Accounting Technicians Ireland

Management Accounting

2nd Year Examination

May 2013

Exam Paper, Solutions & Examiner's Report

NOTES TO USERS ABOUT THESE SOLUTIONS

The solutions in this document are published by Accounting Technicians Ireland. They are intended to provide guidance to students and their teachers regarding possible answers to questions in our examinations.

Although they are published by us, we do not necessarily endorse these solutions or agree with the views expressed by their authors.

There are often many possible approaches to the solution of questions in professional examinations. It should not be assumed that the approach adopted in these solutions is the ideal or the one preferred by us. Alternative answers will be marked on their own merits.

This publication is intended to serve as an educational aid. For this reason, the published solutions will often be significantly longer than would be expected of a candidate in an examination. This will be particularly the case where discursive answers are involved.

Accounting Technicians Ireland

2nd Year Examination: Summer 2013

Paper : MANAGEMENT ACCOUNTING

Monday 20th May 2013 - 2.30 p.m. to 5.30 p.m.

INSTRUCTIONS TO CANDIDATES

In this examination paper the €/£ symbol may be understood and used by candidates in Northern Ireland to indicate the UK pound sterling and the €/£ symbol may be understood by candidates in the Republic of Ireland to indicate the Euro.

Answer FIVE questions.
Answer all three questions in Section A. Answer any two of the three questions in Section B.

If more than the required number of questions is answered, then only the requisite number, in the order filed, will be corrected.

Candidates should allocate their time carefully.

All figures should be labeled, as appropriate, e.g. €/£'s, units etc.

Answers should be illustrated with examples, where appropriate.

Question 1 begins on Page 2 overleaf.

SECTION A
ANSWER ALL THREE QUESTIONS

QUESTION 1 *(Compulsory)*

Phelim Co. produces two products, X and Y, both made from the same material. Until now, it has used traditional absorption costing to allocate overheads to its products. The company is now considering an activity based costing system. Information for the two products for the last year is as follows:

	X	**Y**
Production and sales volumes (units)	30,000	50,000
Selling price per unit	€/£20	€/£30
Raw material usage (kg) per unit	4	6
Direct labour hours per unit	0·6	0·44
Machine hours per unit	1.0	1.4
Number of production set ups per annum	24	36
Number of purchase orders per annum	46	54
Number of deliveries to retailers per annum	20	25

The price for raw materials remained constant throughout the year at €/£2 per kg. Similarly, the direct labour cost for the whole workforce was €/£15 per hour. The annual overhead costs were as follows:

	€/£
Machine set up costs	30,000
Machine running costs	40,000
Ordering costs	45,000
Delivery costs	45,000
Total Overhead cost	160,000

Required:

(a) Calculate the full cost and profit per unit for products X and Y under traditional absorption costing, using direct labour hours as the basis for absorption.

6 Marks

(b) Calculate the full cost and profit per unit for each product using activity based costing.

10 Marks

(c) Advise Phelim Co. on four benefits that may arise resulting from his business having a good employee evaluation process in place.

4 Marks

Total: 20 Marks

QUESTION 2 *(Compulsory)*

Canning Ltd. budgets to sell 3 products and has provided you with the following selling prices and variable co

Product	Sales Units	Selling Price per unit €/£	Variable Cost per unit €/£
Alpha	600,000	10	5
Beta	400,000	11	6
Gamma	1,000,000	6	3

Annual fixed costs are budgeted at €/£4,000,000.

Required:

(a) Calculate the total budgeted profit.

3 Marks

(b) Calculate the contribution / sales ratio for each product.

3 Marks

(c) Calculate the breakeven sales volume per product in total.

5 Marks

(d) How many units of <u>each</u> product <u>and</u> in total would Canning Ltd need to sell to earn a total profit of €/£6,000,000?

4 Marks

(e) Management are deciding whether or not to spend an extra €/£400,000 on advertising and sales promotion of Product Alpha. It is considering reducing its selling price to €/£9 per unit, resulting in expected sales of 800,000 units. Advise whether or not it is financially worth while spending €/£400,000 on the advertising and sales promotion.

