# Management Accounting (F2/FMA) December 2011 to January 2013

This syllabus and study guide is designed to help with teaching and learning and is intended to provide detailed information on what could be assessed in any examination session.

## THE STRUCTURE OF THE SYLLABUS AND STUDY GUIDE

#### Relational diagram with other papers

This diagram shows direct and indirect links between this paper and other papers preceding or following it. Some papers are directly underpinned by other papers. These links are shown as solid line arrows. The links between papers where there is only an indirect link and no required underpinning are shown as dotted line arrows. The relational diagram therefore indicates where you are expected to have underpinning knowledge and where it would be useful to review previous learning before undertaking study.

#### Overall aim of the syllabus

This explains briefly the overall objective of the paper and indicates in the broadest sense the capabilities to be developed within the paper.

#### Main capabilities

This paper's aim is broken down into several main capabilities which divide the syllabus and study guide into discrete sections.

#### Relational diagram of main capabilities

This diagram illustrates the flows and links between the main capabilities (sections) of the syllabus and should be used as an aid to planning teaching and learning in a structured way.

#### Syllabus rationale

This is a narrative explaining how the syllabus is structured and how the main capabilities are linked. The rationale also explains in further detail what the examination intends to assess and why.

#### **Detailed syllabus**

This shows the breakdown of the main capabilities (sections) of the syllabus into subject areas. This is the blueprint for the detailed study guide.

#### Approach to examining the syllabus

This section briefly explains the structure of the examination and how it is assessed.

#### Study Guide

This is the main document that students and learning and content providers should use as the basis of their studies, instruction and materials respectively.

Examinations will be based on the detail of the study guide which comprehensively identifies what could be assessed in any examination session. The study guide is a precise reflection and breakdown of the syllabus. It is divided into sections based on the main capabilities identified in the syllabus. These sections are divided into subject areas which relate to the sub-capabilities included in the detailed syllabus. Subject areas are broken down into sub-headings which describe the detailed outcomes that could be assessed in examinations. These outcomes are described using verbs indicating what exams may require students to demonstrate, and the broad intellectual level at which these may need to be demonstrated (\*see intellectual levels below).

#### **Learning Materials**

ACCA's Approved Learning Partner - content (ALP-c) is the programme through which ACCA approves learning materials from high quality content providers designed to support study towards ACCA's qualifications.

ACCA has one Platinum Approved Learning Partnercontent which is BPP Learning Media. In addition, there are a number of Gold Approved Learning Partners - content.

For information about ACCA's Approved Learning Partners - content, please go ACCA's Content Provider Directory.

The Directory also lists materials by Subscribers, these materials have not been quality assured by

ACCA but may be helpful if used in conjunction with approved learning materials. You will also find details of Examiner suggested Additional Reading which may be a useful supplement to approved learning materials

ACCA's Content Provider Directory can be found here –

http://www.accaglobal.com/learningproviders/alpc/content provider directory/search/.

Relevant articles will also be published in Student Accountant.

# LEVEL OF ASSESSMENTS – INTELLECTUAL DEMAND

ACCA qualifications are designed to progressively broaden and deepen the knowledge and skills demonstrated by the student at a range of levels on their way through each qualification. These relate to intellectual levels as designated by the UK qualifications and credit framework (QCF) and other qualifications frameworks. As a benchmark, these levels progress from GCSE equivalent at the Introductory level of the Foundations in Accountancy (FIA) programme, to A level, or its equivalent, at the Intermediate level and to first year degree level at the Advanced level. The Advanced Diploma (the Skills module plus professional Ethics Module) within the ACCA Qualification is equivalent to undergraduate degree level and the Professional level is benchmarked at Masters level.

Throughout, the study guides assess both knowledge and skills. Therefore a clear distinction is drawn, within each subject area, between assessing knowledge and skills and in assessing their application within an accounting or business context. The assessment of knowledge is denoted by a superscript<sup>K</sup> and the assessment of skills is denoted by the superscript<sup>S</sup>.

