



Hong Kong Institute of
Accredited Accounting Technicians
香港財務會計協會

Accredited Accounting Technician Examination

Pilot Examination Paper

Paper 3 Management Accounting

Questions & Answers Booklet

The Suggested Answers given in this booklet are purposely made to give more details for educational purpose.

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Paper 3 Management Accounting

Time allowed – 3 hours

Section A: Multiple-choice Questions – Attempt all 15 Questions

Section B: Compulsory Question – Attempt the Question

Section C: Optional Questions – Attempt any 2 out of 3 Questions

**DO NOT OPEN THIS QUESTION PAPER UNTIL
INSTRUCTED TO DO SO BY THE SUPERVISOR**

SECTION A (MULTIPLE-CHOICE QUESTIONS) (20 marks)

Answer **ALL** questions in this section. Choose the best answer for each question.
Marks will not be deducted for incorrect answers.

(Questions A1 to A10 carry 1 mark each. Total: 10 marks)

A1. The following data relates to the repair and maintenance department of Pluto Automobile Company for the past four months:

<u>Month</u>	<u>Total operating costs (\$)</u>	<u>Labour hours</u>
2008 Jan	120,000	10,000
Feb	150,000	12,000
Mar	160,000	15,000
Apr	180,000	16,000

What is the best estimate of the department's fixed costs per month?

- A \$10
- B \$20,000
- C \$60,000
- D \$160,000

A2. Juniper Limited's budgeted overhead in the last period was \$170,000. Its overhead absorbed and incurred for the same period were \$180,000 and \$195,000 respectively. What is its amount of over- or under-absorption of overhead?

- A Under-absorption of \$15,000
- B Under-absorption of \$25,000
- C Over-absorption of \$15,000
- D Over-absorption of \$25,000

A3. Which of the following budgets is one which is designed to adjust the budgeted costs levels to suit the level of activity actually attained?

- A Fixed budget
- B Flexible budget
- C Production budget
- D Rolling budget

A4. Planet Limited commenced its business on 1 January 2007. It produced 100,000 units and sold 90,000 units in 2007. The fixed production overhead for 2007 was \$30,000 and the operating profit for 2007 using marginal costing system was \$200,000. What would have been the operating profit for 2007 if absorption costing system had been used?

- A \$170,000
- B \$197,000
- C \$203,000
- D \$230,000

A5. Which of the following are the characteristics of management accounting?

- (1) It must follow generally accepted accounting principles.
- (2) It is concerned with information for the internal use of management.
- (3) It emphasises relevance and flexibility of data.

- A (1) and (2)
- B (1) and (3)
- C (2) and (3)
- D (1), (2) and (3)

A6. Sharona Company is considering the use of 2,500 kg of material X in a special order. 2,000 kg of the material at a cost of \$120,000 is available from stock due to previous over-purchase. Material X can be used as a substitute for material Z, which costs \$63 per kg. The replacement cost of material X is \$65 per kg.

What is the relevant cost of material X in the evaluation of the special order?

- A \$157,500
- B \$158,500
- C \$161,500
- D \$162,500

A7. Remuneration based on piece work is not suitable when:

- (1) the amount of output cannot be accurately measured.
- (2) the nature of work is repetitive.
- (3) the quantity of work is more important than quality.

- A (1) only
- B (3) only
- C (1) and (3)
- D (2) and (3)

- A8.** Brave World Civil Engineering Company Limited has the following data concerning one of its construction contracts as at 31 March 2008.

Contract price	\$2,000,000
Contract cost incurred to date	\$1,200,000
Estimated further cost to complete contract	\$400,000
Progress billing to-date	\$1,000,000
Progress payments received to-date	\$700,000

What is the stage of completion of the contract as at 31 March 2008?

- A 60%
B 70%
C 75%
D 80%
- A9.** Which of the following costing methods is most likely to be used by a furniture store involved in the production and supply of furniture?

- A Process costing
B Job costing
C Contract costing
D Batch costing

- A10.** Natalie Limited uses standard absorption costing. The following data relate to the last period:

Standards per unit of product:	
Direct materials	2 kg at \$50 per kg
Actual for last period	
Output produced in units	10,000
Direct materials purchased	22,000 kg at \$1,210,000
Direct materials issued to production	19,000 kg

What is the material price variance for the last period?

