

### **General information for centres**

### Unit title: Management Accounting Using Information Technology

### Unit code: HR11 47

**Unit purpose:** This Unit is designed to enable candidates to develop their management information decision making and information technology skills. The Unit will enable candidates to provide timeous, meaningful and well-presented financial information. It uses information technology as an assessment tool to enable candidates to prepare management information for control and decision making in an organisation.

This Unit is primarily intended for candidates who expect to take up a career or further study in cost or management accounting but would also be appropriate to those who wish to gain experience in budget preparation. It is also relevant to those with appropriate work experience who wish to formalise their management accounting qualifications.

On completion of the Unit the candidate should be able to:

- 1 Prepare budget statements
- 2 Prepare a basic budgetary control report and a variance analysis
- 3 Use break-even analysis for decision making
- 4 Prepare income statements using marginal and absorption costing methods

Credit points and level: 2 SQA Credits at SCQF level 7: (16 SCQF credit points at SCQF level 7\*)

\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from National 1 to Doctorates.

**Recommended prior knowledge and skills:** Access to this Unit is at the discretion of the centre. However, candidates would normally be expected to be competent in numeracy and communication at SCQF level 5 or have similar qualifications or experience. Candidates should have spreadsheet skills prior to commencement of this Unit.

Core Skills: The achievement of this Unit gives automatic certification of the following:

- Using Number at SCQF level 6
- Using Graphical Information at SCQF level 5

There are also opportunities to develop the Writing element of the Written Communication component of the Core Skill Communication at SCQF level 5 and the Core Skill Problem Solving at SCQF level 5 in this Unit, and these are highlighted in the Support Notes of this Unit specification.

**Context for delivery:** If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

**Assessment:** This Unit could be assessed by four separate assessments.

An exemplar instrument of assessment and marking guidelines have been produced to show the national standard of achievement required at SCQF level 7.

Since the *Numeracy* Core Skill components of Using Number at SCQF level 6 and Using Graphical Information at SCQF level 5 are embedded in this Unit, it is strongly recommended that you follow the assessment guidelines given. If you wish to use a different assessment model, you should seek prior verification of the assessment instrument(s) you intend to use to ensure that the Core Skill is still covered.

# Unit specification: statement of standards

## Unit title: Management Accounting Using Information Technology

## Unit code: HR11 47

The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

## Outcome 1

Prepare budget statements

### **Knowledge and/or Skills**

- Functional budgets
- Master budget
- Financial modelling using spreadsheets

### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- Prepare individual functional budgets and a master budget using a spreadsheet package. Functional budgets to include:
  - Revenue
  - Production
  - Material purchases and usage
  - Labour
  - Fixed and variable overheads
  - Cash
  - The budgets for a six month period should be prepared using a recognised spreadsheet package containing linked worksheets. The master budget should be prepared in a format suitable for presentation to management
  - The evidence should be presented as printouts of all prepared budgets with evidence that correct formulae have been used
- Use financial modelling to prepare a revised master budget incorporating a minimum of two changes in data.

The functional budget templates should be generated under supervised conditions. Candidates should note that no other materials should be accessed during the assessment event other than the linked functional budget templates.

The master budget should be generated under supervised conditions with access restricted to the functional budgets templates only. Candidates should not have access to a pre-prepared Master Budget Template.

Figures must be accurate within a tolerance of four errors.

#### **Assessment Guidelines**

It is recommended that the assessment of this Outcome be completed within one and half hours.

Prior to preparation of the master budget the candidates will prepare templates for the functional budgets with links and formulae. These templates should not include the master budget (ie Income statement and statement of financial position and statement of changes in equity). Candidates will be able to access and complete these pre-prepared functional budget templates during the assessment event.

Candidates will be required to enter assessment data and to prepare the master budget during the assessment, including relevant links and formulae to the functional budgets. Candidates should note that no other materials should be accessed during the assessment event other than the linked functional budget templates.

# Outcome 2

Prepare a basic budgetary control report and a variance analysis

### Knowledge and/or Skills

- Cost behaviour
- Flexible budgeting
- Standard costing
- Cost variances
- Budgetary control report

### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- Prepare a budgetary control report comparing flexed budget with actual figures. The variances to be calculated include:
  - Material: price and usage
  - Labour: rate and efficiency
  - Variable production overheads: expenditure and efficiency
  - Fixed production overheads: expenditure and volume
- Analyse the variances and prepare a report outlining a minimum of one reason for each subvariance calculated.

The budgetary control report and calculation of sub-variances should be prepared using a recognised spreadsheet package and candidates should demonstrate IT skills by linking worksheets/workbooks wherever possible.

