

Technician Level

Paper 7

Management Accounting

Extended Syllabus

INTRODUCTION

Extended Syllabuses are part of a comprehensive package of support materials offered by SIAT. This package includes past question papers, Model Answers, and a range of How to Pass books, all of which are designed to offer extra help and guidance to teachers and candidates, and to enhance chances of success in SIAT examinations.

What are they?

Extended Syllabuses specify in detail the learning and assessment requirements of SIAT examinations.

Each one, produced by the subject Chief Examiner, will state in detail the following:

- Aims and assessment objectives of the award
- Level of English required
- Syllabus topics and syllabus coverage in examinations
- Examination format
- Guided learning hours
- Candidate answer guidance
- Pass mark information and mark allocation
- Recommended reading list and support material
- Detailed listing of syllabus topics and syllabus elements

Who are they for and how can they be of use?

They are designed for:

- Teachers who will find them invaluable when designing courses and planning lessons.
- Candidates who will find them essential because they can be used as checklists when preparing for examinations. Candidates will also be able to refer to Extended Syllabuses when planning revision programmes.

Paper 7 Management Accounting

Aims

The aims of this examination are to enable candidates to develop:

- An ability to critically analyse information for both short term and long term decision making
- An ability to use management accounting information for the purposes of planning and control of cash and other resources within business organisation and an understanding of factors affecting the planning and control process
- An awareness of how product costs can be ascertained using different costing methods
- An understanding of business performance measures, and the relevance and impact of transfer pricing.

Assessment Objectives

After successfully completing this examination candidates will be able to:

- Analyse information in a variety of decision making situations and to explain the basis for the analysis and the validity of the techniques used
- Demonstrate knowledge and understanding of short-term planning and control principles, techniques and processes
- Ascertain product costs using different costing methods
- Use, and interpret, business performance measures and transfer prices

Level of English required

Candidates should have a standard of business English equivalent to LCCIEB English for Business Level 2.

Syllabus topics

1. Short term cost behaviour
2. Short term decision making
3. Short term profit control
4. Cash and working capital management
5. Long term decision making and control
6. Product cost ascertainment
7. Transfer pricing and performance evaluation

Examination format

The time allowance for the examination is 3 hours with 5 questions to be answered from a choice of 6. All questions carry equal marks. The emphasis of the paper will be quantitative; however, each question is likely to contain a descriptive part and Question 1 will consist entirely of short written answers.

At least 1 question from each of the following syllabus topics will be set in each examination:

2. Short Term Decision Making
3. Short Term Profit Control
5. Long Term Decision Making and Control

Typical tasks that will be used to assess candidates:

(a) preparation of:

- monthly cash budgets
- statements that reconcile budgeted profit with actual results
- profit and loss statements
- working capital budgets
- statements which show the order in which products should be manufactured

(b) calculation of:

- net present values and internal rates of return
- standard cost variances
- break-even points and margins of safety
- residual income figures

(c) support calculations and statements with:

- interpretation of the figures shown
- comments upon recommended action
- identifying the advantages and/or disadvantages of particular techniques

This list is not exhaustive but is intended to show typical tasks that candidates must perform in the examination.

Guided Learning Hours

SIAT recommends that 140-160 Guided Learning Hours (GLHs) is a suitable course duration for an 'average' candidate at this level. This figure includes direct contact hours as well as other time when candidates' work is being supervised by teachers. Ultimately, however, it is up to training centres to determine the appropriate course duration based on their candidates' ability and level of existing knowledge. SIAT experience indicates that the number of GLHs can vary significantly from one training centre to another.

Candidate Performance Measurement

Pass Mark Information

| | |
|-------------|-----|
| Pass | 50% |
| Credit | 60% |
| Distinction | 75% |

Mark Allocation

A positive marking approach is used; although candidates will be penalised for initial calculation errors, they will gain marks for consequential 'own figures' as long as the correct use of principles has been demonstrated.

Skills

Candidates will need to show they can:

- add, subtract, divide and multiply, calculate and use percentages
- present information in statements in a form appropriate to management accounting
- present information in graphical format
- analyse and interpret data
- provide short written answers

Recommended Reading List and Support Material

Reading List

| Title | Author(s) | Publisher | ISBN Code |
|---|-------------------------|------------------|------------------|
| How to Pass Management Accounting Third Level | D Frederick and R Lyall | LCCIEB | 1 86247 020 0 |

Support Material

Model Answers and past question papers can be purchased from the SIAT Customer Service Team.

