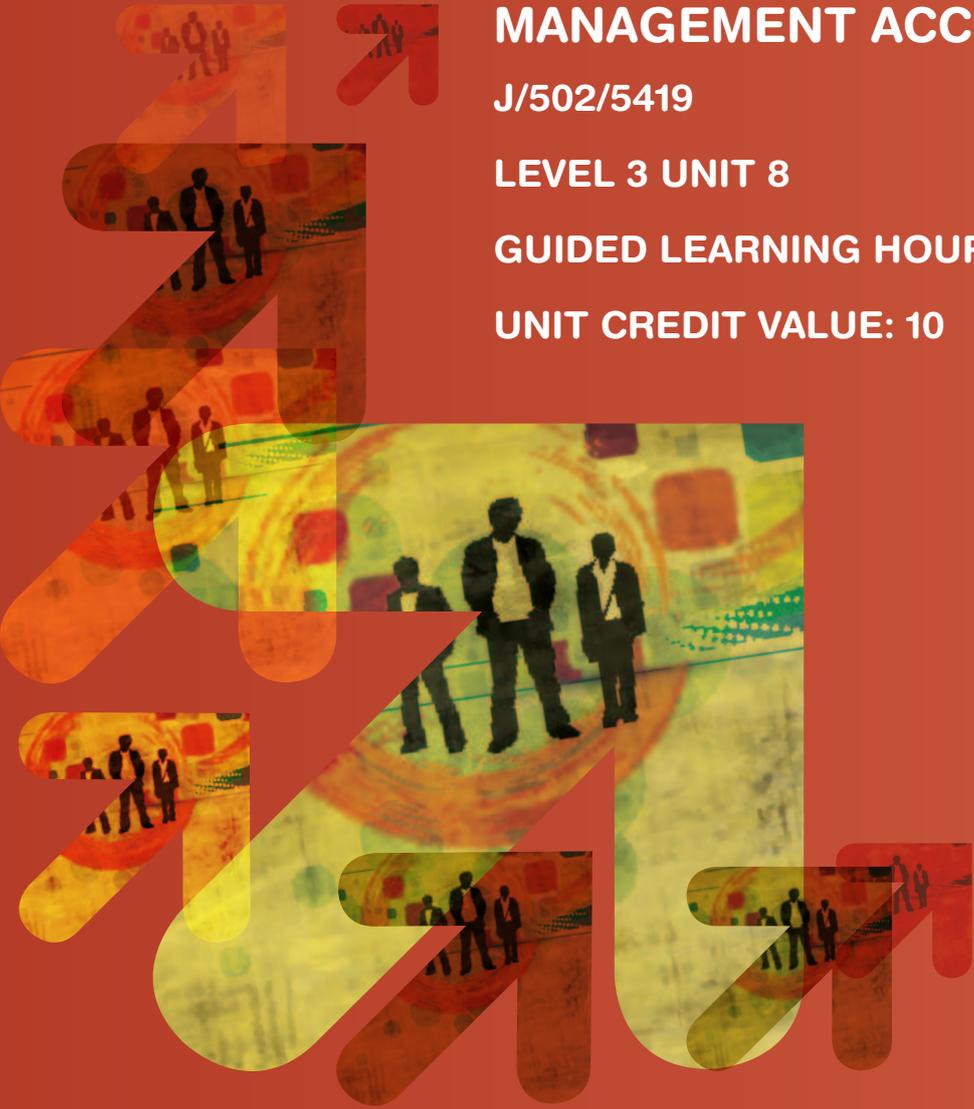




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# OCR LEVEL 3 CAMBRIDGE TECHNICAL CERTIFICATE/DIPLOMA IN BUSINESS



## MANAGEMENT ACCOUNTING

J/502/5419

LEVEL 3 UNIT 8

GUIDED LEARNING HOURS: 60

UNIT CREDIT VALUE: 10



# MANAGEMENT ACCOUNTING

J/502/5419

LEVEL 3 UNIT 8

## PURPOSE OF THE UNIT

The techniques of costing, statistical analysis, break-even and budgeting are amongst the most important techniques that a manager will use to make better decisions in the business environment. This unit will enable learners to interpret the type of financial data that managers might be given in the day to day running of a business. Once learners understand the data they can then move forward and start to make business decisions based on the information given.