## VALUE OF ASSESSMENTS – GUIDED LEARNING HOURS

For the FIA syllabuses the approximate number of standard learning hours that a candidate needs to commit to each examination is based on the credit value of the Qualifications and Credit Framework (QCF) UK, units which make up the syllabus. For FMA, Foundations in Management Accounting, the total learning hours or credit value of the syllabus is 14 credits or 140 hours which includes direct

tuition time, self study, revision and assessment time.

For QCF registered learners in England, Wales and Northern Ireland, passing the exam related to the above syllabus gives credit for the following QCF units:

- Principles of budgeting
- Drafting budgets
- Principles of managing financial performance
- Measuring financial performance

#### **GUIDE TO EXAM STRUCTURE**

The structure of examinations varies within and between modules and levels.

The FIA examinations contain 100% compulsory questions to encourage candidates to study across the breadth of each syllabus.

All FIA examinations are assessed by two-hour paper based and computer based examinations.

The pass mark for all FIA examination papers is 50%.

#### **GUIDE TO EXAMINATION ASSESSMENT**

ACCA reserves the right to examine anything contained within any study guide at any examination session. This includes knowledge, techniques, principles, theories, and concepts as specified.

For the financial accounting, audit and tax papers, except where indicated otherwise, ACCA will publish examinable documents once a year to indicate exactly what regulations and legislation could potentially be assessed within identified examination sessions.

Examinations regulation *issued* or legislation *passed* on or before  $30^{th}$  September annually, will be assessed from June  $1^{st}$  of the following year to May  $31^{st}$  of the year after. Please refer to the examinable documents for the paper (where relevant) for further information.

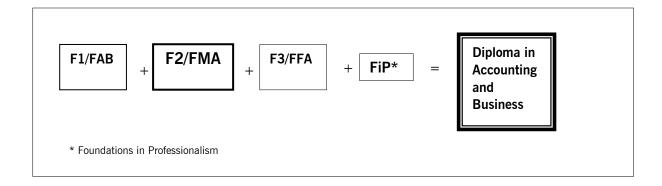
Regulation issued or legislation passed in accordance with the above dates may be examinable even if the *effective* date is in the future. The term issued or passed relates to when regulation or legislation has been formally approved.

The term effective relates to when regulation or legislation must be applied to entity transactions and business practices.

The study guide offers more detailed guidance on the depth and level at which the examinable documents will be examined. The study guide should therefore be read in conjunction with the examinable documents list.

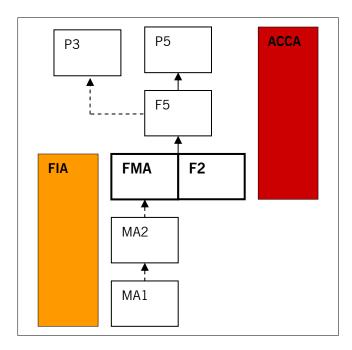
### Qualification structure

The qualification structure requires candidates who wish to gain the Diploma in Accounting and Business to pass the F1/FAB, the F2/FMA and the F3/FFA examinations and successfully complete the Foundations in Professionalism module.



## Syllabus structure

The Foundations in Accountancy suite of qualifications is designed so that a student can progress through three discrete levels; Introductory Certificate level, Intermediate Certificate level and the Diploma level. Students are recommended to enter FIA at the level which is most appropriate to their needs and abilities and to take examinations in order, but this is not a requirement.



## Syllabus

#### **AIM**

To develop knowledge and understanding of providing basic management information in an organisation to support management in planning and decision-making.

#### **RATIONALE**

The syllabus for Paper FMA/F2, *Management Accounting*, introduces candidates to elements of management accounting which are used to make and support decisions.

The syllabus starts by introducing the nature, the source and purpose of cost accounting and the costing techniques used in business which are essential for any management accountant.

