

N5

BrightRED  
PUBLISHING

National 5 ACCOUNTING



BrightRED Study Guide

Curriculum for Excellence

N5

ACCOUNTING



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NEW  
EDITION

# INTRODUCTION

## INTRODUCING N5 ACCOUNTING

Accounting is often defined as ‘the language of business’. Accountants aim to collect, classify, organise, analyse, present and communicate financial information to the owners of business organisations and other interested stakeholders. Accounting is one of the oldest and most respected professions in the world, and accountants can be found in every industry from entertainment to medicine.

This National 5 Study Guide will help you to understand and interpret both financial and management accounting information and will equip you with the necessary skills to prepare a range of accounting statements. It will also help you to develop and apply skills for learning, skills for work and skills for life. This new edition has been updated to include the new procedures for dealing with Cash Discount.

### N5 COURSE CONTENT

The National 5 course contains three main units of study:

#### Preparing Financial Information (National 5)

This unit will focus on the role of financial accounting. You will gain an understanding of the purpose of a range of business documents and how these provide information which can be used to prepare double-entry ledger accounts. You will also develop an understanding and acquire the skills necessary to prepare the final accounting statements of a sole trader (trading and profit and loss account and balance sheet) in accordance with financial accounting concepts. Finally, this unit will help develop an understanding of year-end adjustments for accruals and prepayments as well as the accounting procedures for recording the depreciation of fixed assets.

#### Preparing Management Information (National 5)

This unit will focus on the role of management accounting. You will develop the knowledge and understanding of internal accounting information and the ability to prepare

such information, using a range of basic accounting techniques. The information produced will be used by management in making decisions about the future planning and control of the business.

There will be a focus on the main elements of cost – materials (stock control), labour remuneration, overhead analysis and the preparation of job costing statements. In addition, this unit will develop the knowledge and skills necessary for effective budgetary control and break-even analysis.

#### Analysing Accounting Information (National 5)

In this unit, you will develop the skills, knowledge and understanding relating to the interpretation and analysis of accounting information. The information will be used to assess the organisation’s current financial position and performance and assist with decision-making and future planning. This unit will focus particularly on ratio analysis and profit maximisation under conditions of a limiting factor.

### COURSE ASSESSMENT: EXTERNAL ASSESSMENT

#### Question Paper

The question paper will have **100 marks** and 10% of these will be allocated to theoretical questions. You will be expected to attempt **all** questions. This will be an end-of-course examination paper set by the SQA. The examination paper has two sections:

- **Section one** will have **60 marks** and will contain computational and theoretical questions

- **Section two** will have **40 marks** and will contain computational and theoretical questions.

The question paper will be a closed-book assessment and you will not know in advance what areas of the course content will be assessed.

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### Assignment

The assignment will have **50 marks**. It will require you to work through a series of tasks to prepare accounting information and financial statements using a spreadsheet. You may be required to use this information to aid decision-making, analyse the organisation’s financial position or to make recommendations for the future.

The assignment will make appropriate use of spreadsheets. You will be required to enter data with accuracy, and select and use appropriate formulae, formatting and printing functions to present information and accurately complete all accounting work.

### HOW THIS BOOK CAN HELP YOU

This Study Guide (supported by the Digital Zone) explains clearly and precisely all the financial and management accounting concepts you need to know and understand to pass the internal and external elements of the National 5 Accounting course. It also has a wide range of challenging tasks and activities which provide you with the opportunity to develop your accounting skills.

The Study Guide will also ensure that the following generic skills for learning, life and work are fully developed:

- Numeracy
- ICT
- Decision-making
- Presentation
- Analysing
- Evaluating
- Thinking
- Employability
- Enterprise
- Analytical

While you complete all coursework tasks and activities manually on paper, you will make use of spreadsheet software as well. Tasks and activities can be completed following the templates shown throughout this Study Guide and the Digital Zone.

