Mark Scheme

January 2017
Results

Pearson LCCI (ASE20098) Level 3 Certificate in Cost and Management Accounting

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications are awarded by Pearson, the UK's largest awarding body. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk. Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

Pearson: helping people progress, everywhere

Pearson aspires to be the world's leading learning company. Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Publications code: 51685_ms

ASE20098
January 2017

Question number	Answer AO2 (2)	Mark
1(a)(i)	Margin Materials $27.50 Labour 2.25 x 7.00 = $15.75 **(1)** Overheads (V) $2.50 Overheads (F) 17 100 / 1 200 = **$45.75 (1 of)**	**(2)**

Question number	Answer AO2 (2)	Mark
1(a)(ii)	Absorp Materials $27.50 Labour 2.25 x 7.00 = $15.75 Overheads (V) $2.50 Overheads (F) 17 100 / 1 200 = $14.25 **(1)** **$60.00 (1of)**	**(2)**

Question number	Answer AO2 (10)	Mark
1(b)		**(10)**

	Marginal		**Absorption**	
Revenue		$91 200		$91 200 **(1)**
Cost of Production	$54 900 **(1)**		$72 000 **(1)**	
Closing Inventory	$10 980 **(2)**		$14 400 **(1)**	
Cost of Sales	**(1of)**	$43 920	**(1of)**	$57 600
Gross Profit		$47 280		$33 600
Overheads		$17 100		
Net Profit	**(1of)**	**$30 180**	**(1of)**	**$33 600**

Revenue 960 x $95.00 = $91 200 **(1)**
Cost of Production (marginal) = 1 200 x $45.75 **(of)** = $54 900 **(of)**
Cost of Production (absorption) = 1 200 x $60.00 **(of)** = $72 000 **(of)**
Closing Inventory = 1 200 – 960 = 240 suits **(1)**
Closing Inventory (marginal) = 240 x $45.75 **(of)** = $10 980 **(1 of)**
Closing Inventory (absorption) = 240 x $60.00 **(of)** = $14 400 **(1 of)**

Question number	Answer AO3 (2)	Mark
1(c)	**Answers may include** The difference in profit figures is due to the difference in closing inventory valuations **(1)** – the valuation under absorption costing is $3 420 (of) greater than that under marginal costing which is the same as the difference in the profit ($33 600 against $30 180) **(1of)** The difference in profit figures is due to the difference in closing inventory valuations **(1)** – marginal costing values the remaining 240 suits at $45.75 each while absorption costing values them at $60.00 each **(1of)** Absorption costing gives a higher closing inventory figure than marginal costing **(1)** which reduces the cost of sales and increases Net Profit **(1)** Absorption costing includes all costs whether fixed or variable in its valuation of inventory whereas marginal costing only includes the variable costs **(1)** which reduces the cost of sales and increases Net Profit **(1)** **Maximum 2 marks**	**(2)**

Total for Question 1 = 16 marks

Question number	Answer AO1 (1)	Mark
2(a)(i)	**Answers may include:** **Material price (favourable):** lower quality of material, surpluses on (world) markets, changes in exchange rates, bulk discounts	**(1)**

Question number	Answer AO1 (1)	Mark
2(a)(ii)	**Answers may include:** **Material use (favourable):** higher quality of materials, higher quality of staff, less wastage, few production problems	**(1)**

Question number	Answer AO1 (1)	Mark
2(a)(iii)	**Answers may include:** **Labour efficiency (favourable):** fewer production problems, higher quality of staff, highly motivated staff	**(1)**

Question number	Answer AO2 (2)	Mark
2(b)(i)	**Variance must be correctly stated favourable or adverse** Labour efficiency (3 231 – 3 065) **(1)** x 8.00 = **$1 328 Fav (1)**	**(2)**

Question number	Answer AO2 (2)	Mark
2(b)(ii)	**Variance must be correctly stated favourable or adverse** Labour rate (8.00 – 8.40) **(1)** x 3, 065 = **$1 226 Adv (1)**	**(2)**

Question number	Answer AO2 (2)	Mark
2(b)(iii)	**Variance must be correctly stated favourable or adverse** Fixed overhead expenditure Budgeted Overheads = 2 925 x 12.00 = **$35 100 (1)** Expenditure variance = 35 100 – 36 750 - **$1 650 Adv (1)**	**(2)**

Question number	Answer AO2 (2)	Mark
2(b)(iv)	**Variance must be correctly stated favourable or adverse** Fixed overhead volume 12.00 x (3 231 – 2 925) **(1)** = **$3 672 Fav (1)** Or 5.40 x (7 180 – 6 500) **(1)** = **$3 672 Fav (1)**	**(2)**

