- (a) the contribution per unit of production
- (b) the break-even point
- (c) the margin of safety if 3,200 units are produced and sold in a given month.

Now recalculate each of the above figures assuming that variable costs rise by 10%, fixed costs rise by 2% and the selling price per unit remains unaltered.

Q4L Explain the following terms and give examples of each:

- (a) fixed costs
- (b) variable costs
- (c) stepped fixed costs
- (d) semi-variable costs.

Chapter 3

Q1 A company buys raw material X at £10 per kilo and raw material Y at £8 per kilo. Labour costs are £12 per hour. The company has now been offered two contracts for the supply of manufactured goods. It is not possible to fulfil both of these contracts simultaneously and therefore the company's management must decide which of the two contracts to accept. Details of the two contracts are as follows:

	<i>Contract A</i>	<i>Contract B</i>
Quantity of material X required	80 kg	120 kg
Quantity of material Y required	50 kg	30 kg
Labour required	40 hours	30 hours
Contract price	£2,240	£2,520

- (a) In general terms, which of the two contracts should the company accept?
- (b) Which of the two contracts should be accepted if material X is in short supply and is much in demand for other customer work?
- (c) Which of the two contracts should be accepted if material Y is in short supply and is much in demand for other customer work?
- (d) Which of the contracts should be accepted if labour is in short supply and is much in demand for other customer work?

Q2 A company buys three types of stock item (A, B and C) from manufacturers in bulk and then sells these items to its customers in smaller quantities. Annual purchases and sales of each item are expected to be 10,000 units per annum. The following financial information is available:

	<i>Item A</i>	<i>Item B</i>	<i>Item C</i>
Cost per unit	£20	£30	£40
Selling price per unit	£30	£42	£51

- (a) For each item, calculate the contribution per unit. Also calculate the total contribution per annum if purchases and sales are at the expected levels.
- (b) Assume now that no more than 9,000 units can be sold of any one item and that only 24,000 items can be sold altogether. In these circumstances, how many of each type of item should the company try to sell in the year?

Q3L A company buys three types of stock item (X, Y and Z) from manufacturers and sells these items on to its customers. The following financial information is available:

	<i>Item X</i>	<i>Item Y</i>	<i>Item Z</i>
Cost per unit	£10	£20	£15
Selling price per unit	£15	£27	£21

The maximum demand for each type of stock item is 10,000 units per annum but the company can spend only £375,000 per annum on buying stock.

In these circumstances, how many of each type of stock item should the company aim to buy and sell in the year?

Chapter 4

Q1 Angela starts a new business on 1 October. Her first few transactions are as follows:

- 1 October Angela opens a business bank account and pays £10,000 of her own money into this account.
- 1 October £5,000 is borrowed from Angela's father and paid into the business bank account.
- 2 October A motor vehicle is acquired for £7,250 and paid for by business cheque.
- 2 October Stock is bought for £3,500. This will be paid for at the end of the month.
- 4 October Half of the stock is sold for £2,200. This sum is paid into the business bank account.

Prepare an accounting quadrant for these transactions and total both sides of the quadrant.

Q2 A company carries out the transactions listed below. Explain the effects of each transaction on the company's accounting quadrant.

- (a) £10,000 is paid off a long-term loan of £50,000.
- (b) A £30,000 dividend is paid.
- (c) Land and buildings are bought for £250,000. A £25,000 deposit is paid and a mortgage is obtained for the remainder.
- (d) A customer who owes the company £4,200 pays in full.
- (e) The company pays half of the £12,800 which it owes to a supplier.
- (f) Wages of £2,700 are paid.
- (g) A £420 invoice is received for motor repairs. This invoice will be paid within the next few weeks.

Q3 Caroline has been trading for many years, preparing accounts to 31 December each year. Her business assets and liabilities at 31 December 200X are as follows:

	£
Land and buildings	200,000
Plant and machinery	50,000
Trade creditors	27,420
Trade debtors	18,190
Bank overdraft	7,440
Cash in hand	320
Stock of goods for resale	29,990
Long-term bank loan	120,000

Calculate Caroline's capital as at 31 December 200X.

