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# Management Accounting

2<sup>nd</sup> Year Examination

May 2012

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.

There are often many possible approaches to the solution of questions in professional examinations. The examiner will accept alternatives to the suggested solution shown herein as long as that alternative is appropriate.

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.

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**Accounting Technicians Ireland**  
**2<sup>nd</sup> Year Examination: May 2012**  
**Paper : MANAGEMENT ACCOUNTING**

18<sup>th</sup> May 2012 - 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 labelled, 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)**

Ombi Ltd. specialises in seasonal novelty products and is considering the manufacture of a new range of items to coincide with a major sporting event. The range will initially comprise of 2 products, Flags and Bunting. To assist with budgeting, Ombi Ltd. has collated the following projected information for the month of July:

<u>Projected Sales</u>	<u>Quantity</u>	<u>Sales Revenue per item (€/£)</u>
Flags	4,000	18
Bunting	2,000	50

<u>Production Requirements</u>	<u>Cost per metre</u>	<u>Flags</u>	<u>Bunting</u>
<i>Material Cer</i>	€/£4.00	0.5m	4m
<i>Material Bac</i>	€/£2.00	1m	3m

<u>Finished Inventory</u>	<u>Flags</u>	<u>Bunting</u>
1 <sup>st</sup> July	200	0
31 <sup>st</sup> July	950	1,325

There is no opening or closing work in progress, however due to inefficiencies in the production process, management expect that 5% of output will not pass quality control and therefore cannot be sold.

<u>Materials Inventory</u>	<u>Cer</u>	<u>Bac</u>
1 <sup>st</sup> July	6,000m	20,000m
31 <sup>st</sup> July	10,200m	14,000m

**Labour & Overhead**

The standard direct labour required to produce each Flag unit is 30 minutes and a Bunting unit takes 1 hour to produce. Labour is paid at €/£10 per hour. Variable overheads (which will be incurred evenly over the year) are projected at €/£360,000 per annum and these are to be absorbed into production on the basis of direct labour hours.

**Requirement**

(a) Prepare the following Budget Statements:

- Sales Budget
- Production Budget
- Material Purchasing Budget
- Labour Budget
- Overhead Absorption Budget

**16 Marks**

(b) Calculate the projected standard contribution per unit for Flags and Bunting

**4 Marks****Total 20 Marks**

**QUESTION 2 (Compulsory)**

Mr Gallagher is commencing in business to produce a single article which it sells at €/ $\text{€}100$ . He estimates that the marginal cost of production is €/ $\text{€}60$ , while his fixed costs will be €/ $\text{€}4,000$  per month. He has asked for your assistance with some calculations to inform his business plan.

**Requirement**

(a) Calculate the projected profit/(loss) for the month for sales of:

- 500 units;
- 200 units and
- 50 units.

**3 Marks**

(b) Calculate the Sales Revenue required to earn a projected profit of €/ $\text{€}5,000$ .

**3 Marks**

(c) Calculate the projected profits at sales of €/ $\text{€}30,000$ .

**3 Marks**

(d) Calculate the margin of safety in value terms and units for sales of 400 units.

**3 Marks**

(e) Calculate a projected breakeven point if the sales price is reduced by 10%.

**3 Marks**

(f) Discuss the advantages and disadvantages of using Break Even analysis.

**5 Marks****Total 20 Marks**

**QUESTION 3** (Compulsory)

Jewel Products Ltd. is a producer of jewellery. The company uses a traditional costing system to allocate production overheads to products based on labour hours. The Managing Director has told you that it has been suggested to him that an activity based costing approach would give a better allocation of production overheads and has asked you to carry out some calculations. You have collected the following information on production overhead costs:

	€/£
Production Set Up Costs	129,000
Cost of Ordering Materials	81,000
Cost of Handling Materials	35,000
Utility Costs	175,000

Details of 3 model products and actual cost information for the last period has been recorded as follows:

	GEMB	GEMC	GEME
Units produced	1,000	2,000	1,000
No. of Requisitions	30	100	70
No. of Material Orders	20	30	40
No. of production runs	24	40	36
Machine hours per unit	1	1	2
Direct labour hours per unit (€/£20 per hour)	1	1.5	2
Direct Materials per unit	€/£20	€/£30	€/£40

**Requirement**

- (a) Prepare a schedule showing the total production cost and the unit production cost for each of the 3 products using:
- Traditional Absorption Costing
  - Activity Based Costing
- (b) Comment on the relevance of both approaches.