## ASSESSMENT AND GRADING CRITERIA

<b>Learning Outcome (LO)</b>  The learner will:	<b>Pass</b> The assessment criteria are the pass requirements for this unit.  The learner can:	<b>Merit</b> To achieve a merit the evidence must show that, in addition to the pass criteria, the learner is able to:	<b>Distinction</b> To achieve a distinction the evidence must show that, in addition to the pass and merit criteria, the learner is able to:
1 Understand how production costs are determined and used to calculate prices	P1 explain how an organisation can cost a product and determine its price at any activity level	M1 compare the strengths and limitations of two different costing methods	
2 Be able to use break-even analysis	P2 carry out break-even analysis for a selected organisation	M2 explain the strengths and weaknesses of break-even analysis	D1 evaluate a special order decision for a selected business using break-even analysis
3 Be able to use appropriate statistical information to review and predict business performance	P3 use accounting data and statistical information to measure business performance		
4 Be able to use budgetary techniques	P4 use budgetary techniques to prepare budgets for a selected organisation		
	P5 describe how budgets can be used to set targets to monitor and control an organisation	M3 explain the implications of budget variances for a selected organisation	

## TEACHING CONTENT

The unit content describes what has to be taught to ensure that learners are able to access the highest grade.

Anything which follows an i.e. details what must be taught as part of that area of content.

Anything which follows an e.g. is illustrative, it should be noted that where e.g. is used, learners must know and be able to apply relevant examples to their work though these do not need to be the same ones specified in the unit content.

### Learning Outcome 1 Understand how production costs are determined and used to calculate prices

#### Costs

Start up costs	Those costs which are only incurred during the setting up of a new business venture.
Operating costs	Those costs which are incurred by running a business. These costs could be fixed or variable.
Variable costs	Costs which change as output changes, <i>for example raw materials.</i>
Semi-variable costs	Costs which are part fixed and part variable as output changes, <i>for example a telephone bill (fixed line rental, variable call charges).</i>
Fixed costs	Costs which do not change as output changes, <i>for example administration.</i>
Direct costs	Costs which can be traced directly back to the production process. These costs will usually also be variable costs.
Indirect costs/Overheads	Costs which cannot be attributed to the production process. These costs will usually also be fixed costs.
Total costs	All the costs of a business. Fixed costs + Variable costs = Total costs Indirect costs + Direct costs = Total costs
Cost centres	A part of the business which incurs costs for the business, <i>for example a product, a department, a factory/location.</i>
Profit centres	A part of the business which incurs costs and incurs revenue, <i>for example a product, a department, an outlet/location.</i>
Overhead allocation	Deciding how a business's overheads will be set against a part of the business, <i>for example allocation to a cost centre or profit centre.</i>
Overhead absorption rate	The rate at which the overheads are absorbed into the total costs of a product, <i>for example if the overheads are £10000 and allocated over 200 hours, the overhead absorption rate is £50 per hour.</i>

### Costing methods

Costing	Calculating how much the production process will cost for a product or service.
Absorption costing	Each cost centre will be allocated a proportion of the total overheads. This is then added to the direct costs associated with that cost centre to give a total cost of production. The basis for apportioning overheads may differ depending on the nature of the cost, <i>for example number of staff involved, number of machines used, floor space in factory.</i>
Standard costing	An estimate of the normal (or target) cost of a process or item. Rather than trying to calculate the actual cost, some organisations will use a standard cost and then compare the actual cost with the standard cost. This will give rise to a cost variance.
Cost variance	The difference between an estimate or standard cost and the actual cost.
Marginal/Contribution costing	Marginal costing focuses on the contribution one unit of production can make towards the fixed costs, <i>for example if a product has variable costs of £5 and a selling price of £8, then the contribution to the fixed costs will be £3.</i>

### Pricing

Cost-plus pricing	Calculating the price of a product or service by taking the total cost and adding a mark-up on top, <i>for example £5 total cost plus 25% mark-up = selling price of £6.25</i>
Special order decisions	Making a decision about a one-off order that may be below normal selling price, or deciding what price to charge for a one-off order.