The new Scottish Curriculum for Excellence advocates providing you with the opportunity to work independently to develop a deeper understanding of areas of learning that interest you. Some extension material has been included to challenge you and further develop your interest in the subject. Extension material will not be examined by SQA at National 5 level. However, it will be useful if you plan to go on to study Accounting at Higher level.

### INTERNATIONAL ACCOUNTING STANDARDS (IAS)

Adoption of International Accounting Standards (IAS) required a change in the terminology used in the preparation of the final accounts of business organisations. Whilst there are no compulsory requirements for the presentation of the accounts of **sole traders** to use IAS, it is recommended that you become familiar with preparing all accounting statements in the IAS format. This will ensure you are well prepared if you are progressing to study Accounting at SQA Higher level or at college or university.

Throughout this Study Guide key terminology used in the preparation of accounting statements are presented using IAS terminology. The most frequently used IAS terminology used at National 5 is listed below.

International Accounting Terminology	
Non-current assets	Carrying amount
Inventory	Non-current liabilities
Trade receivables	Income statement
Other receivables	Statement of financial position
Trade payables	Cost of sales
Sales	Property
Allowance for doubtful debts	Profit for the year



To gain an overall award at National 5 Accounting, you must secure a pass in all of the units as well as in the external course assessments.

# PREPARING FINANCIAL ACCOUNTING INFORMATION

## SOLE TRADERS

A sole trader is the name given to a business owned by one person. Examples of sole traders could include businesses like newsagents, hairdressers, grocer shops, taxi drivers or cafes and restaurants.



### ADVANTAGES OF BEING A SOLE TRADER

- The owner gets to keep all the profits – so there is the opportunity to earn a lot of money.
- The owner gets to make all the decisions on how to run the business – they are their own boss.

### DISADVANTAGES OF BEING A OF SOLE TRADER

- It involves a lot of hard work and the owner may find it difficult to get time off or have a holiday.
- Sometimes the owner has to do all the work on his/her own – there is no one there to help or offer advice or expertise.
- The owner will be responsible if the business does not do well and incurs losses. The owner could actually lose his/her personal belongings, for example their house or car, to pay off the business's debts.
- As a sole trader is a smaller firm, they have fewer assets to secure a loan on.



### RAISING FINANCE

A sole trader will probably need some money of his/her own to start up the business. However, they may also need to raise money in the form of a loan from a bank or building society.

When a sole trader borrows money from a bank or building society, they have to be sure that they can make regular monthly payments to pay the money back and of course they are likely to be charged interest.

### SOURCES OF FINANCE

Sources of finance include:

- Loans from family and friends
- Loans from banks or building societies
- Government grants
- Enterprise grants, for example, from the Prince's Trust.

The table on page 7 shows some advantages and disadvantages of these sources of finance.