**15 Marks****5 Marks****Total 20 Marks**

**SECTION B**  
**ANSWER TWO OUT OF THE FOLLOWING THREE QUESTIONS**

**QUESTION 4**

Conferno Ltd. has provided you with the following production information for further analysis:

<u>Budgeted Costs (per unit)</u>	€/£
Direct Materials (15kg at €/£2/kg)	30
Direct Labour (2hours at €/£10/hr)	20
Variable Overhead (2 x €/£5/hr)	10
Fixed Overhead (2 x €/£10)	<u>20</u>
Total Cost	<b><u>80</u></b>

Budgeted Variable Overhead	€/£150,000
Budgeted Fixed Overhead	€/£200,000

Fixed and Variable overhead are absorbed on the basis of direct labour hours which are estimated to be 20,000 per month.

<u>Actual Cost Results</u>	€/£
Direct Materials (14,000 kg)	210,000
Direct Labour (17,500 hours)	192,500
Variable Overhead	100,000
Fixed Overhead	190,000

Conferno had budgeted for sales of 10,000 units at a price of €/£110 per unit, but reports that actual sales revenue was €/£1,080,000 for 9,000 units.

**Requirement**

(a) Calculate the following variances:

- (i) Sales Price Variance
- (ii) Sales Volume Profit Variance
- (iii) Material Price Variance
- (iv) Materials Usage Variance
- (v) Labour Rate Variance
- (vi) Labour Efficiency Variance
- (vii) Variable Overhead Expenditure Variance
- (viii) Variable Overhead Efficiency Variance

**12 Marks**

(b) Calculate the following fixed overhead variances:

- (i) Fixed Overhead Expenditure Variance
- (ii) Fixed Overhead Volume Variance
- (iii) Fixed Overhead Volume Efficiency Variance
- (iv) Fixed Overhead Volume Capacity Variance

**8 Marks**  
**Total 20 Marks**

**QUESTION 5**

You have been asked to talk with a group of accounting technician students in your local area about your experience as an assistant management accountant working in a local company.

**Requirement**

Prepare a briefing paper in advance of your talk which addresses the following issues

- the role of a management accountant in a large manufacturing organisation;
- how management accounting can support decision making;
- how strategic planning differs from budgeting.

**Total 20 Marks**

**QUESTION 6**

Trimvalue Ltd is a wholesale distribution firm which has provided you with the following information from stores in relation to a particular product line – CRIS20

		<i>Units</i>	<i>Unit Price</i>	<i>Value</i>
08/3/12	Delivery from Manufacturer	500	10.00	€/£5,000
12/3/12	Delivery from Manufacturer	100	11.20	€/£1,120
17/3/12	Issued to sales	400		
25/3/12	Delivery from Manufacturer	300	11.50	€/£3,450
27/3/12	Issued to sales	250		

Sales of 650 units @ €/£20 per item are recorded for the month.

There is an opening stock of 250 units, valued at €/£2,000 at 1<sup>st</sup> March 2012.

**Requirement**

(a) Calculate the gross profit for the month of March 2012 using each of the following methods of inventory valuation:

- (i) FIFO
- (ii) LIFO
- (iii) Weighted average.

**14 Marks**

(b) Which inventory valuation is most relevant for decision making purposes. Explain your answer.

**6 Marks  
Total 20 Marks**



## 2<sup>nd</sup> Year Examination: May 2012

### 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

##### Ombi Ltd

(a)

##### Sales Budget

	Flags	Bunting
Sales units	4000	2000
Sales value	€/£72,000	€/£100,000
<b>Total Sales</b>	<b>€/£172,000</b>	

Marks  
Allocated

2 marks

##### Production Budget (units)

	Flags	Bunting
Sales	4000	2000
Add Closing Stock	950	1325
	4950	3325
Less Opening Stock	(200)	-
Net Production	4,750	3,325
requirement (95%)		
Normal loss	250	175
<b>Total Production requirement (100%)</b>	<b>5000 units</b>	<b>3500 units</b>

2 marks

1 mark

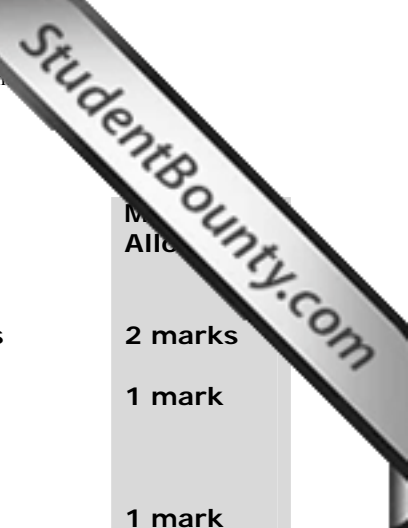
1 mark

##### Materials Purchasing Budget

	<i>Cer</i>	<i>Bac</i>
Production requirement		
Flags (5000 units)	2500m	5000m
Bunting (3500 units)	14000m	10500m
Total	16500m	15500m
Add Closing Stock	10200m	14000m
	26700m	29500m
Less Opening Stock	(6000m)	(20,000m)
<b>Purchasing Requirement</b>	<b>20700m</b>	<b>9500m</b>
Cost per metre	€/£4.00	€/£2.00
<b>Cost of Purchases</b>	<b>€/£82,800</b>	<b>€/£19,000</b>