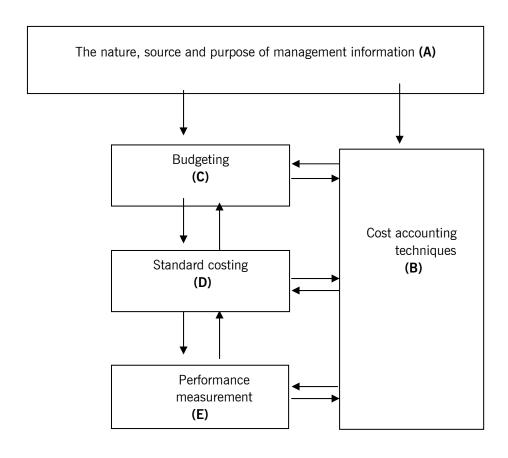
The syllabus then looks at the preparation and use of budgeting and standard costing and variance analysis as essential tools for planning and controlling business costs. The syllabus concludes with an introduction to measuring and monitoring the performance of an organisation

#### MAIN CAPABILITIES

On successful completion of this paper, candidates should be able to:

- A Explain the nature, source and purpose of management information
- **B** Explain and apply cost accounting techniques
- **C** Prepare budgets for planning and control
- D Compare actual costs with standard costs and analyse any variances
- **E** Explain and apply performance measurements and monitor business performance.

#### **RELATIONAL DIAGRAM OF MAIN CAPABILITIES**



#### **DETAILED SYLLABUS**

# A The nature, source and purpose of management information

- 1. Accounting for management
- 2. Sources of data
- 3 Cost classification
- 4 Presenting information

#### B Cost accounting techniques.

- 1. Accounting for material, labour and overheads
- 2. Absorption and marginal costing
- 3. Cost accounting methods
- 4. Alternative cost accounting principles

#### **C** Budgeting

- 1. Nature and purpose of budgeting
- 2. Statistical techniques
- 3. Budget preparation
- 4. Flexible budgets
- 5 Capital budgeting and discounted cash flow
- 6 Budgetary control and reporting
- 7. Behavioural aspects of budgeting

#### D Standard costing

- 1 Standard costing system
- 2 Variance calculations and analysis
- 3 Reconciliation of budgeted and actual profit

#### **E** Performance measurement

- 1. Performance measurement overview
- 2 Performance measurement application
- 3 Cost reductions and value enhancement
- 4. Monitoring performance and reporting

#### APPROACH TO EXAMINING THE SYLLABUS

The syllabus is assessed by a two hour paper-based or computer-based examination. The examination will consist of 50 two mark questions. ACCA will introduce longer style questions in the future and as such approved learning content materials will contain some of these longer style questions. ACCA will provide sufficient notice on when the longer style questions will be introduced.

## Study Guide

## A THE NATURE, SOURCE AND PURPOSE OF MANAGEMENT INFORMATION

#### 1. Accounting for management

- Describe the purpose and role of cost and management accounting within an organisation.<sup>[k]</sup>
- b) Compare and contrast financial accounting with cost and management accounting. [k]
- c) Outline the managerial processes of planning, decision making and control. [k]
- d) Explain the difference between strategic, tactical and operational planning.<sup>[k]</sup>
- e) Distinguish between data and information. [k]
- f) Identify and explain the attributes of good information. [k]
- g) Explain the limitations of management information in providing guidance for managerial decision-making. [k]

#### 2. Sources of data

- a) Describe sources of information from within and outside the organisation (including government statistics, financial press, professional or trade associations, quotations and price list.<sup>[k]</sup>
- b) Explain the uses and limitations of published information/data (including information from the internet) .[k]
- c) Describe the impact of general economic environment on costs/revenue. [k]
- d) Explain sampling techniques (random, systematic, stratified, multistage, cluster and quota). [k]
- e) choose an appropriate sampling method in a specific situation. [s]