Syllabus

1 Short term cost behaviour

Candidates must be able to:

- 1.1 Separate costs into fixed and variable elements according to their behaviour and characteristics
- 1.2 Explain the problems associated with conventional cost classifications and the difficulties encountered when separating costs into fixed and variable elements
- 1.3 Use the range method or high/low method to identify cost behaviour with or without price changes
- 1.4 Prepare a scattergraph and estimate the line of best fit
- 1.5 Read off the estimate of fixed costs as the point where the 'line of best fit' crosses the vertical axis
- 1.6 Prepare a scattergraph where the given cost data contains price variation
- 1.7 Interpret and draw conclusions from a given scattergraph
(A knowledge of regression calculation is *not* required)
- 1.8 Define given costs as *variable*, *semivariable*, *semi-fixed* or *fixed*. Data to arrive at conclusions may be given in graphical form
- 1.9 Show typical cost patterns in diagrammatic form
- 1.10 Calculate costs per period or unit from fixed, variable, semi-variable and stepped patterns
- 1.11 Forecast costs using historical data
- 1.12 Extrapolate costs using high-low techniques and scattergraphs
- 1.13 Explain the effects of time on cost behaviour

2 Short term decision making

Candidates must be able to:

- 2.1 Prepare statements from basic data in both marginal and absorption form as the basis for decision making
- 2.2 Identify binding constraints or limiting factors within an organisation

- 2.3 Calculate the contribution per unit of the limiting factor and explain why this should be maximised
- 2.4 Solve simple linear programming problems using the graphical method
- 2.5 Recommend the choice of product where a limiting factor exists
- 2.6 Identify sub-contracting alternatives where there are limiting factors
- 2.7 Use marginal cost principles for special order decisions
- 2.8 Identify products or departments that may be considered for closure
- 2.9 Recommend whether to make or buy a product or component
- 2.10 Explain and use the wider concept of differential costing where all costs may change
- 2.11 Use opportunity costs in decision making
- 2.12 Discuss the limitations of short term decision making techniques
- 2.13 Calculate the break-even point where there is a single product
- 2.14 Calculate the break-even point where there are multiple products
- 2.15 Calculate and use contribution/sales ratios and margins of safety
- 2.16 Prepare single product break-even charts and profit graphs and identify key figures
- 2.17 Prepare multi-product break-even charts and identify key figures

Note: break-even charts could be required in both traditional or contribution form

- 2.18 Discuss the limitations of break-even analysis
- 2.19 Calculate a selling price for a product to achieve a desired gross mark up or gross margin
- 2.20 Calculate a selling price to achieve a desired contribution

3 Short term profit control

Candidates must be able to:

- 3.1 Define budgets and budgetary control and state the benefits for an enterprise
- 3.2 Describe all the stages in the preparation of a budget

- 3.3 Identify the principal budget factor and explain its importance
- 3.4 Prepare a variety of functional budgets (production, sales, purchasing etc) and show their interrelationships
- 3.5 Prepare summary budgets in the form of master budgets and cash budgets
- 3.6 Reconcile profit budgets and cash budgets and explain why this reconciliation is important
- 3.7 Explain the difference between fixed budgets and flexible budgets
- 3.8 Prepare and use flexible budgets to adjust budgeted cost levels to suit the level of activity
- 3.9 Discuss alternative approaches to budgeting, eg zero-based budgeting, programme planning and budgeting systems and activity based budgeting
- 3.10 Discuss the human behavioural aspects of budgeting
- 3.11 Define and comment on the various types of standard - basic, ideal, attainable and current
- 3.12 Calculate the main cost variances including material price and usage, labour rate and efficiency, variable overhead expenditure, variable overhead efficiency, fixed overhead expenditure, fixed overhead volume, fixed overhead efficiency and fixed overhead capacity
- 3.13 Calculate mixture and yield variances and comment on their special nature and where they might be applied
- 3.14 Calculate and comment on the main sales margin variances - total, price and quantity
- 3.15 Demonstrate an understanding of control ratios as an alternative to overhead efficiency and volume variances
- 3.16 Use variances to reconcile budgeted and actual profit
- 3.17 Describe the common reasons why variances may occur
- 3.18 Explain how variance analysis and the study of the relationships between variances can help to monitor operational performance
- 3.19 Assess the importance of variance analysis and explain its weaknesses