2marks

2 marks



**Solution 1 (Cont'd)**

**Labour Budget**

	Flags	Bunting	M Alle
Production requirements	5000 units	3500 units	
Direct labour input	30 mins	1 hour	
<b>Total labour hours requirement</b>	<b>2500 hours</b>	<b>3500 hours</b>	<b>2 marks</b>
Cost per hour - €/£10			
<b>Total Labour Cost - €/£60,000</b>			<b>1 mark</b>

**Variable Overhead Absorption Budget**

Variable Overhead for year	360,000	
Variable Overhead for month	30,000	<b>1 mark</b>
Direct Labour Hours (2500 + 3500)	6000	
Overhead	€/£5	<b>1 mark</b>
<b>Absorbed as follows:</b>		
<b>Flags</b>	<b>€/£12,500</b>	
<b>Bunting</b>	<b>€/£17,500</b>	<b>1 mark</b>

(b)

**FLAG**

Sales price 18.00

Direct Material

Cers 0.5m @ €/£4	2.00	
Bac 1m @€/£2	2.00	
Direct Labour		
0.5 hour @ €/£10/hr	5.00	
Variable Overhead		
0.5 hours @ €/£5	2.50	<b>1 mark</b>
	11.50	

Normal loss (5%) 0.58 12.08  
**Gross Profit/Contribution (per unit) 5.92** **1 mark**

**BUNTING**

Sales price 50.00

Direct Material

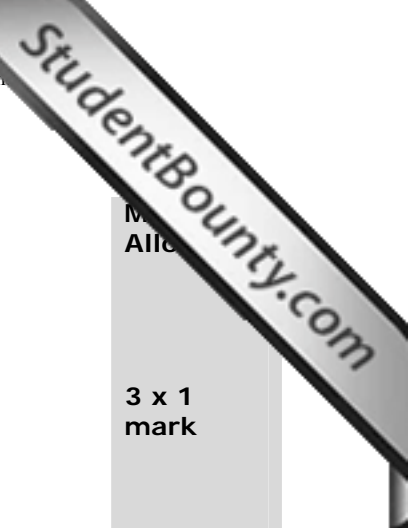
Cers 4m @ €/£4	16.00	
Bac 3m @€/£2	6.00	
Direct Labour		
1 hour @ €/£10/hr	10.00	
Variable Overhead		
1 hour @ €/£5	5.00	<b>1 mark</b>
	37.00	

Normal loss (5%) 1.85 38.85

**Gross Profit/Contribution (per unit) 11.15** **1 mark**

**20 MARKS**

*Solution assumes that the 5% loss is incurred at the end of the production process, thereby incurring all costs, including materials, labour and overhead. No penalty to subsequent calculations if calculated on alternate basis.*



**Solution 2**

**Mr Gallagher**

(a) Projected profit/(loss) calculations

	500 units €/£	200 units €/£	50 units €/£
Projected Contribution	20,000	8,000	2,000
Fixed Costs	4,000	4,000	4,000
Projected Profit/(Loss)	<b>16,000</b>	<b>4,000</b>	<b>(2,000)</b>

3 x 1  
mark

Workings:

Sales Revenue	100
Variable Cost	60
Contribution	40
Breakeven Point	
Fixed Cost/Contribution	$4,000/40 = 100 \text{ units} = \text{€}/\text{£}10,000 \text{ sales revenue}$

(b)

Target Profit + Fixed Costs / Contribution

$(5000+4000)/40 = 225 \text{ Units}$

= **€/£22,500 sales revenue**

1 mark

1 mark

1 mark

(c)

Sales	30,000 =	300 units
Variable Costs	18,000	
Contribution	12,000	
Fixed Costs	4,000	
<b>Projected profit</b>	<b>8,000</b>	

2 marks

1 mark

(d) Margin of safety

In sales value - (Profit x Sales) /Contribution

1 mark

400 units	
Sales revenue	40,000
Variable Costs	24,000
Contribution	16,000
Fixed Costs	4,000
Projected profit	12,000

$(12000 \times 40000)/16000 = \text{€/£}30,000 \text{ in terms of sales value}$

1 mark

In units - Profit / Contribution per unit

$12,000/40 = 300 \text{ units}$

1 mark

(e)

Revised BEP	
Sales Revenue	90
Variable Cost	60
Contribution	30

1 mark

Fixed Costs /Contribution

$4,000/30 = 134 \text{ units}$

1 mark

= **€/£12,000 units**

1 mark

**Solution 2 (Cont'd)****(f) Advantages & Disadvantages of Breakeven analysis**

<b>ADVANTAGES</b>	<b>DISADVANTAGES</b>
Efficient tool for forecasting and to inform decision making	Does not consider quantity discounts or other pricing impacts
Margin of safety can be used to demonstrate robustness and strength of projections	Assumes that variable costs are clearly identifiable and are constant, ignoring the impact of production efficiency or other factors
Particularly useful for pricing of special orders and situations where there is limited resource availability	Assumes that sales mix and contributions remain constant which may not reflect practical reality
Relatively simple to administer	Should only be applied to a short term horizon