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Source of finance	Advantages	Disadvantages
<b>Grant</b>	This is money given to a business by central or local government, the EU or from the Prince's Trust for things such as the purchase of new machinery or training of staff. It is often used to persuade businesses to locate in areas of high unemployment. It doesn't have to be paid back.	Grants can be complicated to apply for and the business often needs to meet many conditions before they are awarded the grant.  Grants are usually one-off payments.
<b>Retained profits</b>	An established business will usually 'hold' or retain profit from previous years in the business.  Retained profits can be used to buy more stock or to take advantage of bulk buying, which should increase future profits.	When a business has to continually use retained profits to solve short-term cash flow problems, it is often unable to grow and expand.
<b>Bank loan</b>	A bank loan is usually granted for a fixed amount, and has to be paid back in fixed monthly instalments over a fixed period of time – for example, five years.  The business can budget for the monthly repayments and is able to purchase essential machinery or equipment straightaway.	Interest has to be paid in addition to the loan itself.  New and relatively small businesses might find it difficult to convince lenders to give them a loan.
<b>Trade credit</b>	Trade credit allows a business to buy goods and pay for them at a later date. This gives the business time to sell stock at a higher price and earn a profit before the bill from the supplier has to be paid.	Cash discount for prompt payment to suppliers is likely to be lost.  If payment is not made within the agreed credit period, suppliers will be reluctant to offer credit to the business in the future.
<b>Hire purchase</b>	Hire purchase allows a business to buy an asset, such as a delivery van, and pay it back over a fixed period of time – for example, 36 months. An initial deposit is required, followed by monthly payments.  This allows a business to purchase expensive equipment with only an initial deposit.	The business does not legally own the asset until the last hire purchase payment has been made.  If interest rates are high, then this can be an expensive form of borrowing.
<b>Owner's personal finance</b>	This includes using personal savings or borrowing money from family and friends who are willing to support the business. The main advantage is that borrowing is reduced and the owner(s) maintain control of the business.	All of these savings and this money could be invested in a business that does not succeed. It's a risk for those involved.  Owners could lose all their equity.
<b>Mortgage</b>	A common method of financing the purchase of (property) land and premises is to take a mortgage from a bank, where a long-term loan is secured against the title deeds for the land or buildings of a property. The bank or other mortgage provider retains ownership of the land or premises until the entire mortgage has been repaid.  The business is generally given a long period of time (20–25 years) to repay the mortgage.	If the borrower doesn't meet the monthly mortgage repayments, the lender can claim ownership of the property and sell it to retrieve the money they lent the business.  Interest is charged for the duration of the mortgage in addition to the actual mortgage repayments. This can be very expensive.
<b>Loan from family and friends</b>	Families are more likely to offer lower rates of interest and perhaps offer longer repayment terms.	The sole trader may not be able to repay family and friends if the business does not succeed and this could cause problems with personal relationships.



### THINGS TO DO AND THINK ABOUT

Consider the advantages and disadvantages of the sources of finance listed above. If you were to start out as a sole trader, which source(s) would you opt for and why?



ONLINE

Head to [www.brightredbooks.net/NSAccounting](http://www.brightredbooks.net/NSAccounting) to find out more about various Prince's Trust loans.

## PREPARING MANAGEMENT ACCOUNTING INFORMATION

# INVENTORY VALUATION 1

### VALUING INVENTORY

An important part of inventory control is the recording of inventory movements within a business. Valuing inventory might at first seem to be a simple enough exercise but this is not the case for the reason that there are several alternative methods of valuation, each producing a different figure. We will consider two of these methods later in this unit. The value placed on a business's inventory is of crucial importance, because:

1. it will affect the materials to be charged to customers for completing jobs;
2. it affects the figure for cost of sales sold which in turn will affect the gross profit in the income statement – see Unit 1;
3. it affects the value of current assets in a business's statement of financial position – see Unit 1.

### DON'T FORGET

How the value of a business's inventory affects gross profit in the income statement and the value of current assets in a business's statement of financial position are covered in Unit 1, pp40–41 and pp42–43.

### TYPES OF (INVENTORY) STOCK CONTROL SYSTEMS

#### Inventory Record Cards

Inventory record cards contain, in addition to the quantities of receipts and issues of inventory, a record of

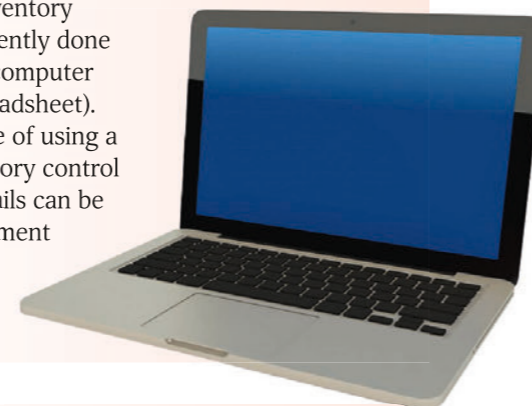
Inventory card

Stock Item: Woollen Jumpers		Location: Aisle 16								
Stock Code: WJ		Supplier: Merino Mills								
Date	Details	IN			OUT			BALANCE		
		Qty	Unit cost	Value	Qty	Unit cost	Value	Qty	Unit cost	Value
July 1	Balance							8	30	240
2	Inv. 49				6	30	180	2	30	60
3	Ch. 142	12	35	420				2	30	60
								12	35	420
9	Rec. 23				2	30	60			
					8	35	280	4	35	140

the prices of inventory received and issued. It may also include data on the level at which inventory should be re-ordered and in what quantities.