The evidence should be printouts of all prepared budgets with evidence that correct formulae have been used.

The evidence should be generated under supervised conditions with access to blank templates only. Prior to the assessment event candidates will be given a template displaying the layout of the budgetary control report. Centres should note that no other materials should be accessed during the assessment event other than the template.

Figures must be accurate within a tolerance of three errors. The reasons given in the report should be accurate within a tolerance of one error.

### Assessment Guidelines

It is recommended that the assessment of this Outcome be completed within one and half hours.

Prior to the assessment event candidates should have been given a blank template, suitable for presentation to management, with no links or formulae. The template for the budgetary control report and cost variances and analysis of sub-variances should not include any formulae within a cell. Cost variances can include the formulae for the sub-variance calculations. Candidates will be able to access the blank spreadsheet template provided and will be required to complete the budgetary report and calculate the variances and sub-variances during the assessment. They should also provide possible reasons for the variances.

## Outcome 3

Use break-even analysis for decision making

### **Knowledge and/or Skills**

- Break-even analysis
- Break-even charts
- Effect on Profit and Loss
- Decision making based on break-even analysis
- Use of spreadsheets to demonstrate the graphical and mathematical approach of break-even and the effects on profits

### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can, for three difference scenarios:

- Calculate break-even point in revenue and output
- Calculate margin of safety in revenue and output
- Calculate Profit or Loss at any given output
- Calculate effects on Profit or Loss of changes in a minimum of two key variables
- Prepare a break-even chart showing break-even and margin of safety for one of the scenarios
- Prepare a recommendation for management based on Profit/Loss calculated for each of the three different scenarios.

The budgets for a six month period should be prepared using a recognised spreadsheet package containing linked worksheets. Prior to the assessment event candidates will prepare a template displaying the columnar headings for an operating statement including cells showing the key input data required to calculate break-even point in a given situation.

The evidence should be generated under open-book supervised conditions. Figures must be accurate within a tolerance of two errors.

### **Assessment Guidelines**

It is recommended that the assessment of this Outcome be completed within one and half hours.

Prior to the assessment event candidates should prepare a template displaying the columnar headings for an operating statement including cells showing the key input data required to calculate break-even point in a given situation. From this information candidates will calculate break-even points and margin of safety for each of the three different scenarios using a mathematical approach. For one scenario candidates should demonstrate the changes graphically. Candidates will also calculate the impact on profits of changes in selling price and costs. Candidates will be required to recommend a suitable course of action. Candidates should note that no other materials should be accessed during the assessment event other than the template.

### **Outcome 4**

Prepare income statements using marginal and absorption costing methods

### **Knowledge and/or Skills**

- Income statements
- Marginal and absorption costing
- Use of spreadsheets to prepare income statements

### **Evidence Requirements**

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- Prepare income statements using both marginal and absorption methods, to accurately and clearly demonstrate different inventory valuations under each method.
- Compare and contrast the two methods of costing.

The income statements should be prepared using a recognised spreadsheet package and candidates should demonstrate IT skills by linking worksheets/workbooks wherever possible.

The evidence should be printouts of data and formulae in relation to marginal and absorption costing.

The evidence should be generated under closed-book supervised conditions. Figures must be accurate within a tolerance of three errors.

#### **Assessment Guidelines**

It is recommended the assessment of this Outcome be completed within two hours.

Evidence comparing and contrasting the two methods of costing could be generated using a recognised word processing package.

**Administrative Information** 

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Unit title:	Management Accounting Using Information Technology	
Superclass category:	AK	
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**History of changes:** 

Version	Description of change	Date

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**FURTHER INFORMATION:** Call SQA's Customer Contact Centre on 44 (0) 141 500 5030 or 0345 279 1000. Alternatively, complete our <u>Centre Feedback Form</u>.

## **Unit Specification: support notes**

# Unit title: Management Accounting Using Information Technology

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

## Guidance on the content and context for this Unit

This Unit is primarily intended to prepare candidates for a career in cost or management accounting but would also be appropriate to those who wish to gain experience in budget preparation. It is also relevant to those with appropriate work experience who wish to formalise their management accounting qualifications.

This Unit is an introduction to management accounting. The use of spreadsheet packages will introduce candidates to the different presentation possibilities used in management accounting in the workplace.

For those candidates who successfully achieve this Unit as part of the SQA Advanced Certificate/SQA Advanced Diploma Accounting Group Award, there may be opportunities to gain exemptions from a number of professional accounting bodies. Centres should contact the relevant professional bodies to ascertain their current exemption policies.