(Note: Derivation of random samples will not be examined)

#### 3. Cost classification

- Explain and illustrate production and nonproduction costs.<sup>[k]</sup>
- b) Describe the different elements of non production costs- administrative, selling, distribution and finance. [k]
- c) Describe the different elements of production cost- materials, labour and overheads. [k]
- d) Explain the importance of the distinction between production and non production costs when valuing output and inventories. [k]
- e) Explain and illustrate with examples classifications used in the analysis of the product/service costs including by function, direct and indirect. fixed and variable, stepped fixed and semi variable costs.<sup>[s]</sup>
- f) Explain and illustrate the use of codes in categorising transaction. [k]
- g) Describe and illustrate, graphically, different types of cost behaviour. [s]
- h) Use high/low analysis to separate the fixed and variable elements of total costs including situations involving semi variable and stepped fixed costs and changes in the variable cost per unit.<sup>[s]</sup>
- i) Explain the structure of linear functions and equations. [s]
- j) Explain and illustrate the concept of cost objects, cost units and cost centres. [s].
- k) Distinguish between cost, profit, investment and revenue centres. [k].
- Describe the differing needs for information of cost, profit, investment and revenue centre managers.<sup>[k]</sup>

#### 4. Presenting information

- a) Prepare written reports representing management information in suitable formats according to purpose. [5]
- b) Present information using tables, charts and graphs (bar charts, line graphs, pie charts and scatter graphs). [s].
- c) Interpret information (including the above tables, charts and graphs) presented in management reports. [5]

#### **B** COST ACCOUNTING TECHNIQUES

#### 1. Accounting for material, labour and overheads

- a) Accounting for materials
  - (i) Describe the different procedures and documents necessary for the ordering, receiving and issuing of materials from inventory.
  - (ii) Describe the control procedures used to monitor physical and 'book' inventory and to minimise discrepancies and losses. [k].
  - (iii) Interpret the entries and balances in the material inventory account. [s].
  - (iv) Identify, explain and calculate the costs of ordering and holding inventory (including buffer inventory)<sup>[s]</sup>
  - (v) Calculate and interpret optimal reorder quantities. [s]
  - (vi) Calculate and interpret optimal reorder quantities when discounts apply. [ss].
  - (vii) Produce calculations to minimise inventory costs when inventory is gradually replenished.<sup>[s]</sup>.
  - (viii) Describe and apply appropriate methods for establishing reorder levels where demand in the lead time is constant. [s]
  - (ix) Calculate the value of closing inventory and material issues using LIFO, FIFO and average methods. [5]
- b) Accounting for labour
  - (i) Calculate direct and indirect costs of labour. [s]
  - (ii) Explain the methods used to relate input labour costs to work done. [k]
  - (iii) Prepare the journal and ledger entries to record labour cost inputs and outputs. [s]

- (iv) Describe different remuneration methods: time-based systems, piecework systems and individual and group incentive schemes. [K]
- (v) Calculate the level, and analyse the costs and causes of labour turnover. [s]
- (vi) Explain and calculate labour efficiency, capacity and production volume ratios. [s]
- (vii)Interpret the entries in the labour account. [5]
- c) Accounting for overheads
  - (i) Explain the different treatment of direct and indirect expenses. [k]
  - (ii) Describe the procedures involved in determining production overhead absorption rates.<sup>[k]</sup>
  - (iii) Allocate and apportion production overheads to cost centres using an appropriate basis. [s]
  - (iv) Reapportion service cost centre costs to production cost centres (using the reciprocal method where service cost centres work for each other)<sup>[s]</sup>
  - (v) Select, apply and discuss appropriate bases for absorption rates. [s]
  - (vi) Prepare journal and ledger entries for manufacturing overheads incurred and absorbed.<sup>[s]</sup>
  - (vii) Calculate and explain the under and over absorption of overheads. [s]