4 Cash and working capital management

Candidates must be able to:

- 4.1 Explain why liquidity and cash flow management are important for the successful operation of any business
- 4.2 Prepare detailed cash budgets on a monthly or quarterly basis
- 4.3 Compare cash budgets with working capital budgets and understand their different purposes
- 4.4 Prepare working capital budgets for new products, including both weekly or projected balance sheet methods
- 4.5 Demonstrate the effects of sales and production expansion or contraction upon working capital requirements
- 4.6 Prepare flow of funds statements which show the difference between cash flows and profit flows
- 4.7 Explain how short term liquidity problems can be solved by long term funding policy
- 4.8 Calculate and interpret ratios for stock turnover, debtor collection, creditor settlement and liquidity

5 Long term decision making and control

Candidates must be able to:

- 5.1 Explain the difference between long term and short term decision making
- 5.2 Identify relevant and irrelevant costs in project appraisal
- 5.3 Prepare project appraisals using the traditional techniques of Payback and/or Accounting Rate of Return
- 5.4 Evaluate the effectiveness of these 'traditional techniques' and identify their limitations
- 5.5 Explain what is meant by Discounted Cash Flow (DCF) and explain how DCF techniques overcome the main limitations of traditional techniques
- 5.6 Define basic DCF terms such as 'cash flow', 'time value of money', 'discounting', 'compounding' etc
- 5.7 Explain the assumptions on which DCF project appraisal is based

- 5.8 Explain the meaning of Net Present Value (NPV) and Internal Rate of Return (IRR)
- 5.9 Calculate the Net Present Value (NPV) of any cash flow pattern
- 5.10 Calculate the Internal Rate of Return (IRR) of conventional cash flow patterns using linear interpolation
- 5.11 Compare IRR and NPV methods and describe why the 2 techniques do not necessarily rank projects in the same order
- 5.12 Prepare a Profitability Index and evaluate its usefulness
- 5.13 Show an introductory knowledge of Cost of Capital calculations particularly the weighted average approach
- 5.14 Apply elementary aspects of risk analysis including sensitivity analysis and expected value using probabilities
- 5.15 Incorporate elementary aspects of the impact of inflation in project appraisal

6 Product cost ascertainment

Candidates must be able to:

- 6.1 Explain in detail how costs of operations, processes, departments or products are ascertained
- 6.2 Prepare operating statements and product costs on an absorption cost basis and explain the strengths and weaknesses of such an approach
- 6.3 Prepare operating statements and product costs on a marginal cost basis and explain the strengths and weaknesses of such an approach
- 6.4 Prepare accounts and product costs for process industries and explain how stocks are valued and process losses are accounted for
- 6.5 Illustrate how joint and by-products are dealt with and the alternative ways of apportioning joint costs
- 6.6 Describe the principles of Activity Based Costing (ABC) and contrast ABC with the more traditional approaches
- 6.7 Prepare simple ABC statements and calculate unit production costs based on ABC principles

7 Transfer pricing and performance evaluation

Candidates must be able to:

- 7.1 Explain why an enterprise may wish to decentralise and describe the advantages and disadvantages of decentralisation
- 7.2 Define and contrast 'profit centres', 'cost centres' and 'investment centres'
- 7.3 Evaluate centres on the basis of ratios and in particular be able to calculate Return on Capital Employed (ROCE) and Residual Profit or Income (RI)
- 7.4 Contrast ROCE with RI and describe the strengths and weaknesses of the two measures
- 7.5 Calculate and interpret Profitability and Use of Assets Ratios
- 7.6 Explain why transfer pricing is necessary and the objectives that should be met
- 7.7 Calculate and use market and cost based transfer prices and evaluate the consequences for buyers, sellers and the group overall of the different methods
- 7.8 Discuss the introductory aspects of performance evaluation in non-profit making organisations