5 Marks

Total: <u>20</u> Marks

QUESTION 3 *(Compulsory)*

Hayes Ltd. produces and sells one product only. The standard cost and selling price for one unit is as follows:

	€/£
Direct material – 10 kilograms at €/£15 per kg	150
Direct wages – 5 hours at €/£8 per hour	40
Variable cost	190
Selling price	300

The budgeted fixed production overhead cost is €/£45,000 and sales of 750 units were budgeted. Hayes Ltd uses a marginal costing system.

During April 2013 the actual results were as follows:

	€/£
Sales 700 units @ €/£320	224,000
Direct materials: 7,500 Kg	111,750
Direct wages 3,400 hours	27,880
Fixed production overhead	37,000
Total Costs	176,630
Profit	47,370

Note: Hayes Ltd. does not hold any inventories.

Required:

(a) Calculate the following variances:

i. Sales price;
ii. Sales volume;
iii. Material price;
iv. Material usage;
v. Labour rate;
vi. Labour efficiency;
vii. Fixed overhead expenditure;
viii. Fixed overhead volume.

10 Marks

(b) Outline two possible reasons for each of the material usage and labour rate variances calculated in part (a) above.

4 Marks

(c) Briefly list and explain three benefits and three limitations of a standard costing system.

6 Marks

Total: 20 Marks

SECTION B
ANSWER TWO OUT OF THE FOLLOWING THREE QUESTIONS

QUESTION 4

'*Over time or over a specific range of activity, some costs tend to be unaffected by the level of output, whereas others will change as output changes'.*

Required:

(a) Briefly explain, with the aid of an example, each of the following three cost classifications:

i. Variable cost;
ii. Fixed cost;
iii. Mixed cost (Semi variable / semi fixed cost).

6 Marks

(b) The following information has been supplied for **Cunningham Ltd**., a manufacturing company based in Athlone;

Activity		
Production (units)	40,000	80,000
Sales (units)	36,000	68,000

Costs	**€/£**	**€/£**
Direct Material	100,000	200,000
Administration	60,000	60,000
Factory Overhead	340,000	400,000
Production Labour	360,000	560,000
Selling and Distribution	58,000	74,000

Prepare a table summarising the variable cost per unit and total fixed cost for each of the five cost headings above.

10 Marks

(c) Using your answer to part (b) calculate the total estimated cost for an activity level of production of 60,000 units and sales of 46,000 units

4 Marks

Total: 20 Marks

QUESTION 5

Kenny Ltd. makes three products, A, B and C, of which unit costs, machine hours and selling prices are as follow

	Product A	**Product B**	**Product C**
Machine hours per unit	10	12	14
Labour hours per unit	1.2	0.8	0.4
	€/£	**€/£**	**€/£**
Direct materials @ €/£0.50 per kg	7	6	5
Direct wages @ €/£7.50 per hour	9	6	3
Variable overheads	3	3	3
Variable cost per unit	19	15	11
Selling price per unit	25	20	15
Contribution per unit	6	5	4

Sales demand for the period is limited as follows.

	Units
Product A	4,000
Product B	6,000
Product C	6,000

Mattie Kenny, the CEO of Kenny Ltd. has stated "the supply of materials and machine capacity in any period is unlimited. However there is a scarce resource in that direct labour hours are limited to 5,000 hours for the period and it is company policy to produce a minimum of 1,000 units of Product A".

Required:

(a) Assuming there is no limiting factor, calculate the maximum achievable contribution.

4 Marks

(b) Indicate the production levels that should be adopted for the three products in order to maximise contribution, and state the maximum contribution achievable in the period.

12 Marks

(c) Advise Mattie Kenny as to any four ways that may help to overcome the direct labour constraint that exists within Kenny Ltd.

4 Marks

Total: 20 Marks

QUESTION 6

'The budgeting process is an important feature of effective management performance'.

Required:

(a) Outline and briefly explain five benefits of budgeting.

5 Marks

(b) Provide a brief overview of the budgeting process.

6 Marks

(c) Explain each of the following approaches to budgeting;

i. Activity based budgeting;
ii. Zero based budgeting;
iii. Rolling budgets.

9 Marks

Total 20 Marks

2nd Year Examination: May 2013

Management Accounting

Suggested Solutions

Students please note: These are suggested solutions only; alternative answers may also be deemed to be correct and will be marked on their own merits.