### Learning Outcome 2 Be able to use break-even analysis

Break even level of output	The number of products/services the business must sell so that they neither make a profit or a loss. Break even level of output is where total sales revenue (income) = total costs (expenditure).
Contribution per unit	Sales price – Variable cost
Break even calculation	The formulae for finding out the break even level of output. $\frac{\text{Fixed costs}}{\text{Sales price} - \text{Variable cost}}$ OR $\frac{\text{Fixed costs}}{\text{Contribution per unit}}$
Break even graph	A graph which shows the break even level of output. A break even graph should include lines to represent: <ul style="list-style-type: none"> <li>• Fixed costs</li> <li>• Total costs</li> <li>• Total sales revenue</li> <li>• The break even level of output</li> <li>• The area of profit</li> <li>• The area of loss.</li> </ul>

Margin of safety	The difference between the break even level of output and the actual (or planned).
Break even analysis	Using a break even calculation and/or graph to show possible effects on a business's decision making.

### Learning Outcome 3 Be able to use appropriate statistical information to review and predict business performance

Statistical information	Quantitative data about a business, <i>for example moving averages, changes over time, seasonal variations, price indices e.g. Consumer Price Index (CPI).</i>
Business performance	Using ratio analysis to compare financial figures, <i>for example profitability ratios, liquidity ratios and efficiency ratios.</i>
Profitability ratios	Comparisons of financial figures to give an indication of the profitability of an organisation. To include; gross profit margin, net profit margin, return on capital employed (ROCE).
Liquidity ratios	Comparisons of financial figures to give an indication of the liquidity of an organisation. To include; current ratio and acid test.
Efficiency ratios	Comparisons of financial figures to give an indication of how efficient a business is in managing its assets and liabilities. To include; debtor collection period (debtor days), creditors payment period (creditor days), stock turnover.

### Learning Outcome 4 Be able to use budgetary techniques

Budget	An attempt to predict the revenue, costs and resources of an organisation over a period of time, <i>for example sales budget, production budget, purchases budget, debtors budget, creditors budget, cash budget, departmental budget.</i>
Master budget	As summary of all the budgets in an organisation.
Variance analysis	Comparing the budgeted figure against the actual figure to decide if the result is adverse or favourable for the organisation.
Adverse variance	When the variance would have a negative effect on the business, <i>for example:</i> <ul style="list-style-type: none"> <li>• <i>if a business budgeted to sell 100 units, but only actually sold 90, this would be an adverse variance of 10</i></li> <li>• <i>if a business budgeted to purchase £1000 of raw materials, but actually spent £1200, this would be an adverse variance of £200</i></li> </ul>
Favourable variance	When the variance would have a positive effect on the business, <i>for example:</i> <ul style="list-style-type: none"> <li>• <i>if a business budgeted to sell 100 units, but actually sold 120, this would be a positive variance of 20</i></li> <li>• <i>if a business budgeted to purchase £1000 of raw materials, but actually only spent £900, this would be a positive variance of £100</i></li> </ul>

It is important to maintain focus on the current law and practice in this area. The list given above is neither prescriptive nor exhaustive. Where legislation has been revised learners will consider the most up to date version as that will reflect current industry practice.

## DELIVERY GUIDANCE

### Learning Outcome 1

This learning outcome is about understanding the methods and terminology involved in costing (see teaching content). To start the tutor could facilitate a group discussion on the terminology used. In small groups the learners could research a selected term in more detail and present their findings to the group. The tutor could introduce the concept of price calculation by providing the learners with a case study that has a variety of costs and ask them to calculate a realistic price and justify their decision.

For M1 the learners must be able to compare and contrast two different costing methods. The tutor could provide the learners with a variety of cost calculations for a selection of goods and services. The learners could identify the type of costing method used and suggest why it may have been selected and if the method is effective. The learners must then select two different costing methods and evaluate the strengths and weaknesses of each.

### Learning Outcome 2

The learners should gain an understanding of how to use break-even analysis and what it will show a business. The tutor could support the learners in creating a break-even graph, including working out an appropriate axis through to how to plot a line using a minimum of two points. For this task there is no need to use anything but simple figures in both the calculation and the graph until learners have grasped the basic techniques. Having created their break-even graph the learners could identify what might affect the break-even level of output in a positive and negative way.

The use of posters and wall charts could help learners to visualise this concept and could be used to show the differences between the break-even points of different businesses.