Mar  
AllocaPresentation  
**1 mark**Advantages  
**2 marks**Disadvantages  
**2 marks****20 MARKS**



**Solution 3**

**Jewel Products Ltd**

(a)

**(i) Traditional Absorption Costing**

Total labour hours

GemB	1000 x 1	1000
GemC	2000 x 1.5	3000
GemE	1000 x 2	2000
		<b>6000</b>

Production Overheads

Production Set Up Costs	129,000
Cost of Ordering Materials	81,000
Cost of Handling Materials	35,000
Utility Costs	175,000
	<b>420,000</b>

**Production Overhead Absorption Rate € / £70 per labour hour**

*(420,000/7000)*

2 Marks

**Total Cost Summary**

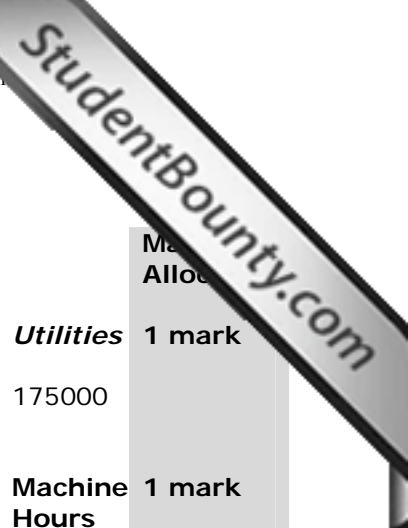
	GEMB €/£	GEMC €/£	GEME €/£
Direct Materials	20,000	60,000	40,000
Direct Labour	20,000	60,000	40,000
Production Overhead	70,000	210,000	140,000
<b>Total Production Cost</b>	<b>110,000</b>	<b>330,000</b>	<b>220,000</b>
Units Produced	1000	2000	1000
<b>Cost per unit</b>	<b>€/£110</b>	<b>€/£165</b>	<b>€/£220</b>

1 mark

**Cost Summary per unit**

	GemB €/£	GemC €/£	GemE €/£
Direct Materials	20	30	40
Direct Labour	20	30	40
Production Overhead	70	105	140
<b>Cost per unit</b>	<b>€/£110</b>	<b>€/£165</b>	<b>€/£220</b>

3 x 1 mark



**Solution 3 (Cont'd)**

**(ii) Activity Based Costing**

<b>Cost Centre</b>	<b>Set Up</b>	<b>Ordering</b>	<b>Handling</b>	<b>Utilities</b>	Ma Allo
Production Overhead	129000	81000	35000	175000	1 mark
<b>Cost Driver</b>	<b>Production runs</b>	<b>Material Orders</b>	<b>Material Requisitions</b>	<b>Machine Hours</b>	1 mark
Volume	100 runs	90 orders	200 requisitions	5000 hours	
<b>Activity Based Overhead rate</b>	<b>€/£1290</b>	<b>€/£900</b>	<b>€/£175</b>	<b>€/£35</b>	4 x 1 mark
<b>Total Cost Summary</b>					
	GEMB €/£	GEMC €/£	GEME €/£		
Direct Materials	20,000	60,000	40,000		
Direct Labour	20,000	60,000	40,000		
Production Overhead					
- Set Up	30,960	51,600	46,440		
- Ordering	18,000	27,000	36,000		
- Handling	5,250	17,500	12,250		
- Utilities	35,000	70,000	70,000		
<b>Total Production Cost</b>	<b>129,210</b>	<b>286,100</b>	<b>244,690</b>		
Units Produced	1000	2000	1000		
<b>Cost per unit</b>	<b>€/£129.21</b>	<b>€/£143.05</b>	<b>€/£244.69</b>		3 x 1 mark

**Solution 3 (Cont'd)**

(b)

The traditional absorption costing sees overhead allocated on the basis of direct labour hours and the volume of production. This is not particularly accurate as it uses a single cost driver (direct labour hours), while there is information to suggest that a number of activities are relevant in generating costs. However, it should be noted that the traditional absorption costing method does recognise the importance of production overheads and is simple to use.

Activity Based Costing is more accurate as it identifies the cost driver for each pool of costs and allocates overhead on the basis of that cost driver and the relative proportion of the activity consumed by that product. This provides more accurate information for decision making such as pricing and production quantities. While it is more complex to establish and maintain, the use of activity based costing can lead to a better understanding of overheads and can support benchmarking and performance management.