Solution 1

(a)

	Product X	Product Y	Marks Allocated
	€	€	
Selling Price	20.00	30.00	**1 Mark**
Direct Material	8.00	12.00	**1 Mark**
Direct Labour	9.00	6.60	**1 Mark**
Overhead (working 1)	2.40	1.76	**1 Mark**
Cost	19.40	20.36	
Profit	0.60	9.64	**1 Mark**

(b)

	Product X	Product Y	
	€	€	
Selling Price	20.00	30.00	
Direct Material	8.00	12.00	
Direct Labour	9.00	6.60	**2 Marks**
Overhead (working 2)	2.16	1.91	**2 Marks**
Cost	19.16	20.51	
Profit	0.84	9.49	**2 Marks**

(c)

Four potential benefits from a good employee evaluation process would include;

- Improved morale
- Reduction in labour turnover
- Increased productivity
- Reduced friction and frustration
- Enhanced communication between management and subordinates
- Instil a higher level of accountability for performance

(Other reasonable benefits also acceptable)

Marks Allocated
1 Mark per benefit (Max of 4 benefits)

Working 1 **Marks**

OAR =	€160,000 / 40,000	€4 per labour hour	**1 Mark**
X =	€4 x 0.60 =	€2.40 per unit	
Y =	€4 x 0.44 =	€1.76 per unit	

Working 2

Activity	**Cost Driver Rates**	**Product X**	**Product Y**	
	€	€	€	
Set Up	500 per set up	12,000	18,000	**1 Mark**
Machine running	0.40 per machine hr	12,000	28,000	**1 Mark**
Ordering	450 per order	20,700	24,300	**1 Mark**
Delivery	1,000 per delivery	20,000	25,000	**1 Mark**
Total		64,700	95,300	
Per unit		2.16	1.91	

Solution 2

(a)

	Alpha	**Beta**	**Gamma**	
	€	€	€	
Selling Price	10	11	6	
Variable Cost	5	6	3	
Contribution per unit	5	5	3	**1 Mark**
Contribution	3m	2m	3m	

	€	
Total Contribution	8m	**1 Mark**
Fixed Cost	4m	
Profit	4m	**1 Mark**

(b)

	Alpha	**Beta**	**Gamma**	
C/S %	50%	45.45%	50%	**3 Marks**

(c)

Weighted Average CPU = €8m / 2m units = €4 per unit
BEP Fixed cost / Weighted Average CPU = €4m / €4 = 1m units

Marks Allocated

BEP Formula: 1 Mark
Weighted Average CPU: 2 Marks
BEP: 2 Marks

(d)

(Fixed Cost + Target Profit) / Weighted Average CPU
(€4 million + €6 million) / €4 = 2.5m units

Marks Allocated

Formula: 2 Marks
Sales to achieve target profit: 2 Marks

(e)	€m	**Marks A**
Original Contribution of Alpha	3.00	**1 Mark**
Revised Contribution of Alpha	3.20	**1 Mark**
Increase in Contribution	0.20	
Increase in Fixed Cost	0.40	**1 Mark**
Decrease in Profit	0.20	**1 Mark**

Therefore spending the extra €400,000 on advertising **is not** financially worthwhile. **1 Mark**

Solution 3

(a)

		€
i	(€320 -€300) x 700	14,000 fav
ii	(700 – 750) x €110	5,500 adv
iii	€111,750 – (7,500 x €15)	750 fav
iv	(7,500 kg – 7,000 kg) x €15	7,500 adv
v	€27,880 – (3,400 hrs x €8)	680 adv
vi	(3,400 hrs – 3,500 hrs) x €8	800 fav
vii	€37,000 - €45,000	8,000 fav

Following the Examination, and in consultation with the External Examiner, it was decided to mark students on the best seven (out of eight) variances. A maximum of 10 marks still applied. These marks were allocated as 1.5 marks per variance, up to a maximum of 10 marks. Thus any candidate with seven correct answers would have received 6 x 1.5 marks (= 9) plus 1 mark to arrive at the maximum allowed.