Q4L Brian starts a business on 1 April. His transactions for the first week of trading are as follows:

1 April	Brian opens a business bank account and pays £25,000 of his own money into this account. From now on, all receipts and payments are made through the business bank account.
1 April	The first week's rent of £200 is paid.
1 April	Equipment is bought for £7,900 and paid for by cheque.
3 April	Stock is bought for £18,200. Half of this is paid immediately but the other half will not be paid until the end of April.
5 April	Stock which cost £3,000 is sold for £4,100. The customer will pay in May.
7 April	Stock which cost £1,900 is sold for £2,850. The customer pays immediately.
7 April	Brian draws £500 out of the business bank account to pay for his personal living expenses.

Prepare an accounting quadrant for these transactions. Also prepare a profit and loss account for the week to 7 April and a balance sheet at that date.

Q5L The assets and liabilities of D Ltd at the start of an accounting year are as follows:

	£000
Land and buildings	215
Equipment	42
Motor vehicles	36
Stock of goods for resale	43
Trade debtors	31
Cash at bank	33
Shareholders' funds	305
Long-term loan	50
Trade creditors	45

Summarised transactions for the accounting year are:

	£000
Purchases of stock (on credit)	194
Operating expenses (on credit)	65
Sales (on credit)	315
Cost of goods sold	202
Paid to suppliers of stock and expenses	241
Received from customers	302
Interest paid on long-term loan	3
Amount paid off long-term loan	20
New equipment purchased and paid for by cheque	10

Prepare an accounting quadrant to record this information. Also prepare a profit and loss account for the year and a balance sheet as at the end of the year. Ignore depreciation.

Chapter 5

Q1 A company buys fuel oil (for resale to customers) and stores it in a large tank. On 1 November, the tank contained 7,000 litres of oil, which had cost the company 40p per litre. During November, oil purchases were made as follows:

5 November	5,000 litres bought for 42p per litre
12 November	6,000 litres bought for 44p per litre
18 November	11,500 litres bought for 45p per litre
23 November	3,500 litres bought for 47p per litre

Oil sales during November were as follows:

10 November	10,000 litres
17 November	5,000 litres
21 November	12,500 litres

Calculate the cost of the closing stock of oil at 30 November and the cost of the oil sold in November, assuming that stock is valued:

- (a) using the FIFO method
- (b) using the LIFO method.

Q2 A business buys a fixed asset for £16,000 at the start of Year 1. The asset has an expected useful life of four years and an expected residual value of £1,000.

For each of Years 1 to 4, calculate the amount of depreciation charged in the year, the accumulated depreciation at the end of the year and the asset's net book value at the end of the year, assuming that depreciation is computed:

- (a) on the straight line basis
- (b) on the reducing balance basis at 50% per annum.

Q3 Edward deals in motor lorries. He buys the lorries second-hand, carries out any necessary repairs or servicing work and then sells them to customers. His sales staff are paid a 4% commission when they sell a lorry. His stock of lorries at the end of an accounting year is as follows:

	<i>Costs incurred to date</i>	<i>Expected further costs</i>	<i>Expected selling price</i>
	£	£	£
Lorry 1	12,000	-	14,000
Lorry 2	15,600	400	16,500
Lorry 3	23,200	1,000	26,000
Lorry 4	18,400	900	20,000

Calculate the value at which the stock of lorries should be shown in Edward's balance sheet.