Question number	Answer AO2 (3)	Mark
2(c)	Candidates may decide to flex the overhead costs. Materials 30 156 kg x 5.10 = Fixed $153 795.60 Flexed $153 795.60 **(1)** Labour 3 231 hours x 8.00 = Fixed $25 848.00 Flexed $25 848.00 **(1)** Overheads Fixed $35 100.00 Flexed $38 772.00 **$214 743.60** **$218 415.60** **(1of)**	**(3)**

Question number	Answer AO2 (2)	Mark
2(d)(i)	Candidates may have decided to flex the overhead costs in 2(c). Budgeted Profit: Fixed / Flexed Revenue $240 530.00 / $240 530.00 } **1 of for both** Budgeted cost $214 743.60 / $218 415.60 } **Budgeted profit** **$25 786.40** **$22 114.40** **(1of)**	**(2)**

Question number	Answer AO2 (2)	Mark
2(d)(ii)	Actual Profit Revenue $240 530.00 } **(1)for both** Actual cost $210 006.00 } **Actual profit** **$30 524.00** **(1of)**	**(2)**

Question number	Answer AO2 (6)	Mark
2(e)	Candidates may have decided to flex the overhead costs in 2(c).	

	Fixed	
Budgeted Profit	25 786.40	
Material price	4 470.00	**(1)**
Material use	1 815.60	**(1)**
Labour rate	(1 226.00)	**(1of)**
Labour efficiency	1 328.00	**(1of)**
Overhead expenditure	(1 650.00)	**(1of)**
Actual Profit	30 524.00	**(1of)**

(1 of) for both profit figures

	Flexed	
Budgeted Profit	22 114.40	
Material price	4 470.00	**(1)**
Material use	1 815.60	**(1)**
Labour rate	(1 226.00)	**(1of)**
Labour efficiency	1 328.00	**(1of)**
Overhead expenditure	(1 650.00)	**(1of) for both**
Overhead volume	3 672.00	
Actual Profit	30 524.00	**(1of)**

(1of) for both profit figures

(6)

Total for Question 2 = marks

Question number	Answer AO2 (4)	Mark
3(a)(i)	<table><tr><th></th><th>Product D</th><th>Product E</th><th>Product F</th><th>Total</th></tr><tr><td>Contribution</td><td>165 000</td><td>75 000</td><td>120 000</td><td>360 000</td></tr><tr><td>Revenue</td><td>300 000</td><td>150 000</td><td>300 000</td><td>750 000</td></tr><tr><td>C/S Ratio</td><td>55%</td><td>50%</td><td>40%</td><td>48%</td></tr><tr><td></td><td>**(1)**</td><td>**(1)**</td><td>**(1)**</td><td>**(1)**</td></tr></table>	**(4)**