Or the following method may be used – **Marks Allocated remain the same as above**

i. **Sales Price Variance**

Units	€
700 should have sold for (700 x €300)	210,000
700units actually sold for (700 x €320)	224,000
Variance	**14,000A**

ii. **Sales Volume Variance**

Budgeted sales units	750
Actual sales units	700
	50A
X Standard contribution per unit €110	
Variance	**€5,500A**

iii. **Material Price Variance**

	€
7,500 kg should have cost (7,500 x €15)	112,500
7,500kg actuallycost	111,750
Variance	**750F**

iv. **Material Usage Variance**

Units	€
700 should have used (700 x 10kg)	7,000 kg
700 units actually used	7,500 kg
	500A
X Standard cost per kg of material €15	
Variance	**€7,500A**

v. **Labour rate Variance**

	€
3,400 hours should have cost (3,400 x €8)	27,200
3,400 hours actuallycost	27,880
Variance	**680A**

vi. **Labour efficiency Variance**

700 units should have taken (700 x 5 hrs)	3,500 hrs
700 units did take	3,400 hrs
	100 hrs F
X standard direct labour cost per hour €8	
Variance	**€800F**

vii. **Fixed Overhead expenditure Variance**

	€
Budgeted Fixed Overhead	45,000
Actual Fixed Overhead	37,000
Variance	**8,000 F**

(b)

Material Usage

1. Material was of an inferior quality than expected. As such there was a higher proportion of the material wasted than was expected.
2. There was a change in product design which resulted in greater usage of material than originally expected.

Labour Rate

1. A higher skilled worker was employed than was originally expected.
2. During the period there was a general increase in wage rates which was not envisaged when preparing the standard specifications.

(Note: Other reasonable reasons are acceptable)

Marks Allocated
2 x reasons: 2 Marks Each
Total: 4 Marks

(c)

Benefits of standard costing

1. Standards that are viewed as reasonable by employees can promote economy and efficiency. They provi benchmarks that individuals can use to judge their own performance.
2. Standard costs can simplify bookkeeping. Instead of recording actual costs for each job, the standard costs for materials, labour and overheads can be charged to jobs.
3. The use of standard costs is a key element in a management by exception approach. If costs remain within standards managers can focus on other issues. When costs are significantly outside standards managers are alerted that there may be problems requiring attention. This approach allows managers to focus on important issues.

Limitations of standard costing

1. If the standard is unattainable then the employees may feel that there is no point in trying to reach it. This may have a negative impact on productivity and employee morale.
2. There may be a tendency to emphasise meeting the standard to the exclusion of other important objectives such as maintaining and improving quality, on time delivery and customer satisfaction.
3. Good accounting information is useful when it is timely; variance reports may take long to produce – a fact that decreases its value and reliability. In addition to variance reports, setting and implementing performance standards can use significant staff and other resources, such as time.

(Note: Other reasonable benefits and limitations are acceptable)

Marks Allocated
3 benefits: 1 mark each **3 limitations: 1 mark each**
Total: 6 Marks

Solution 4

(a)

Variable cost - is a cost that varies as the level of activity changes. Material cost would be an example of a variable cost – the more of a product that is produced the more material that would be required.

Fixed cost - is a cost that remains the same irrespective of the level of activity. The cost of renting a building would be classified as a fixed cost. The rent would be paid periodically and would not vary with the level of activity.

Mixed cost - is a cost that is partly fixed and partly variable. The remuneration package of a sales representative would be an example of a mixed cost. The basic salary of the sales representative is the fixed element and any sales commission paid would depend on the volume of sales achieved, hence, the variable element.

Marks Allocated
Explanation of each: 1 mark Each **Illustration of each: 1 mark Each**
Total: 6 Marks

(b)

	Variable cost per unit	Fixed cost	Working	Marks Al
	€	€		
Direct Material	2.50	0	1	**1 Mark**
Administration	0	60,000		**1 Mark**
Factory Overhead	1.50	280,000	2	**2 Marks**
Production Labour	5.00	160,000	3	**2 Marks**
Selling & Distribution	0.50	40,000	4	**2 Marks**
	9.50	540,000		

Workings

1. €100,000 / 40,000 €2.50 per unit

2. VC €60,000 / 40,000 =€1.50 per unit
   FC €340,000 – (40,000 x €1.50) = €280,000

3. VC €200,000 / 40,000 = €5 per unit
   FC €360,000 – (40,000 x €5) = €160,000

4. VC €16,000 / 32,000 = €0.50 per unit
   FC €58,000 – (36,000 x €0.50) = €40,000

Marks Allocated
Variable Cost Per Unit: 1 Mark
Total Fixed Cost: 1 Mark

(c)