- Q4L** A company is preparing its accounts for the year to 31 December. Explain the effects of each of the following items on the company's accounting quadrant.
- (a) Business rates of £800 were paid on 1 April. These rates covered the 12-month period to the following 31 March.
 - (b) Accrued heating costs at 31 December were £320.
 - (c) An insurance premium of £720 was paid on 1 December. This premium covered the 12-month period to the following 30 November.
 - (d) On 1 November, the company received rent from a tenant of £1,200. This rent was for the quarter ending on the following 31 January.
- Q5L** Frank's gross profit margin is a consistent 20% of sales. His sales in Year 2 were 10% higher than in Year 1 and his sales in Year 3 were 10% lower than in Year 2. The following table can be used to calculate Frank's gross profit for each of the three years, but several figures are missing:

	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>
	£	£	£
Sales	24,000	?	?
Stock at start of the year	3,200	?	?
Purchases	19,400	21,260	?
Stock at end of the year	?	?	3,305
Cost of goods sold	?	?	?
Gross profit	?	?	?

Compute the missing figures in this table.

Chapter 6

Q1 List the main users of the information provided in the financial statements of a limited company and explain why each class of user might need this information. Also explain why one set of financial statements is unlikely to satisfy the needs of all user groups.

Q2 An individual is trying to decide whether or not to invest some money in the shares of a large public company. To help with this decision, the individual has obtained copies of the company's financial statements for the last few years.

Identify the main types of information which will be shown in the financial statements and which might help when making the investment decision. Also explain why the financial statements will not provide all of the information which the individual might need.

Q3L (a) Explain the role and the legal status of accounting standards.

(b) Explain the role and the legal status of accounting concepts.

Chapter 7

- Q1** The profit and loss account of a business shows a net profit for the year of £20,000. However, the business bank balance has increased by only £1,000 during the year. Explain how this difference may have arisen.
- Q2** Explain the effect of the following transactions on a company's operating profit and on its cash flows.
- (a) The purchase of a fixed asset and providing for depreciation throughout the asset's useful life.
 - (b) The repayment of a long-term loan.
 - (c) Accounting for accrued expenses at the end of an accounting period.
 - (d) Investing spare cash in fixed asset investments.
 - (e) The sale of stock on credit.
 - (f) A corporation tax payment.

Q3L A company's balance sheets at the end of Year 1 and Year 2 are as follows:

	Year 1		Year 2	
	£000	£000	£000	£000
Fixed assets				
Cost		210		340
Accumulated depreciation		<u>108</u>		<u>152</u>
		102		188
Current assets				
Stock	98		86	
Trade debtors	58		83	
Bank	<u>11</u>		<u>14</u>	
	<u>167</u>		<u>183</u>	
Current liabilities				
Trade creditors	45		39	
Taxation	<u>31</u>		<u>28</u>	
	<u>76</u>	91	<u>67</u>	116
		<u>193</u>		<u>304</u>
Long-term loan		<u>50</u>		<u>70</u>
		<u>143</u>		<u>234</u>
Share capital		100		120
Retained profits		<u>43</u>		<u>114</u>
		<u>143</u>		<u>234</u>

The company's summarised profit and loss account for Year 2 is as follows:

	£000
Profit before depreciation and tax	143
Depreciation	<u>44</u>
Profit before tax	99
Taxation	<u>28</u>
Profit after tax	<u>71</u>

No dividends were paid or proposed in either year and there were no fixed asset disposals during Year 2. Prepare a cash flow statement for Year 2.

- Q4L** With reference to Question 3 (above) explain why the company's bank balance rose by only £3,000 during Year 2, despite the fact that profit before depreciation and tax for the year was £143,000.

Chapter 8

Q1 Extracts from the financial statements of A Ltd for the year to 31 December 200X are as follows:

	£000
<i>Profit and loss account</i>	
Sales	12,710
Cost of goods sold	9,790
Net profit before interest and tax	1,490
Interest payable	170
Taxation	240
Dividends payable	650
 <i>Closing balance sheet</i>	
Fixed assets	11,100
Stock	2,840
Trade debtors	2,390
Cash at bank	nil
Current liabilities	3,880
Long-term loan	1,500
Shareholders' funds	10,950

Insofar as this information permits, calculate the following accounting ratios:

- (a) Return on capital employed
- (b) Gross margin
- (c) Net profit to sales
- (d) Current ratio
- (e) Quick ratio
- (f) Stock turnover
- (g) Debtor turnover
- (h) Balance sheet gearing.