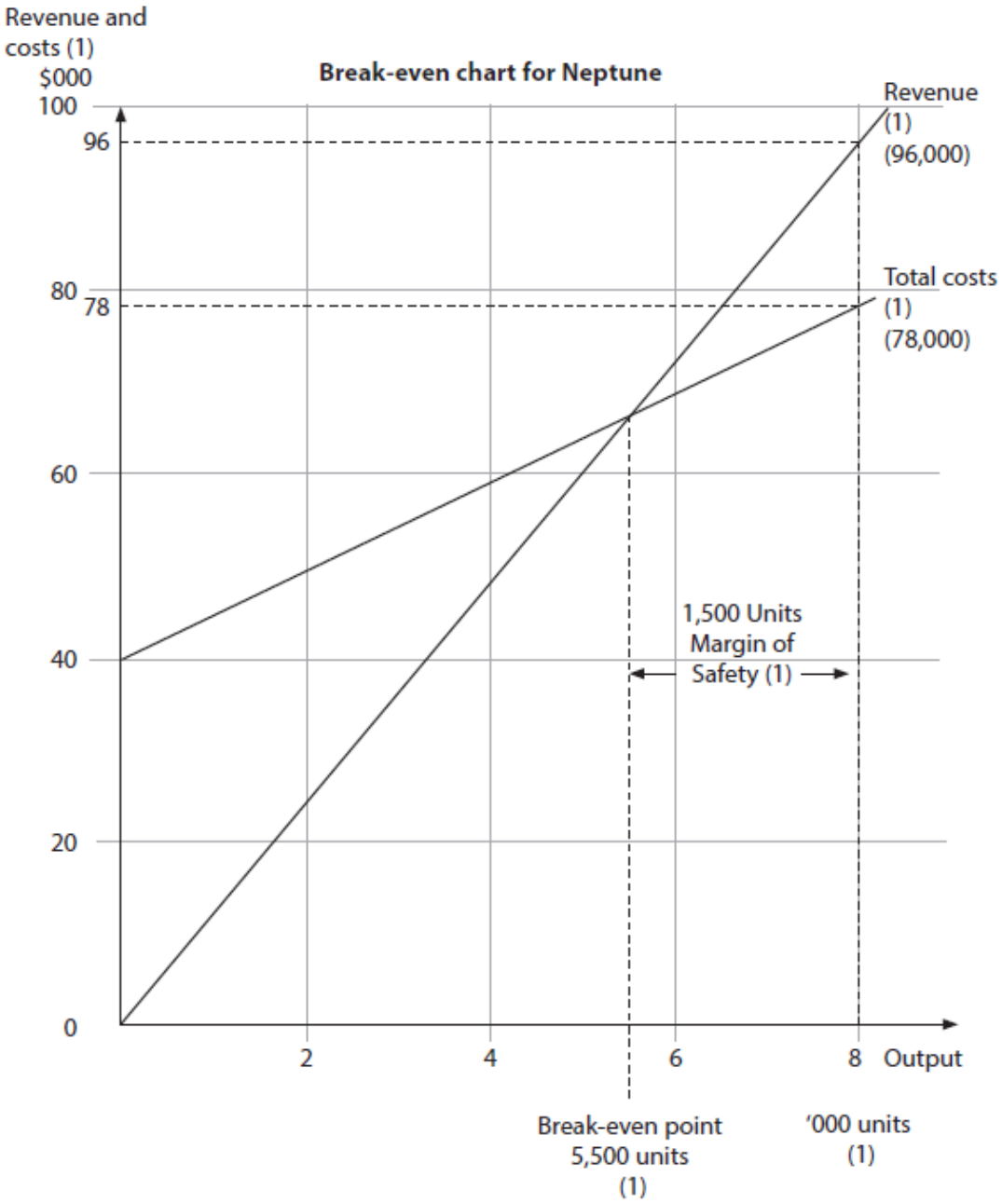
Question number	Answer AO2 (2)	Mark
3(a)(ii)	Break-Even Revenue Turnover = $270 000 / 48% **(1of)** = **$562 500 (1of)**	**(2)**

Question number	Answer AO2 (2)	Mark
3(a)(iii)	Margin of Safety ($) = 750 000 – 562 500 = **$187 500 (1of)** Margin of Safety (%) = $\frac{\$187\ 500}{\$750\ 000}$ x 100 = **25.00% (1of)**	**(2)**

Question number	Answer AO2 (2)	Mark
3(a)(iv)	Budgeted Profit = $360 000 - $270 000 **(1of)** = **$90 000 (1of)**	**(2)**

Question number	Answer AO1 (2) AO3 (2)	Mark
3(b)	**Answers may include: 1 mark for point made, 1 mark for development** It is assumed that the number of units sold of each product is correct **(1)** – changes in product-mix will change the break-even revenue and margins of safety **(1)** It is assumed that selling prices or variable cost per unit will not change as output increases **(1)** – this would change the contribution of the products and therefore the break-even point and profitability **(1)** It is assumed that total fixed costs will not change as output increases **(1)** – this would change the break-even point and profitability **(1)** It is assumed that increases in sales of Product E will not reduce sales of Product D or F **(1)** – this would harm the overall profitability of the business **(1)**	**(4)**

Question number	Answer AO3 (6)	Mark
3(c)	**Marks to be awarded for the following:** **(1)** for an appropriate title that includes 'break-even chart' in it **(1)** for appropriately labelled vertical axis ($) and horizontal axis (units) **(1)** for correctly plotted total cost line **(1)** for correctly plotted revenue line **(1)** for correctly positioned and labelled break-even point (5 500 units) **(1)** for appropriately labelled margin of safety (2 500 units)	**(6)**