		Cost	Marks Allocated
		€	
Direct Material	60,000 x €2.50	150,000	**½ Mark**
Administration		60,000	**½ Mark**
Factory Overhead	(60,000 x €1.50) + €280,000	370,000	**1 Mark**
Production Labour	(60,000 x €5) + €160,000	460,000	**1 Mark**
Selling & Distribution	(46,000 x €0.50) + €40,000	63,000	**1 Mark**
		1,103,000	

Solution 5

(a)

		€	
Product A	4,000 x €6	24,000	**1 Mark**
Product B	6,000 x €5	30,000	**1 Mark**
Product C	6,000 x €4	24,000	**1 Mark**
Total Contribution		78,000	**1 Mark**

(b)

	A	B	C	
CPU (€)	6.00	5.00	4.00	
Lab hours per unit	1.20	0.80	0.40	
Cont per Lab Hr (€)	5.00	6.25	10.00	**3 Marks**
Rank	3	2	1	**1 Mark**
Total hrs Available	5,000			
Hrs committed to A	1,200	(1,000 units x 1.2 per unit)		**1 Mark**
Hours remaining	3,800			

Production Plan

	Production		Hours	
Product C	6,000 units	6,000 x 0.4 hrs per unit	2,400 hrs	**1 Mark**
Product B	1,750 units	1,750 x 0.8 hrs per unit	1,400 hrs	**1 Mark**
Product A	1,000 units	1,000 x 1.2 hrs per unit	1,200 hrs	**1 Mark**
	8,750 units		5,000 hrs	

Contribution

		€	
Product A	1,000 x €6	6,000	**1 Mark**
Product B	1,750 x €5	8,750	**1 Mark**
Product C	6,000 x €4	24,000	**1 Mark**
		38,750	**1 Mark**

(c)

1. Some of the work that cannot be carried out in-house due to the constraint could be subcontracted out.
2. Some lower level workers could be re trained and they could then work on these products.
3. A recruitment campaign could be launched and new workers could be sourced.
4. Productivity and efficiency could be improved to reduce the time required per unit.

(Note: Other reasonable suggestions are acceptable)

Marks Allocated

Any four reasonable suggestions: 1 Mark Each

Total: 4 Marks

Solution 6

(a)

There are many advantages to using budgets. The use of budgets:

- provide a method of allocating and using resources within the organisation
- help to monitor and control operations
- promote forward thinking
- show employees an overall picture of the direction of the organisation which can motivate staff
- help to co-ordinate different departments and align them towards shared objectives
- provide a framework for delegation.

(Note: Other reasonable suggestions are acceptable)

Marks Allocated

Any five benefits: 1 Mark Each

Total: 5 Marks

(b)
The budgeting process normally follows a set structure as follows;

- Form a budget committee
- Establish a budget administration system
- Set the budget period
- Set budget guidelines
- Prepare initial budgets
- Negotiate, review and approve
- Budget revision

(each needs to be briefly explained to get full marks)

Marks Allocated
Any six points: 1 Mark Each
Total: 6 Marks

(c)
Activity Based Budgeting is a method of budgeting in which the activities that incur costs in every functional area of an organisation are recorded and their relationships are defined and analyzed. Activity based budgeting stands in contrast to traditional, cost-based budgeting practices in which a prior period's budget is simply adjusted to account for inflation or revenue growth. As such, ABB provides opportunities to align activities with objectives, streamline costs and improve business practices.

A **rolling budget** is one that is revised at regular intervals by adding a new budget period to the full budget as each budget period expires. A budget for one year, for example, could have a new quarter added to it as each quarter expires.

In this way, the budget will continue to look one year forward. Cash budgets are often prepared on a continuous basis.

Advantages of rolling budgets

- The budgeting process should be more accurate
- Much better information upon which to appraise the performance of management
- The budget will be much more ‘relevant’ by the end of the traditional budgeting period

Disadvantages of rolling budgets

- More costly and time consuming
- An increase in budgeting work may lead to less control of the actual results

Zero based budgetingis an alternative approach that is sometimes used particularly in government and not for profit sectors of the economy. Under zero based budgeting managers are required to justify all budgeted expenditures, not just changes in the budget from the previous year. The base line is zero rather than last year's budget.