For M2 learners must be able to explain the strengths and weaknesses of break-even analysis. For some businesses break-even is a straightforward process as their costs and revenues are relatively stable. However, for some businesses this is not the case and ICT can be effectively used to model break-even in order to show the impact of any changes.

For D1 learners must be able to come to a valid and reasoned judgement about the use of break-even analysis for a special order in a selected business. The tutor could provide the learners with scenarios of special orders. The learners could

then analyse a scenario to decide if the business should accept or decline the special order. This analysis should help learners to understand how break-even analysis needs to be modified when considering special-orders, for example by considering the role of contribution pricing.

### Learning Outcome 3

Learners must understand the different types of data that businesses use in order to review and predict their performance. The tutor could lead a discussion on the types of statistical information used. In order to gain thorough understanding of using statistical data learners could compare and contrast two similar businesses. The learner should be able to draw conclusions about the businesses performance using the statistical data.

### Learning Outcome 4

To achieve this learning outcome the learners must understand and be able to apply budgetary techniques. The tutor could lead a group discussion on the types of techniques that can be applied. To begin to apply the techniques the learners could prepare their own budget for a forthcoming event, for example buying Christmas presents for friends and family, or saving for a summer holiday. The learner could prepare their own personal budget, and set targets to monitor and control their progress. The learners could transfer their understanding into a business context; using case study material and pre-prepared budgets they could study a range of business budgets and describe how targets were used. A speaker from a local business could discuss with the learners how budgets are applied and monitored within their organisation.

For M3 learners must be able to explain the implications of budget variances. The learner could use their own personal budget and suggest what the consequences would be if they failed to meet their target. The learners could use case study material and pre-prepared budgets to develop their understanding. For example, an increase in income, compared to the budget is favourable, whereas an increase in expenditure is unfavourable; in small groups the learners could discuss a range of issues such as these and identify the possible implications. The learners could apply this knowledge to the business environment and explain the consequences if a business failed to meet their targets, for example spending cuts, redundancy, or liquidation.

## SUGGESTED ASSESSMENT SCENARIOS AND TASK PLUS GUIDANCE ON ASSESSING THE SUGGESTED TASKS

### **P1, M1**

Scenario and task:

You work for a new organisation that is just about to launch its first product.

P1 Learners should use the data to explain to the organisation how it can cost a product, how this changes as the business activity changes and the relationship to the price that should be charged.

M1 Learners should identify two of the costing methods used and outline the strengths and weaknesses of each.

Guidance:

The tutor must provide relevant data based on the suggested teaching content for a product or service.

### **P2, M2**

Scenario and task:

Use the costing analysis from P1 carry out a break-even analysis for the organisation.

P1 You must create and present a break-even analysis for the organisation.

M2 You should include an explanation of the strengths and weaknesses of a break-even analysis.

Guidance:

The tutor must provide relevant data based on the suggested teaching content.

### **D1**

Scenario and task:

You have been provided with two sets of data. One contains expected costs and revenues, the other, expected costs and revenues for a special order. You should analyse the two sets of data and evaluate if the special order should be accepted. As part of the evaluation, they should provide justification for your recommendations.

Guidance:

The tutor must provide relevant data based on the suggested teaching content.

### **P3**

Scenario and task:

The business has asked you to analyse some statistical data in order to review and predict its performance. You should use the data to calculate appropriate ratios and comment on the performance of the business.

Guidance:

The tutor must provide relevant data based on the suggested teaching content.

### **P4, P5**

Scenario and task:

Based on the data you have been given; produce a set of budgets for the organisation. Using the budgets you have produced describe how they can be used to set targets to monitor and control the organisation.

Guidance:

The tutor must provide relevant data based on the suggested teaching content.

The learner must produce a set of budgets that is fit for purpose.

### **M3**

Scenario and task:

You have been given an updated spreadsheet showing a master budget for last year and the actual figures. Explain the implications of all the variances for the business.

## LINKS to NOS

**CfA BAD322** Analyse and report data (Partial)

**CfA BAA533** Manage budgets (Partial)

**CfA BAA522** Draft financial statements (Partial)

**CfA M&LE1** Manage a budget (Partial)



## **CONTACT US**

Staff at the OCR Customer Contact Centre are available to take your call between 8am and 5.30pm, Monday to Friday.

We're always delighted to answer questions and give advice.

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