It is clear in the example that the costs produced for Jewel Ltd are more detailed and accurate when calculated using activity based costing, than when using traditional costing. In particular, the product GEMC, which is produced in higher volumes than GEMB or GEME absorbs higher production overhead costs under traditional absorption costing (resulting in a unit cost of €165) than under activity based costing, where the unit cost is €143.05.

Marks  
Allocated

1 mark

1 mark

1 mark

1 mark

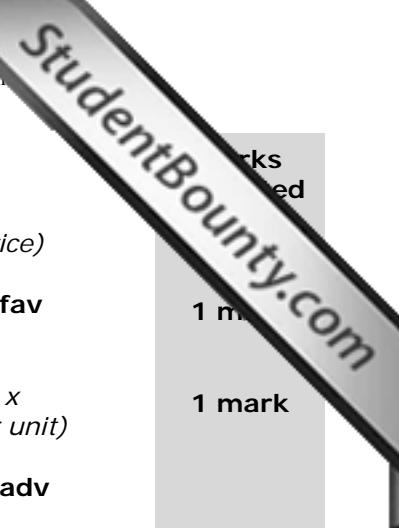
1 mark

20 marks

**Solution 4**

**Examiner's Note:** A change was announced during the Examination in relation to Question 4, whereas the quantity of Direct Materials (Actual) was amended to 140,000Kg (in place of 14,000Kg). Answers using either figure were acceptable and solutions using the two alternatives are shown herein.

Also note that there are two methods that could be followed in order to determine the answer for parts vii) and viii). Both approaches are shown here and either is acceptable.



**Solution 4 (cont'd)**

(a)

**(i) Sales Price Variance**

*(Actual Sales Quantity x Actual Price) – (Actual Sales Quantity x Standard Price)*

(9,000 x 120.00)	-	(9,000 x 110.00)	
1,080,000	-	990,000	= <b>£/€90,000 fav</b>

1 mark

**(ii) Sales Volume Profit Variance**

*(Actual Sales Quantity x Standard profit per unit) – (Standard Sales Quantity x Standard profit per unit)*

(9,000 x 30*)	-	(10,000 x 30)	
270,000	-	300,000	= <b>£/€30,000 adv</b>

1 mark

(9,000 x 25*)	-	(10,000 x 25)	
225,000	-	250,000	= <b>£/€25,000 adv</b>

1 mark

\*Additional Working

Sales price		110	
Direct Materials (15kg at £2/kg)	30		
Direct Labour (2hours at €10/hr)	20		
Variable Overhead (2 x €10 or €7.50/hr)	10/15		
Fixed Overhead (2 x €10)	20	<u>80/85</u>	
Budgeted Standard profit		<u><b>30/25</b></u>	

**£/€60,000 fav**

**(iii) Material price variance**

*(Actual quantity of inputs x Actual price) – (Actual quantity of inputs x Standard Price)*

*A Based actual direct materials of 140,000kg*

(140,000 x 1.5)	-	(140,000 x 2.00)	
210,000	-	280,000	= <b>£/€70,000 fav</b>

*Or B Based actual direct materials of 14,000kg*

(14,000 x 15.00)	-	(14,000 x 2.00)	
210,000	-	28,000	= <b>£/€182,000 fav</b>

1 mark

**(iv) Materials usage variance**

*(Actual quantity of inputs x Standard price) – (Flexed quantity x Standard price)*

*A Based actual direct materials of 140,000kg*

(140,000 x 2.00)	-	(15 x 9,000 x 2.00)	
280,000	-	270,000	= <b>£/€10,000 adv</b>

*Or B Based actual direct materials of 14,000kg*

(14,000 x 2.00)	-	(15 x 9,000 x 2.00)	
28,000	-	270,000	= <b>£/€242,000 adv</b>

1 mark

**TOTAL MATERIALS VARIANCE £/€60,000 fav**

**(v) Labour rate variance**

*(Actual Hours of input x Actual Rate) – (Actual Hours of input x Standard rate)*

(17,500 x 11.00)	-	(17,500 x 10.00)	
192,500	-	175,000	= <b>£/€17,500 adv</b>

1 mark

**(vi) Labour efficiency variance**

*(Actual Hours of input x Standard rate) – (Standard hours required for actual output x Standard rate)*

(17,500 x 10.00)	-	(2 x 9,000 x 10.00)	
175,000	-	180,000	= <b>£/€5000 fav</b>

1 mark

**TOTAL LABOUR VARIANCE £/€12,500 adv**



**(vii) Variable overhead expenditure variance**

*(Actual variable Overhead) - (Actual hours x Variable Overhead Recovery Rate)*

*A Based on Variable Overhead Absorption Rate of €/£5/hour*

100,000	-	(17,500 x 5.00)	
100,000	-	87,500	= <b>£/€12,500 adv</b>

*Or B Based on Budgeted Variable Overhead of €/£150,000*

100,000	-	(17,500 x 7.50*)	
100,000	-	131,250	= <b>£/€31,250 fav</b>

1 mark

1 mark

**(viii) Variable overhead efficiency variance**

*(Actual hrs x Var. Overhead rec. Rate) - (Standard Hrs x Var. Overhead rec. Rate)*