Q2 The issued share capital of S Ltd consists of 500,000 ordinary shares. The following information relates to the year to 31 March 200X:

	£
Net profit after tax	45,000
Dividends paid in year	12,500
Proposed dividends	15,000

The market value of the company's shares at 31 March 200X was 60p per share. Calculate the following ratios:

- (a) Earnings per share
- (b) Dividend per share
- (c) Dividend yield

(d) Price/earnings ratio.

Q3 A profitable company may run into difficulties if it is "overtrading". Indicate the nature of these difficulties and explain the concept of overtrading.

Q4L Company A is an old-established and old-fashioned gentleman's outfitter. The company operates from expensive High Street premises and offers excellent customer service. The clothing which the company sells is highly priced but regular customers may open an account and benefit from generous credit terms.

Company B is a newly-established clothing supermarket which operates from a retail estate situated on the outskirts of the city. The store is self-service and employs only a small number of staff. The clothing is inexpensive but must be paid for immediately.

Explain how the different approaches of Company A and Company B would be reflected in their accounting ratios.

Q5L The financial statements of C Ltd for the year to 30 June 200X are as follows:

Profit and loss account for the year to 30 June 200X

	£000	£000
Sales		4,800
Cost of goods sold:		
Opening stock	580	
Purchases	<u>3,100</u>	
	3,680	
<u>Less: Closing stock</u>	<u>610</u>	<u>3,070</u>
Gross profit		1,730
Operating expenses		<u>650</u>
Operating profit		1,080
Interest payable		<u>220</u>
Profit before tax		860
Taxation		<u>210</u>
Profit after tax		650
Dividends payable		<u>300</u>
Retained profit for the year		<u>350</u>

Balance sheet as at 30 June 200X

	£000	£000
Fixed assets		4,000
Current assets		
Stock	610	
Trade debtors	990	
	<u>1,600</u>	
Current liabilities		
Trade creditors	750	
Bank overdraft	180	
Taxation	210	
Dividends	300	
	<u>1,440</u>	
Net current assets		<u>160</u>
		4,160
Long-term loans		<u>2,000</u>
		<u>2,160</u>
Shareholders' funds		<u>2,160</u>

Based upon this information, calculate the following accounting ratios:

- (a) Return on capital employed
- (b) Gross margin
- (c) Net profit to sales
- (d) Current ratio
- (e) Quick ratio
- (f) Stock turnover
- (g) Debtor turnover
- (h) Creditor turnover
- (i) Balance sheet gearing.

Chapter 9

Q1 The balance sheet of a company at the end of Year 1 is as follows:

	£000	£000
Fixed assets		530
Current assets		
Stock	350	
Trade debtors	300	
Bank balance	<u>35</u>	
	685	
Current liabilities		
Trade creditors	<u>355</u>	<u>330</u>
		860
Long-term loans		<u>200</u>
		<u>660</u>
Share capital		250
Accumulated retained profits		<u>410</u>
		<u>660</u>

Predictions for Year 2 are as follows:

- (a) The company will buy new fixed assets for £100,000 and pay for these out of the business bank account. There will be no fixed asset disposals during the year. Depreciation of fixed assets for the year will be £80,000.
- (b) The company intends building up its stocks so as to offer a better service to its customers. In consequence, stocks are expected to rise by 10%.
- (c) The company also intends offering more generous credit terms to its customers. As a result, trade debtors are expected to rise by 20%.
- (d) Some of the company's suppliers have complained that they are not being paid quickly enough and so the company intends to pay these suppliers more quickly in the future. Because of this, trade creditors are expected to fall to £300,000 by the end of Year 2.
- (e) One-half of the long-term loan will be repaid during Year 2.
- (f) There will be a £50,000 share issue during the year.
- (g) The budgeted profit and loss account for Year 2 shows that retained profits for the year will be £90,000.