#### Computers

The recording of inventory movements is frequently done today by means of computer (using an Excel spreadsheet). The great advantage of using a computer for inventory control is that accurate details can be supplied to management much more quickly and accurately.



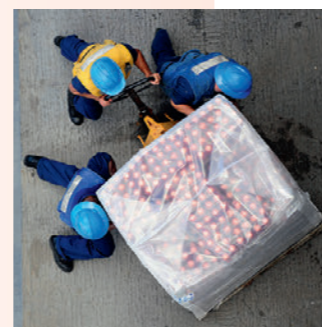
### STORAGE AND LOCATION OF INVENTORY

In choosing the location for stores, the factors which have to be considered are:

- the type of production process and the inventory involved, e.g. is the inventory bulky and difficult to move from one location to another?
- the nature of materials, e.g. are they flammable? If so, the stores may have to be located in a more isolated area.
- the time taken to transport materials from the stores to the production areas.

The type of storage used for materials will depend upon:

- the **weight** of the goods
- the **bulkiness** of the goods
- the risk of physical **deterioration**
- the risk of **theft**.



### INVENTORY CHECKING/TAKING

The physical checking of inventory is necessary for the following reasons:

- to ensure inventory records are accurate
- to act as a deterrent against theft
- to detect errors and discrepancies and therefore update inventory record cards.

### METHODS OF CHECKING INVENTORY

#### Checking Inventory Periodically

Checking inventory periodically is usually undertaken annually (once per year) and is done by physically counting inventory on shelves, including any work in progress.

#### Checking Inventory on a Continuous Basis

Checking inventory on a continuous basis is essential where an organisation uses what is known as the **perpetual inventory system**. This is a stocktaking system whereby the inventory balance is shown on the inventory record card after every receipt or issue of stock. If the inventory record cards are to be relied upon, any differences between the balances on the inventory record card and the actual inventory levels must be investigated immediately.

The differences may arise due to errors completing inventory stock cards, shrinkage of materials, theft and losses due to damages.

### INVENTORY LEVELS

There are disadvantages of having too much or too little inventory.

#### Disadvantages of Holding Too Much Inventory

- high storage costs
- cash being paid to purchase inventory before it is absolutely necessary
- high risk of deterioration or obsolescence before it is able to be used in production.

#### Disadvantages of Not Holding Enough Inventory

- running out of inventory and so holding up production
- customers going elsewhere if production is halted due to insufficient inventory
- purchasing inventory regularly in small quantities may mean the business does not qualify for trade discounts.

Therefore, it is important that the management accountants ensure that the business has just the right amount of inventory – they must have an efficient inventory control system. Any good inventory control system should pay attention to the following:

- maximum inventory level
- minimum inventory level
- reorder inventory level
- reorder quantity.

MAXIMUM INVENTORY LEVEL	MINIMUM INVENTORY LEVEL
The level which inventory should not rise above. Consider the following: <ul style="list-style-type: none"> <li>• the cost of storage</li> <li>• the rate of usage</li> <li>• the risk of deterioration.</li> </ul>	The minimum inventory level is the level below which inventory should not fall. Consider the following: <ul style="list-style-type: none"> <li>• the rate of usage</li> <li>• delivery time for new inventory to arrive</li> <li>• the level of safety or 'buffer' or 'safety' inventory to be held.</li> </ul>
REORDER LEVEL OF INVENTORY	REORDER QUANTITY
This is the level at which a purchase order is made out. Consider the following: <ul style="list-style-type: none"> <li>• rate of inventory usage</li> <li>• level of buffer or safety inventory required</li> <li>• the cost of storage.</li> </ul>	This is the quantity of materials to be ordered when the reorder level is reached and it depends upon the: <ul style="list-style-type: none"> <li>• cost of ordering the inventory, for example delivery costs</li> <li>• cost of storing the inventory</li> <li>• trade discounts for bulk buying.</li> </ul>