Total for Question 3 = 20 marks

Question number	Answer AO2 (7) AO4 (3)	Mark
4(a)	**Award 1 AO4 mark for each apportionment of joint costs** |	kg	$			kg	$	
---	---	---	---	---	---	---	---
Material A	700	4 200	**(1)**	Product X	300	3 168	**(5)**
Material B	500	4 300	both	Product Y	420	3 548	
Labour		1 400	**(1)**	Product Z	340	5 744	
Overheads		2 600	both	By-Prod Q	60	240	**(1)**
Disposal		200	**(1)**	Norm Loss	80	0	**(1)**
	1 200	12 700			1 200	12 700	| Disposal costs = 80 kg x $2.50 = $200 **(1)** **Credit side:** Net Costs = 12 700 – 240 = 12 460 **(1)** Sales proceeds: Product X = 300 x $25 = $7 500 Product Y = 420 x $20 = $8 400 Product Z = 340 x $40 = $13 600 Total = $29 500 **(1)** Apportionment of joint-costs: Product X = (7 500 / 29 500) x $12 460 = $3 168 **(1)** Product Y = (8 400 / 29 500) x $12 460 = $3 548 **(1)** Product Z = (13 600 / 29 500) x $12 460 = $5 744 **(1)**	**(10)**

Question number	Answer AO3 (2) AO4 (2)	Mark
4(b)	Answers might include: • Restrict access to parts of the system **(1)** – this will ensure that only management have access to the most sensitive parts of the system **(1)** • Change passwords regularly **(1)** – this will ensure that passwords are less usable by non-authorised staff or those no longer needing access **(1)** • Password protect information **(1)** – so that it cannot be accidentally written over or changed **(1)** • Back up information **(1)** – to reduce the likelihood of it being deleted or corrupted **(1)** • Introduce log-in / log-out procedures **(1)** – this will reduce likelihood of computers displaying sensitive information when unattended **(1)**	**(4)**

Question number	Answer AO4 (3) AO5 (3)	Mark
4(c)	Answers may include Positive factors: • The various parts of the system use specialist software **(1)** which may produce information in the form that it is required **(1)** or may produce information quickly **(1)** Negative factors: • Information may need to be copied from one part of the system to another **(1)** and this will slow down the production of reports **(1)** and introduce errors **(1)** • Different versions of the same information may be stored in different parts of the systems **(1)** and this may lead to confusion or errors **(1)** that causes poor decisions to be made **(1)** Maximum 4 marks for arguing one side Conclusion : system will or will not produce information that is accurate and up-to date **(1)**	**(6)**

Total for Question 4 = 20 marks

Question number	Answer AO2 (1)	Mark
5(a)(i)	Reorder level = 6 x 90 = **540 kg (1)**	**(1)**

Question number	Answer AO2 (2)	Mark
5(a)(ii)	Minimum level = 540 – (4 x 60) **(1of)** = **300 kg (1of)**	**(2)**

Question number	Answer AO2 (1)	Mark
5(a)(iii)	Reorder quantity = 4 000 – 300 = **3 700 kg (1of)**	**(1)**

Question number	Answer AO2 (2)	Mark
5(a)(iv)	Average Inventory (kg) = 300 + (3 700 / 2) **(1of)** = **2 150 kg (1of)**	**(2)**

Question number	Answer AO2 (1)	Mark
5(a)(v)	Average Inventory ($) = 2 150 kg x $9.60 per kg = **$20 640 (1of)**	**(1)**

Question number	Answer AO1 (1)	Mark
5(b)	EOQ = $\sqrt{\frac{2\,c\,d}{h}}$	**(1)**

Question number	Answer AO1 (4)	Mark
5(c)	**Holding costs** – these are the costs associated with the storage of inventory **(1)** - examples might include: Rental of space, heat & light, staff, depreciation of equipment, security staff, security equipment, financial costs (interest, money tied up), wastage, theft **(1)** **Ordering costs** – these are the costs associated with placing an order for inventory **(1)** - examples might include: Time of person placing the order, telephone costs, postage, delivery costs **(1)**	**(4)**

Question number	Answer AO2 (1)	Mark
5(d)(i)	Standard hours production = 61 180 / 20 = **3 059 hours (1)**	**(1)**

Question number	Answer AO2 (2)	Mark
5(d)(ii)	Efficiency: (3 059 / 2 670) **(1of)** x 100 = **114.57% (1of)**	**(2)**

Question number	Answer AO2 (3)	Mark
5(d)(iii)	16 workers x 175 = 2 800 hours **(1)** Capacity: (2 670 / 2 800) **(1)** x 100 = **95.36% (1)**	**(3)**

Question number	Answer AO2 (2)	Mark
5(d)(iv)	Volume: (3 059 / 2 800) **(1of)** x 100 = **109.25% (1of)**	**(2)**

Total for Question 5 = 20 marks

TOTAL FOR PAPER = 100 MARKS