Zero based budgeting approach requires considerable documentation. In addition to all of the schedules in the usual master budget, the manager must prepare a series of decision packages in which all of the activities of the department are ranked according to their relative importance and the cost of each activity is identified. Higher level managers can then review the decision packages and cut back in those areas that appear to be less critical or whose costs do not appear to be justified.

Marks Allocated
Explanation of Each: 3 Marks Each
Total: 9 Marks

2nd Year Examination: May 2013

Management Accounting

Examiner's Report

Statistical Analysis – By Question						
Question No.	1	2	3	4	5	6
Average Mark (%)	60%	43%	56%	45%	46%	60%
Nos. Attempting	805	810	806	735	405	604

Statistical Analysis - Overall	
Pass Rate	67%
Average Mark	58%
Range of Marks	**Nos. of Students**
0-39	205
40-49	136
50-59	176
60-69	138
70 and over	231
Total No. Sitting Exam	**813**
Total Absent	126
Total Approved Absent	53
Total No. Applied for Exam	992

General Comments:

This paper was divided into two sections A and B each consisting of three questions. All three questions in section A were compulsory and candidates had a choice of two out of three questions from section B. All of the questions carried 20 marks each. The first five questions were mainly computational with some narrative parts whilst question 6 was narrative.

In section B question 5 proved unpopular with candidates. The majority of candidates attempted questions 4 and 6 from this section.

The paper examined six areas of the syllabus. All of the six areas examined are key elements of the syllabus and given the depth of their coverage in the study text, past exam papers and sample papers should not have posed any difficulty.

It is important that candidates understand the costing concepts involved within the areas of the syllabus and not just learn their content. Understanding leads to better application in the exam. This rote learning was evident in the solutions to questions 3 and 4 whereby candidates had the ability to explain certain terms but did not demonstrate the ability to apply them to practical scenarios. Additionally, in some questions candidates were required to explain certain costing terms and provide a practical example. Most candidates across the country provided similar examples. Candidates should have the ability to see potentially different examples for a given situation.

It was obvious that many candidates did not have the appropriate study completed for this paper. It was also clear that students were question spotting from previous exams.

Questions from past exam papers and sample papers will not be replicated for my exam. It is important understanding of the concepts and divergent thinking rather than rote learning.

There were many well presented scripts but overall the presentation and layout of scripts was disappointi hopefully this will improve for future sittings.

i. The handwriting in some cases was very poor.
ii. The questions were not labelled.
iii. There was no logical sequence to some answers.
iv. In many cases there was a lack of workings. Many candidates produced a final figure rather than showing the workings that lead to this figure. If this final figure is not correct then valuable marks are lost for workings.

It is important to read the requirements of the question carefully. Some questions require cost per unit whereas others require a total cost. Also ensure that an example is provided if required to support a certain explanation. Easy marks were lost here by the vast majority of students.

Specific Comments

Question 1

Parts (a) and (b) of this question required candidates to calculate the full cost and profit per unit of two products using both Absorption Costing and Activity Based Costing principles. Part (c) required candidates to outline four benefits that may arise as a result of a business having a good employee evaluation process in place.

It was surprising that so many candidates struggled with some fairly straightforward calculations required in part (a) of this question. Many candidates were unable to (and showed no knowledge of) how to calculate an overhead absorption rate. In many cases the candidates used the formula the wrong way around.

Whilst some candidates did calculate the overhead absorption rate per labour hour correctly they were unable to then use this rate to calculate the overhead cost per unit.

In many cases, candidates did not complete the answer in that they did calculate the overhead cost per unit but did not add this to the direct materials and direct labour cost per unit in order to arrive at a total cost per unit. This meant that candidates lost out on easy marks.

This is very disappointing because candidates had access to practical examples in the study text and this topic has appeared on every exam paper since 2008.

Candidates demonstrated more competence in calculating the cost and profit per unit using Activity based costing principles as required for part (b) of this question. They seemed to have a clear understanding in identifying cost drivers and applying them to the cost base.

For both parts (a) and (b) candidates in many instances did not read the requirements fully and presented calculations in total as opposed to per unit as required by the question.

Part (c) of this question was very well answered with candidates demonstrating a very comprehensive understanding of an employee evaluation process.

Question 2

This question required candidates to calculated total budgeted profit, contribution to sales ratio, breakeven sales volume and sales required to achieve a certain profit for three products.