*A Based on Variable Overhead Absorption Rate of €/£5/hour*

(17,500 x 5.00)	-	(9,000 x 2 x 5.00)	
87,500	-	90,000	= <b>£/€2,500 fav</b>

*Or B Based on Budgeted Variable Overhead of €/£150,000*

(17,500 x 7.50)	-	(9,000 x 2 x 7.50)	
131,250	-	135,000	= <b>£/€3,750 fav</b>

1 mark

1 mark

**TOTAL VARIABLE OVERHEAD VARIANCE                    £/€10,000 adv/ €/£35,000 fav**

**(b)****(i) Fixed Overhead Expenditure Variance**

*(Actual Fixed Overhead expenditure) - ( Budgeted fixed overhead expenditure)*

190,000	-	200,000	= <b>£/€10,000 fav</b>
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1 mark

1 mark

**(ii) Fixed Overhead Volume Variance**

*(Standard Hours for Actual Output x Standard Rate)- (Budgeted Hours x Standard Rate)*

(9,000 x 2 x 10)	-	(20,000 x 10)	
180,000	-	200,000	= <b>£/€20,000 adv</b>

1 mark

1 mark

- which comprises of:

**(iii) Fixed Overhead Volume Efficiency Variance**

*(Standard hours for actual output x standard rate) – (actual hours x standard rate)*

(9000 x 2 x 10)	-	(17500 x 10)	
180,000	-	175,000	= <b>£/€5000 fav</b>

1 mark

1 mark

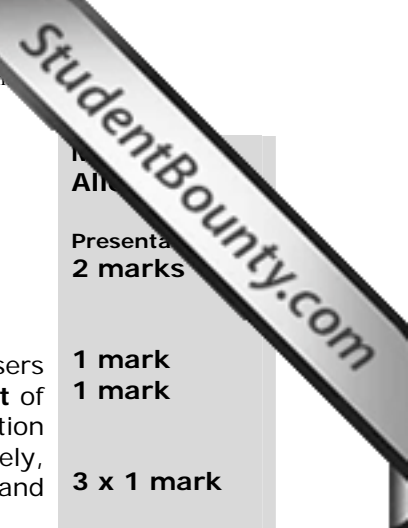
**(iv) Fixed Overhead Volume Capacity Variance**

*(Actual hours x standard rate) – (budgeted hours x standard rate)*

(17,500 x 10) -	(20,000 x 10)	
175,000 -	200,000	= <b>£/€25,000 adv</b>

1 mark

1 mark



**Solution 5**  
**BREIFING PAPER**

Subject: Role of Management Accountant  
Supporting Decision Making  
Strategic Planning and Budgeting

Date: 19 May 2012

A Management Accountant is concerned with providing **information** to users within the organisation to assist with **effective and efficient management** of the business. A Management Accountant in a large manufacturing organisation will be involved in collecting and analysing data (primarily, but not exclusively, financial in nature) and supplying information for **planning, control** and **decision making**.

Examples of this information would include the calculation of product costs (including stock valuation) to determine pricing decisions:

Consideration of the financial implications of a manufacturing line or particular product:

Budget preparation, financial projections and variance analysis to support financial management.

The provision of information to support decision making is one of the major functions of management accounting. Although costs collected in the accounting records may provide basic information, decision making information usually also involves dealing with anticipated or expected future costs and revenues. It may also include information which is not normally incorporated in a traditional accounting system – these are known as the **relevant costs and revenues**.

**Exception reporting** or **Management by Objectives (MBO)** is often used in management accounting to focus the reporting of information to ensure that an organisation achieves it's overall goals and objectives.

**Marginal costing** techniques which may include **breakeven analysis** and **cost-volume-profit analysis** can be particularly useful for decision making. These are simple to administer and understand as they concentrate on the controllable aspects of the business.

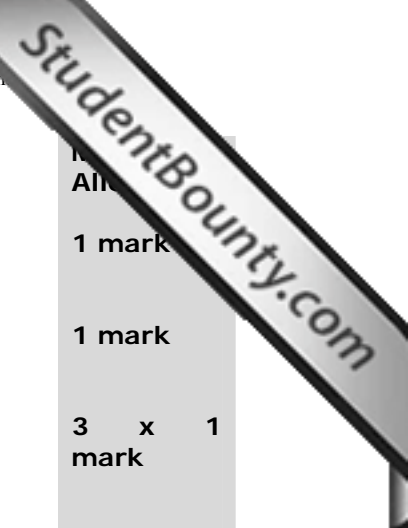
Strategic planning relates to **long-term planning** which establishes the shape and direction of the organisation over a 2-10 year period. It is normally ad hoc and involves scanning the internal and external environment and focussing on general plans to achieve the **mission and vision** of the organisation. Strategic financial plans are normally only stated as **forecasts** as they can be subject to considerable change and revision.