Prepare a budgeted balance sheet as at the end of Year 2.

- Q2** A company which begins an accounting year with a bank balance of zero anticipates the following receipts and payments during the year:
- (a) Cash received from customers will be £300,000. Because of the seasonal nature of the company's business, one-third of this sum will be spread evenly over the first half-year and the remaining two-thirds will be spread evenly over the second half-year.
 - (b) Payments to suppliers of stock will be £90,000. This sum will be spread over the year in the same way as cash collected from customers.
 - (c) The wages bill will be £5,000 per month.
 - (d) Rent payable will be £5,000 per quarter.
 - (e) Business rates of £5,000 will be payable in the first quarter. A further £5,000 will be payable in the third quarter.
 - (f) An insurance premium of £10,000 will be payable on the first day of the year.
 - (g) Further expenses of £40,000 will be payable. This sum will be spread evenly over the year.
 - (h) New fixed assets will be purchased for £50,000 in the first month of the year.

Calculate the expected bank balance at the end of the year and prepare a quarter-by-quarter cash budget for the year.

- Q3L** Standard material costs for the manufacture of one unit of a product are as follows:

Material X	10 kg at £8 per kg
Material Y	5 kg at £12 per kg

During a certain period, 500 units of the product were manufactured and material costs were as follows:

Material X	5,120 kg at a total cost of £39,240
Material Y	2,480 kg at a total cost of £31,110

Compute the flexed materials budget for output of 500 units and prepare a variance summary.

- Q4L** Standard costs and revenue in relation to one unit of a product are as follows:

Selling price	£47.50
Material used	10 kg at £1.80 per kg
Labour used	2 hours at £7 per hour

Budgeted output for a certain period was 10,000 units. In the event, trading was difficult and only 9,200 units were produced and sold during this period. These were sold at the reduced price of £42.50 per unit. Actual usage of materials and labour was as follows:

Material used	93,100 kg at £1.90 per kg
Labour used	18,000 hours at £6.50 per hour

Compute the budgeted and actual contribution to fixed costs made by the product and prepare a variance analysis.

Chapter 10

Q1 A company is considering investing £40,000 in new technology. It is anticipated that this technology would save the company £10,000 in the first year, rising by 4% per annum for each of the next three years. The company's cost of capital is 9% per annum. Assuming that the savings would occur at the end of each year, determine the net present value of this investment and indicate whether or not the company should go ahead.

Q2 With reference to Question 1 (above):

- (a) Compute the payback period for the investment.
- (b) Explain the advantages and disadvantages of basing an investment decision on the investment's payback period rather than calculating its net present value.

Q3L A company is trying to decide whether or not to proceed with a long-term investment. The amount invested would be £80,000 and this would yield returns of £25,000 at the end of each of the next four years.

- (a) Determine the net present value of the investment using a discounting rate of 8%. Repeat the calculation using a discounting rate of 12%. Hence determine the internal rate of return of the investment.
- (b) If the company's cost of capital is 10% per annum, should the investment be made?

Q4L The costs incurred per term by a boarding school are as follows:

Variable costs per pupil	£500
Fixed costs	£180,000

The required profit margin is 20% of the total fees which are charged to pupils' parents or guardians.

- (a) If the school has 200 pupils in a certain term, calculate the fee per pupil that should be charged for that term in order to achieve the required profit margin.
- (b) If 10 of the pupils are charged only £420 per term each (because they are the sons and daughters of staff who work at the school) calculate the fee that must be charged for each of the remaining pupils in order that the school's profit is not diminished.

Chapter 11

- Q1** In your own words, define the term "corporate governance" and explain why corporate governance is necessary.
- Q2** List the main features of the "Cadbury Code".
- Q3L** (a) Explain the role of a "remuneration committee".
- (b) List the main disclosures in relation to directors' remuneration which are required by Stock Exchange listing rules.