#### 2. Absorption and marginal costing

- a) Explain the importance of, and apply, the concept of contribution. [s]
- b) Demonstrate and discuss the effect of absorption and marginal costing on inventory valuation and profit determination.<sup>[s]</sup>
- c) Calculate profit or loss under absorption and marginal costing. [s]
- d) Reconcile the profits or losses calculated under absorption and marginal costing. [s]
- e) Describe the advantages and disadvantages of absorption and marginal costing. [k]

#### 3. Cost accounting methods

a) Job and batch costing:

- (i) Describe the characteristics of job and batch costing. [k]
- (ii) Describe the situations where the use of job or batch costing would be appropriate. [k]
- (iii) Prepare cost records and accounts in job and batch costing situations. [s]
- (iv) Establish job and batch costs from given information. [s]

#### b) Process costing

- (i) Describe the characteristics of process costing. [k]
- (ii) Describe the situations where the use of process costing would be appropriate. [s]
- (iii) Explain the concepts of normal and abnormal losses and abnormal gains. [k]
- (iv) Calculate the cost per unit of process outputs. [s]
- (v) Prepare process accounts involving normal and abnormal losses and abnormal gains. [s]
- (vi) Calculate and explain the concept of equivalent units. [s]
- (vii) Apportion process costs between work remaining in process and transfers out of a process using the weighted average and FIFO methods. [5]
- (viii)Prepare process accounts in situations where work remains incomplete. [s]
- (ix) Prepare process accounts where losses and gains are identified at different stages of the process. [s]
- (x) Distinguish between by-products and joint products. [k]
- (xi) Value by-products and joint products at the point of separation. [s]
- (xii) Prepare process accounts in situations where by-products and/or joint products occur. [s]

(Situations involving work-in-process and losses in the same process are excluded).

#### c) Service/operation costing

- (i) Identify situations where the use of service/operation costing is appropriate. [k]
- (ii) Illustrate suitable unit cost measures that may be used in different service/operation situations. [5]
- (iii) Carry out service cost analysis in simple service industry situations. [s]

#### 4 Alternative cost accounting

- a) Explain activity based costing (ABC), target costing, life cycle costing and total quality management (TQM) as alternative cost management techniques. [K]
- b) Differentiate ABC, Target costing and life cycle costing from the traditional costing techniques (note: calculations are not required).[k]

#### **C** BUDGETING

#### 1. Nature and purpose of budgeting

- a) Explain why organisations use budgeting. [k]
- b) Describe the planning and control cycle in an organisation. [k]
- c) Explain the administrative procedures used in the budgeting process. [k]
- Describe the stages in the budgeting process (including sources of relevant data, planning and agreeing draft budgets and purpose of forecasts and how they link to budgeting).

#### 2. Statistical techniques

- a) Explain the advantages and disadvantages of using high low method to estimate the fixed and variable element of costing. [k].
- b) Construct scatter diagrams and lines of best fit.[s]
- c) Analysis of cost data.
  - (i) Explain the concept of correlation coefficient and coefficient of determination. [k]
  - (ii) Calculate and interpret correlation coefficient and coefficient of determination. [s]
  - (iii) Establish a linear function using regression analysis and interpret the results. [s]
- d) Use linear regression coefficients to make forecasts of costs and revenues. [s]

- e) Adjust historical and forecast data for price movements.[s]
- f) Explain the advantages and disadvantages of linear regression analysis. [k]
- g) Describe the product life cycle and explain its importance in forecasting. [k]
- h) Explain the principles of time series analysis (cyclical, trend, seasonal variation and random elements). [k]
- i) Calculate moving averages.[s]
- j) calculation of trend, including the use of regression coefficients .[s]
- k) Use trend and seasonal variation (additive and multiplicative) to make budget forecasts. [S]
- Explain the advantages and disadvantages of time series analysis<sup>[k]</sup>
- m) Explain the purpose of index numbers [k]
- n) Calculate simple index numbers for one or more variables. [s]
- o) Explain the role and features of a computer spreadsheet system. [k]
- p) Identify applications for computer spreadsheets and their use in cost and management accounting. [5]