Part (a) required candidates to calculate total budgeted profit for three products and candidates scored very well in this part of the question. Some candidates calculated the total contribution rather than the total profit but those candidates were in the minority. Those candidates were awarded marks accordingly.

Candidates also scored well in part (b) of this question which required candidates to calculate the contribution/sales ratio for each product and in total.

However candidates had difficulty in answering part (c) of this question. This part required candidates breakeven sales volume. Many candidates scored little or no marks in this section despite the fact that t appeared on past papers and is adequately covered in the study text.

Part (d) of this question required candidates to calculate the sales volume required to achieve a certain profit. Again answers to this part of the question were very disappointing and many candidates scored little or no marks.

Candidates were required to apply some decision making to part (e) in order to decide whether additional expenditure on advertising was worthwhile.
Many candidates did not attempt this part of the question.

Question 3

[Please see note in the suggested solutions in respect of the marking that was applied in this question]

This question required candidates to calculate variances, explain the causes of the material usage and labour rate variances and explain the benefits and limitations of standard costing.

Many students displayed a good knowledge of the calculation of basic variances. However the theory elements in parts (b) and (c) were of a very mixed standard.
Some candidates scored very highly whilst it was clear that others did not understand the concept of standard costing and variance analysis. A minority did not even attempt parts (b) and (c).This proves that whilst candidates are able to calculate the variances accurately they do not understand the theory underpinning standard costing.

Question 4

This question required candidates to explain with the use of an example variable, fixed and mixed costs, the calculation of the variable cost per unit and total fixed costs under five cost headings and the calculation of the total cost for a particular activity level.

The standard of the answers was mixed for part (a) which required the explanation of a variable, fixed and mixed cost together with an example.
Many candidates scored very highly whilst others lost out on very easy marks by not giving an example. Most candidates provided the same examples across the country.

Part (b) of the question required candidates to calculate the variable cost per unit and the total fixed cost under five cost headings. One of the cost headings was a variable cost, one was a fixed cost and three were mixed costs.
It was both surprising and disappointing that many candidates were unable to distinguish between the three different costs. (even by those students that answered part (a) correctly)
This proves that candidates are unable to apply the principle despite understanding the theory.

A minority of students were able to split the mixed costs between fixed and variable using the high low method. The text book has dedicated a separate chapter to this topic.
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Easy marks were lost by not adding up the individual costs to arrive at a total amount so it is important to read the requirements of the question carefully.

In part (c) of the question candidates were required to calculate the total cost for a given level of production and sales and this posed a problem.
In most cases this question was not attempted or badly answered particularly by candidates that were unable to attempt part (b). Marks were awarded if the principle was correct even if the amounts used were incorrect.

Question 5

This question required the calculation of the total contribution for three products, maximum contribution achievable when there is a constrained resource and listing four ways to overcome a labour constraint.

Part (a) of the question required the calculation of total contribution for three products and
this part of the question was answered quite well.

Part (b) required the calculation of the maximum contribution achievable when labour hours were limiting

This part of the question was very poorly answered.
Students failed to identify the limiting factor and for those that did identify it they were unable to rank the pr according to the highest contribution per limiting factor.
Many ranked them according to the highest contribution per unit.

In order to answer this type of question there are four steps. Many answers did not follow those steps with the result that candidates ended up with no format which caused them confusion and many answers were unfinished.

A number of candidates multiplied the labour hours per unit by the contribution per unit rather than dividing which meant that the rankings were incorrect. However marks were awarded because the principle was correct.

Part (c) required candidates to list four ways to overcome labour constraints and this part of the question was answered very well.

Question 6

This question required candidates to list the five benefits of budgeting, give a brief overview of the budgeting process and to explain certain budgeting terms.

Part (a) of the question required candidates to demonstrate their knowledge of the benefits of budgeting and this part of the question was answered quite well. A minority of candidates gave five benefits but the five benefits all had the same meaning so those candidates were only awarded marks for one benefit.

Part (b) required candidates to demonstrate their knowledge of the budgeting process and again was well answered. Many candidates listed the points directly from the study text whilst others used practical examples rather than word for word from the study text. Both answers scored highly.

Part (c) required an explanation of Activity based budgeting, Zero Based Budgeting and Rolling Budgets.

This part of the question was answered quite well.