### THINGS TO DO AND THINK ABOUT

#### PROGRESS CHECK

Answer the following questions in your workbook.

1. Outline the factors that should be considered when deciding where to locate the stores department within a business.
2. Explain what is meant by periodic inventory control.
3. Explain what is meant by the perpetual inventory system of stock control.
4. Outline the main disadvantages to a business of not holding enough inventory.
5. Outline the main disadvantages to a business of holding too much inventory.



### ONLINE

Learn more about inventory control by following the link at [www.brightredbooks.net/N5Accounting](http://www.brightredbooks.net/N5Accounting)



### ONLINE TEST

Test your knowledge of inventory control at [www.brightredbooks.net/N5Accounting](http://www.brightredbooks.net/N5Accounting)

ANALYSING ACCOUNTING INFORMATION

# PROFIT MAXIMISATION AND LIMITING FACTORS

Most sole traders set up in business with a view to making a profit, preferably as high a profit as possible. Maximising profit simply means making as much profit as possible from the resources available. This is usually achieved by making as much as can be sold – if demand for a product is limited, there is no point in making more even though it may be possible to do so.

## LIMITING FACTORS

Sometimes demand for a product may be high but production of the product may be limited by factors such as:

- scarcity of materials
- shortage of labour
- limited machine capacity
- limited number of machines
- limited space in a factory.

These factors are called **limiting factors** (or **key factors**). If a limiting factor exists, management will have to decide which level of output will make most profit, taking into account the **limiting factor**. Instead of studying the contribution per unit, contribution must be considered in light of the limiting factor.

### EXAMPLE

Two products, A and B are being produced and details are as follows:

	A	B
<b>Contribution per unit</b> (Selling Price – Variable Cost)	£12	£12
Number of labour hours per unit	4 hrs	2 hrs
Number of units demanded	10 000	12 000
Total labour hours available (Limiting Factor)	<b>60 000 hours</b>	
Total fixed costs	£160 000	

If demand is to be satisfied the total number of labour hours required would be:

Product A	Product B	
10 000 × 4	+	12 000 × 2
40 000	+	24 000
		= 64 000 hours

The number of labour hours required is **64 000 but only 60 000 labour hours are available**. Since there is a **shortage of 4 000, hours**, labour is the limiting factor. How will this problem be solved? Should **one or both products be cut back**? B has a lower **unit contribution** than A so should only B be reduced? Before a decision is taken, the **contribution per labour hour** must be examined.

	A	B
Contribution per unit	£12	£12
Number of labour hours	4 hrs	2 hrs
<b>Contribution per labour hour</b>	<b>(£12/4 hrs = £3) £3 per labour hr</b>	<b>(£12/2 hrs = £6) £6 per labour hr</b>

Only now can the order of priority be decided. Since the product giving the highest **contribution per labour hour** is B, the full demand for B will be met and the production of A will be cut by 4 000 hours. Thus, production will be planned as follows:

<b>1</b>	<b>Product B</b>	<b>24 000 hours/2 hrs</b>		<b>= 12 000 units</b>
<b>2</b>	<b>Product A</b>	<b>60 000 - 24 000 hours</b>	<b>= 36 000 hours/4</b>	<b>= 9 000 units</b>

### How Much Profit will be Made?

	A	B	Total
Number of labour hours	36 000	24 000	60 000
Contribution per labour hour	£3	£6	
Total contribution	£3 x 36 000	£6 x 24 000	
	£108 000	£144 000	<b>£252 000</b>
Less fixed costs			£160 000
<b>Profit (maximised)</b>			<b>£92 000</b>

contd

### DON'T FORGET

When there is a limiting factor involved – you must find contribution per limiting factor!