#### 3. Budget preparation

- a) Explain the importance of principal budget factor in constructing the budget'. [k]
- b) Prepare sales budgets<sup>[s]</sup>
- c) Prepare functional budgets (production, raw materials usage and purchases, labour, variable and fixed overheads) [5]
- d) Prepare cash budgets<sup>[s]</sup>

- e) Prepare master budgets (Income statement and statement of financial position) [s]
- f) Explain and illustrate 'what if' analysis and scenario planning [S]

#### 4. Flexible budgets

- a) Explain the importance of flexible budgets in control<sup>[k]</sup>
- b) Explain the disadvantages of fixed budgets in control<sup>[k]</sup>
- c) Identify situations where fixed or flexible budgetary control would be appropriate<sup>[s]</sup>
- d) Flex a budget to a given level of volume<sup>[s]</sup>

#### 5. Capital budgeting and discounted cash flows

- a) Discuss the importance of capital investment planning and control<sup>[k]</sup>
- b) Define and distinguish between capital and revenue expenditure<sup>[k]</sup>
- Outline the issues to consider and the steps involved in the preparation of a capital expenditure budget<sup>[k]</sup>
- d) Explain and illustrate the difference between simple and compound interest, and between nominal and effective interest rates<sup>[s]</sup>
- e) Explain and illustrate compounding and discounting<sup>[s]</sup>
- f) Explain the distinction between cash flow and profit and the relevance of cash flow to capital investment appraisal<sup>[k]</sup>
- g) Identify and evaluate relevant cash flows for individual investment decisions. [S]
- h) Explain and illustrate the net present value (NPV) and internal rate of return (IRR) methods of discounted cash flow<sup>[s]</sup>
- i) Calculate present value using annuity and perpetuity formulae<sup>[s]</sup>
- j) Calculate NPV, IRR and payback (discounted and non-discounted) [S]

k) Interpret the results of NPV, IRR and payback calculations of investment viability<sup>[s]</sup>

#### 6. Budgetary control and reporting

- Calculate simple variances between flexed budget, fixed budget and actual sales, costs and profits<sup>[s]</sup>
- b) Discuss the relative significance of variances<sup>[k]</sup>
- c) Explain potential action to eliminate variances[k]
- d) Define the concept of responsibility accounting and its significance in control<sup>[k]</sup>
- e) Explain the concept of controllable and uncontrollable costs<sup>[k]</sup>
- f) Prepare control reports suitable for presentation to management. (to include recommendation of appropriate control action [s]

#### 7. Behavioural aspects of budgeting

- a) Explain the importance of motivation in performance management<sup>[k]</sup>
- Identify factors in a budgetary planning and control system that influence motivation<sup>[s]</sup>
- c) Explain the impact of targets upon motivation<sup>[k]</sup>
- d) Discuss managerial incentive schemes<sup>[k]</sup>
- e) Discuss the advantages and disadvantages of a participative approach to budgeting<sup>[k]</sup>
- f) Explain top down, bottom up approaches to  $\text{budgeting}^{[k]}$

#### **D** STANDARD COSTING

#### 1. Standard costing systems

- a) Explain the purpose and principles of standard costing. [k]
- b) Explain and illustrate the difference between standard, marginal and absorption costing<sup>[k]</sup>

c) Establish the standard cost per unit under absorption and marginal costing<sup>[s]</sup>