A strategic plan for a manufacturing organisation is likely to be profit driven with possibly market share and other performance objectives.

Budgeting is very much focussed on a **short-term** horizon – normally up to 1 calendar year. Budgeting involves **detailed financial planning** to decide how resources should be used in the short term and predicting the financial outcome of these decisions. A budget is a quantative expression of a plan. In a manufacturing organisation there is likely to be a number of budgets - for example **sales, production, administration budgets**, which will all be combined into one overall Master budget.

*other relevant points may also attract mark allocation subject to an overall maximum of 20 marks*

1 mark
All
Presenta
2 marks
1 mark
1 mark
3 x 1 mark
1 mark
Example(s)
1-2 marks
1 mark
1 mark
1 mark
1-2 marks
1 mark
1 mark
1 mark
Example
1 mark
1 mark
1 mark
Example
1 mark
Maximum
20 marks



	FIFO	LIFO	Weighted Average
Sales Revenue	13,000	13,000	13,000
Cost of Sales			
Opening Stock	2,000	2,000	2,000
Purchases	9,570	9,570	9,570
Closing Stock	(5,570)	(4,575)	(5,165)
	6,000	6,995	6,405
Gross Profit	7,000	6,005	6,595

*Workings*

**Purchases**    €/£

8/3/12	5000
12/3/12	1120
25/3/12	3450
	<b>9570</b>

**FIFO**

Opening Stock 1/3/12		250	8.00	2000		
8/3/12		500	10.00	5000		
12/3/12		100	11.20	1120		
		850		8120		
17/3/12	250	8.00	2000			
	150	10.00	1500	(400)	<b>(3500)</b>	
				450	4620	
25/3/12				300	11.50	3450
				750		8070
27/3/12	250	10.00	2500	(250)	<b>(2500)</b>	
Closing Stock 31/3/11				<b>500</b>	<b>€/£5570</b>	
<b>Issued to Production (3500+2500)</b>					<b>€/£6000</b>	

3 x 1  
 mark

**LIFO**

Opening Stock 1/3/12		250	8.00	2000		
8/3/12		500	10.00	5000		
12/3/12		100	11.20	1120		
		850		8120		
17/3/12	100	11.20	1120			
	300	10.00	3000	(400)	<b>(4120)</b>	
				450	4000	
25/3/12				300	11.50	3450
				750		7450
27/3/12	250	11.50	2875	(250)	<b>(2875)</b>	
Closing Stock 31/3/11				<b>500</b>	<b>€/£4575</b>	
<b>Issued to Production (4120+2875)</b>					<b>€/£6995</b>	

2 marks  
 1 mark

**Weighted Average**

Opening Stock 1/3/12		250	8.00	2000		
8/3/12		500	10.00	5000		
		750	9.33	7000		
12/3/12		100	11.20	1120		
		850	9.55	8120		
17/3/12	100			(400)	9.55	<b>(3820)</b>
				450		4300
25/3/12				300	11.50	3450
				750	10.33	7450
27/3/12				(250)	10.33	<b>(2585)</b>
Closing Stock 31/3/11				<b>500</b>	<b>10.33</b>	<b>€/£5165</b>
<b>Issued to Production (3820+2585)</b>						<b>€/£6405</b>

2 marks  
 1 mark

**Solution 6** (Cont'd)

(b)

Decision making is based on relevant costs which are affected by the alternatives being considered. The **relevant cost of materials** and inventory valuation will be based on the conditions prevailing and the cashflows that will arise.

Mark  
Allocate

1 mark

The most useful valuation for decision making is likely to be **LIFO** as it is the most current. If the materials must be purchased then the relevant cost is the latest purchase price – LIFO. If the materials are held in stock but must be replaced then the relevant cost is the replacement cost, which is most likely to be the latest purchase price - LIFO.

2 marks

If materials have no alternative use or re-sale value then there is no cost. If the materials can be resold or used elsewhere then the relevant cost is the **opportunity cost** (ie: the revenue otherwise lost).

1 mark

FIFO is not particularly useful for decision making, particularly in the short term as it is based on historical costs.

1 mark

Weighted average can be useful in that it smoothes cost fluctuations over a period of time, giving a balanced inventory valuation and stock calculation.