## EXERCISE 1

John Craig is a sole trader who produces two items, **rugs** and **scarves**. Figures available are as follows:

Total labour hours available	20 000 hours
Total fixed costs	£200 000

NOTE: The limiting factor is 20 000 labour hours.

Product	Rugs	Scarves
Selling price per unit	£80	£20
Variable costs per unit	£40	£8
Contribution per unit (Selling Price – Variable Cost)	?	?
Labour hours per unit	2	1
Number of units demanded	5 000	12 000

- Compare the hours available with the hours required to find the shortage of labour hours.
- What is limiting factor for John Craig?
- Calculate the contribution per unit for each product.
- Calculate the contribution per labour hour for each product.
- Show the order of priority for production. Give a reason for your answer.
- Show how many labour hours should be allocated to the production of both rugs and scarves.
- Find the total contribution from the rugs and scarves.
- Subtract the total fixed costs to find the total profit from the production of both products.



## EXERCISE 2

James Wilson is a sole trader who makes three products, X, Y and Z, and has provided the following information:

Total machine hours available	22 000 hours
Total fixed costs	£140 000

NOTE: The limiting factor is 22 000 machine hours

Product	X	Y	Z
Selling price per unit	£26	£48	£56
Variable cost per unit	£16	£32	£40
Contribution per unit (SP-VC)	?	?	?
Number of machine hours per unit	1	2	1.5
Number of units demanded	4 000	6 000	5 000

- Compare the hours available with the hours required to find the shortage of machine hours.
- What is the limiting factor for James Wilson?
- Calculate the contribution per unit for each product.
- Calculate the contribution per machine hour for each product.
- Show the order of priority for production. Give a reason for your answer.
- Show how many machine hours should be allocated to the production of the three products.
- Find the total contribution from the production of all three products.
- Calculate the maximum possible profit from the production of all three products.

## EXERCISE 3

David Main currently manufactures four products, Alpha, Beta, Gamma and Omega.

Annual fixed costs are £131 500

Details for each product are shown below.

	Alpha	Beta	Gamma	Omega
Selling price	£33	£35	£42	£42
Variable costs	£16.50	£21	£18	£22
Contribution per Unit	?	?	?	?
Labour Hours	3	4	4	5

During the next year the number of labour hours is likely to be limited to **46 000 hours**.

Demand for each of the four products is estimated to be:

Alpha – 5 000 units

Beta – 4 000 units

Gamma – 3 000 units

Omega – 3 500 units

You are required to:

- Calculate the **contribution per unit** for each product.
- Calculate the **contribution per labour hour** for each product.
- State the **order of production** to maximise profit.
- Calculate the amount of each product to be produced if profits are to be maximised.
- Calculate the total contribution per product and overall profit if profits are to be maximised.

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Curriculum for Excellence

## N5

# ACCOUNTING

William Reynolds

This BrightRED Study Guide is just the thing you need to tackle your course and gain the exam skills essential to succeed at National 5 Accounting. Written by trusted author and experienced Accounting teacher William Reynolds, this book is packed with brilliant examples, tasks and advice. It is the ultimate companion to your studies:

- ▶ **Contains all the essential course information, fully up-to-date with SQA course changes**, arranged in easily digestible double-page topic spreads.
- ▶ **Designed in full colour, highly illustrated, accessible and engaging** to make sure all that study sticks!
- ▶ **Don't forget!** pointers offer advice on key facts and on how to avoid common mistakes.
- ▶ **Things to do and think about** sections at the end of each topic allow for further practice and research.
- ▶ **Packed with exercises** to perfect your accounting skills.
- ▶ **A glossary of key terms** helps you really learn and revise important course concepts.

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