#### 2 Variance calculations and analysis

- a) Calculate sales price and volume variance. [S]
- b) Calculate materials total, price and usage variance. [5]
- c) Calculate labour total, rate and efficiency variance. [s]
- d) Calculate variable overhead total, expenditure and efficiency variance<sup>[s]</sup>
- e) Calculate fixed overhead total, expenditure and, where appropriate, volume, capacity and efficiency variance. [s]
- f) Interpret the variances.[s]
- g) Explain factors to consider before investigating variances, explain possible causes of the variances and recommend control action. [5]
- h) Explain the interrelationships between the variances .<sup>[k]</sup>
- i) Calculate actual or standard figures where the variances are given. [k]

#### 3 Reconciliation of budgeted and actual profit

- a) Reconcile budgeted profit with actual profit under standard absorption costing. [s]
- Reconcile budgeted profit or contribution with actual profit or contribution under standard marginal costing.<sup>[s]</sup>

#### **E PERFORMANCE MEASUREMENT**

#### 1. Performance measurement overview

- a) Discuss the purpose of mission statements and their role in performance measurement<sup>[K]</sup>
- b) Discuss the purpose of strategic and operational and tactical objectives and their role in performance measurement<sup>[k]</sup>

- c) Discuss the impact of economic and market conditions on performance measurement<sup>[k]</sup>
- d) Explain the impact of government regulation on performance measurement<sup>[K]</sup>

#### 2 Performance measurement - application

- Discuss and calculate measures of financial performance (profitability, liquidity, activity and gearing) and non financial measures<sup>[s]</sup>
- b) Perspectives of the balanced scorecard
  - (i) discuss the advantages and limitations of the balanced scorecard<sup>[k]</sup>
  - (ii) describe performance indicators for financial success, customer satisfaction, process efficiency and growth<sup>[k]</sup>
  - (iii) discuss critical success factors and key performance indicators and their link to objectives and mission statements<sup>[k]</sup>
  - (iv) establish critical success factors and key performance indicators in a specific situation<sup>[s]</sup>
- c) Economy, efficiency and effectiveness
  - (i) explain the concepts of economy, efficiency and effectiveness  $^{[k]} \label{eq:concepts}$
  - (ii) describe performance indicators for economy, efficiency and effectiveness<sup>[k]</sup>
  - (iii) establish performance indicators for economy, efficiency and effectiveness in a specific situation<sup>[s]</sup>
  - (iv) discuss the meaning of each of the efficiency, capacity and activity ratios<sup>[k]</sup>
  - (v) calculate the efficiency, capacity and activity ratios in a specific situation<sup>[s]</sup>
- d) Unit costs
  - (i) describe performance measures which would be suitable in contract and process costing environments<sup>[k]</sup>
- e) Resource utilisation
  - (i) describe measures of performance utilisation in service and manufacturing environments<sup>[k]</sup>
  - (ii) establish measures of resource utilisation in a specific situation<sup>[s]</sup>
- f) Profitability
  - (i) calculate return on investment and residual income<sup>[s]</sup>

- (ii) explain the advantages and limitations of return on investment and residual income<sup>[k]</sup>
- g) Quality of service
  - (i) distinguish performance measurement issues in service and manufacturing industries<sup>[k]</sup>
  - (ii) describe performance measures appropriate for service industries<sup>[k]</sup>

#### 3. Cost reductions and value enhancement

- a) Compare cost control and cost reduction[k]
- b) Describe and evaluate cost reduction methods<sup>[s]</sup>
- c) Describe and evaluate value analysis[s]

#### 4 Monitoring performance and reporting

- a) Discuss the importance of non-financial performance measures<sup>[k]</sup>
- b) Discuss the relationship between short-term and long-term performance<sup>[k]</sup>
- c) Discuss the measurement of performance in service industry situations<sup>[k]</sup>
- d) Discuss the measurement of performance in non-profit seeking and public sector organisations<sup>[k]</sup>
- Discuss measures that may be used to assess managerial performance and the practical problems involved<sup>[k]</sup>
- Discuss the role of benchmarking in performance measurement<sup>[k]</sup>
- g) Produce reports highlighting key areas for management attention and recommendations for improvement<sup>[s]</sup>