**Outcome 1** covers the preparation of both functional and master budget statements.

- Functional budgets: revenue, production, material purchases and usage, labour, fixed and variable overheads, and cash budget
- Master budgets: Income Statement and Statement of Financial Position and Statement of Changes in Equity

**Outcome 2** covers the preparation of budgetary control reports and cost variances. The variances to include:

- Material: price and usage
- Labour: rate and efficiency
- Variable production overheads: expenditure and efficiency
- Fixed production overheads: expenditure and volume

Outcome 3 involves the use of break-even analysis as an aid to decision making.

- Calculation of break-even levels using a mathematical approach
- Demonstration of changes using graphs
- Effects on profit/loss
- Recommendations on courses of action

**Outcome 4** covers the preparation of income statements using marginal and absorption costing. inventory valuations will be calculated using both methods.

## Guidance on the delivery and assessment of this Unit

This Unit is likely to form part of a Group Award designed to provide candidates with the knowledge and skills for further study or employment within an accounting environment.

Where this Unit is being delivered as part of the SQA Advanced Certificate/SQA Advanced Diploma Accounting Group Award it is recommended that the Unit be delivered towards the beginning of the Group Award to give candidates a good understanding of, and the application of practical skills in the preparation of budgets, both functional and master; the operation of standard costing techniques, budgetary control and variance analysis; the use of break-even and sensitivity analysis and decision making based on break-even analysis; and the preparation and comparison of marginal and absorption costing statements.

It is recommended each Outcome be assessed separately. The evidence for Outcome 1 is produced under supervised conditions with access restricted to the functional budgets templates only. The evidence for Outcome 2 is generated under supervised conditions with access to blank templates only. The evidence for Outcome 3 is generated under open-book supervised conditions. The evidence for Outcome 4 is generated under closed-book supervised conditions.

During the delivery of this Unit it is recommended that candidates be made aware of the existence of current accounting standards and legislation.

### **Opportunities for developing Core Skills**

The achievement of this Unit gives automatic certification of the Using Number component of the Core Skill *Numeracy* at SCQF level 6. Throughout all four Outcomes of the Unit, the candidates apply a wide range of numeric skills to solve work related problems.

The achievement of this Unit gives automatic certification of the Using Graphical Information component of the Core Skill *Numeracy* at SCQF level 5. In Outcome 3 the candidates are required to produce and interpret graphs.

The delivery and assessment of this Unit may contribute towards the Writing element of the Written Communication component of the Core Skill *Communication* at SCQF level 5 if candidates prepare a written report for management in Outcome 2.

The delivery and assessment of this Unit may also contribute towards the Core Skill *Problem Solving* at SCQF level 5. In Outcome 3 candidates use break-even analysis to aid decision making. This involves candidates carrying out calculations for three different scenarios and making recommendations to management based on the calculations.

These Core Skills can be developed through formative activities without being formally assessed for certification of Core Skills.

## **Open learning**

This Unit could be delivered by distance learning. However, it would require planning by the centre to ensure the authenticity of candidate evidence. Arrangements would have to be made to ensure that evidence is generated under the assessment conditions specified for each Outcome.

Further advice can be found on SQA's website - <u>www.sqa.org.uk.</u>

# Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website <u>www.sqa.org.uk/assessmentarrangements.</u>

# General information for candidates

## Unit Title: Management Accounting Using Information Technology

This Unit will introduce you to management accounting and reporting. You will make use of information technology to demonstrate the various ways in which management information can be displayed.

In Outcome 1 you will learn how to prepare budget statements using spreadsheets. The budget statements will include functional budgets and master budgets. The functional budgets covered include: revenue; production; materials purchase and usage; labour; fixed and variable overheads; and cash.

In Outcome 2 you will look at cost variances (material, labour, variable production overheads, and fixed production overheads) and analyse these and prepare budgetary control reports.

In Outcome 3 you will learn about break-even analysis and how this is used for decision making. You will calculate break-even levels using a mathematical approach and demonstrate the changes using graphs.

In Outcome 4 you will prepare income statements to demonstrate different inventory valuations using both marginal and absorption costing methods.

Throughout the Unit you will demonstrate your skills in using spreadsheets to prepare statements and link worksheets/workbooks wherever possible.

Each Outcome may be assessed separately. The assessments will be carried out under supervised conditions.

You will have opportunities to develop components within the Core Skills of *Numeracy*, *Communication* and *Problem Solving* in this Unit. Achievement of this Unit gives automatic certification of Using Number at SCQF level 6 and Using Graphical Information at SCQF level 5.