1 mark

20 marks

## 2<sup>nd</sup> Year Examination: May 2012

### Management Accounting

### Examiner's Report

Statistical Analysis - By Question						
Question No.	1	2	3	4	5	6
<b>Average Mark (%)</b>	51%	55%	48%	52%	54%	56%
<b>Nos. Attempting</b>	853	844	844	695	225	798

Statistical Analysis - Overall	
<b>Pass Rate</b>	69%
<b>Average Mark</b>	55%
<b>Range of Marks</b>	<b>Nos. of Students</b>
0-39	116
40-49	149
50-59	262
60-69	197
70 and over	143
<b>Total No. Sitting Exam</b>	<b>867</b>
<b>Total Absent</b>	125
<b>Total Approved Absent</b>	41
<b>Total No. Applied for Exam</b>	1033

#### General Comment

The overall performance at this session of the 2<sup>nd</sup> Year Management Accounting examination was slightly better than previous sessions.

The examination assessed all aspects of the syllabus and most candidates made a good attempt at the required 5 questions. In terms of performance for individual questions – the average mark exceeded 50% in all cases, with the exception of Question 3.

The format comprised of a compulsory section with three scenario based, largely computational type questions assessing the application of key concepts of the syllabus in practical situations; and a second section where the candidate was required to answer 2 out of 3 questions, which included a mainly narrative question together with other computational/theory questions.

Candidates who were well prepared presented answers in a logical and professional manner with relevant supporting workings evident and accordingly many scored highly.

**Note:** The Board of Examiners was advised of the announced change to the face of the paper on the day of the examination. It was noted that, where an alternative answer was possible, students were given full credit for their answer in all cases.

The Board took cognisance of the possible impact of these matters to ensure that students weren't unfairly disadvantaged when reaching their decision on the final grades awarded.

### Question 1

This question examined the area of budgetary planning and control through the preparation of operational budgets with a focus on stock. Generally most candidates presented a number of operational budgets and gained marks accordingly. The production budget presented in some instances included all production costs, rather than focusing on production requirement quantities. Errors did occur in relation to stock calculations included incorrect opening or closing stock calculations. Some candidates did not recognise or deal with the % loss of production. Part (b) required a job cost calculation and while the majority correctly presented this on a unit basis as required by the question, some presented a total contribution calculation.

### Question 2

This question dealt with the marginal costing technique of breakeven analysis and required a number of calculations relative to the information provided. It was good to note that most candidates had knowledge of this area and were able to apply it to an extent. A small number of candidates used € / £60 as the total production cost, rather than the unit production cost as stated. Solutions to part (a) in a small number of scripts were presented as the total projected profit for sales of 750 units rather than the required three individual calculations for 500, 200 and 50 units respectively. In some cases the answer was presented in units when a monetary profit figure was required. Candidates should be careful to read the question requirements and answer accordingly. Generally it seemed that the calculations required in parts (b) and (d) posed more difficulties. The theory section in part (b) was generally well answered.

### Question 3

This question examined the management accounting systems of traditional absorption costing and activity based costing and the poorest overall performance on the paper. This was mainly attributable to a number of errors and the fact that in quite a number of cases the comparison was not carried out as only one costing approach was presented (normally ABC). There was considerable confusion between the two methods and some presented the same results for both approaches. In many instances the calculations focused only on the overhead costs and ignored the direct materials and direct labour information provided for the costing in one or both costings. Some scripts did not provide calculations per unit, but rather presented a total cost or total overhead analysis only. Part (b) relating to the theory was generally better answered illustrating that candidates had some knowledge of the differences but were not able to apply this in the question.

**Question 4**

In keeping with performance at previous sessions, performance on this subject was generally good although part (b) dealing specifically with the fixed overhead variances did cause some problems for quite a number of candidates. The marking schedule awarded marks for candidates' knowledge of the subject that could be demonstrated in providing the variance formulae and then awarded further marks for its application using the information provided.

**Question 5**

This was a straightforward narrative type question requiring a briefing note on the role of the management accountant, how they can support decision making and discussing strategic planning and budgeting. It was good to note that this question was attempted by a good number of candidates and most made a good attempt at dealing with these points, with the standard of presentation and content varying. Some presented a comparison between management and financial accounting, which contained some relevant points but was not tailored to answer the question. A number of submissions described strategic planning as being short term, rather than medium to long term. It is useful to consider the organisation of the solution of narrative question to ensure that each aspect of the requirements is clearly responded to, rather than an extensive narrative on all related theory aspects. Bullet points can be used for presentation in the context of such a report and examples are very useful in practically demonstrating knowledge of the subject.

**Question 6**

This question examined costing of materials with reference to decision making. It required the use of various methods of stock valuation and some candidates did not see past the issue of stock valuation and simply presented these calculations and did attempt to calculate the gross profit as required by the question. Accordingly candidates only attracted some of the marks available. Some errors were made in relation to dealing with opening stock and some solutions saw the closing stock deducted sales to give the gross profit, rather than the cost of sales calculation. The solutions offered for part (b) varied but marks were awarded for relevant discussion. Overall this question attracted the highest average mark on the paper.