- A \$45,000 adverse
B \$95,000 adverse
C \$100,000 adverse
D \$110,000 adverse

(Questions A11 to A15 carry 2 marks each. Total: 10 marks)

Use the following information to answer Questions A11 to A12

Venus Manufacturing Company produces three models of handmade vases, P1, P2 and P3. All products are made by skilled labour. Since it requires a long period of training and the remuneration is not so attractive, no new workers are willing to join the industry. As a result, labour hours are anticipated to be restricted at 20,000 in the coming year. Labour is paid at an hourly rate of \$30.

Information regarding the production and sales for the coming year is as follows.

	<u>P1</u>	<u>P2</u>	<u>P3</u>
Budgeted demand	7,000 units	6,000 units	4,000 units
<u>Per unit</u>	\$	\$	\$
Selling price	300	400	390
Direct materials	110	60	50
Direct labour	30	60	120
Variable production overhead	70	85	35
Variable selling overhead	30	45	25

A11. What is the optimal production plan for the three products?

- A 4,000 units P1 and 4,000 units P3
- B 7,000 units P1, 6,000 units P2 and 250 units P3
- C 2,000 units P2 and 4,000 units P3
- D 6,000 units P2 and 2,000 units P3

A12. What is the optimal production plan if the company has a policy of devoting at least 20% and not more than 50% of its available skilled labour capacity to each of the three products?

- A 4,000 units P1, 3,000 units P2 and 2,500 units P3
- B 4,000 units P1, 5,000 units P2 and 3,000 units P3
- C 6,000 units P1, 5,000 units P2 and 1,000 units P3
- D 10,000 units P1, 3,000 units P2 and 1,000 units P3

Use the following information to answer Questions A13 to A15

Product Zeta is produced by mixing and processing two materials: X and Y. The standard mix to produce one unit of Zeta is 7 kg of material X at \$8 per kg and 3 kg of material Y at \$6 per kg.

In a period, 800 units of Zeta were produced and the material costs incurred were as follows:

	\$
5,000 kg of material X	41,000
3,200 kg of material Y	<u>17,600</u>
	<u>58,600</u>

A13. What is the price variance for each of the two materials?

	<u>Material X</u>	<u>Material Y</u>
A	\$1,000 Adverse	\$1,600 Favourable
B	\$1,000 Favourable	\$1,600 Adverse
C	\$1,120 Adverse	\$1,200 Favourable
D	\$1,120 Favourable	\$1,200 Adverse

A14. What is the mix variance for each of the two materials?

	<u>Material X</u>	<u>Material Y</u>
A	\$4,800 Adverse	\$4,800 Favourable
B	\$4,800 Favourable	\$4,800 Adverse
C	\$5,920 Adverse	\$4,440 Favourable
D	\$5,920 Favourable	\$4,440 Adverse

A15. What is the yield variance for each of the two materials?

	<u>Material X</u>	<u>Material Y</u>
A	\$1,120 Adverse	\$360 Adverse
B	\$1,120 Adverse	\$360 Favourable
C	\$1,120 Favourable	\$360 Adverse
D	\$1,120 Favourable	\$360 Favourable

(Total: 20 marks)

[END OF SECTION A]

SECTION B (COMPULSORY QUESTION) (30 marks)

Answer the question in this section. Marks are indicated at the end of the question.

All numerical solutions should be rounded up to two decimal places unless specified otherwise in the question.

B1. Saturn Industrial Limited has the following information relating to one of its production processes for the month of March 2008:

(1) Opening work in progress was 2,000 units at \$24,800 and its breakdown was:

	Degree of Completion	\$
Materials input	100%	12,000
Labour	40%	10,000
Overheads	30%	<u>2,800</u>
		<u>24,800</u>

(2) Costs incurred during the period were:

Materials input	10,000 units at \$72,500
Labour	\$36,000
Overheads	\$25,800

(3) Closing work in process were 3,000 units and their degree of completion of individual components were:

Materials input	100%
Direct labour	60%
Overheads	40%

(4) Normal loss was 10% of the materials input during current period. The scrap value of loss was \$5 per unit. 1,200 units were actually scrapped during the month. It is the company's cost accounting policy to deduct the scrap value of normal loss from the cost of materials input in the current process.

REQUIRED:

(a) Prepare the following accounts for the month of March 2008 using the first in first out method. Detailed workings on equivalent units and the cost per equivalent unit of individual cost elements must be shown.

- (i) Process account; and
- (ii) Abnormal loss account.

(25 marks)

(b) Briefly explain what are meant by normal losses and abnormal losses.

(5 marks)

(Total: 30 marks)

REQUIRED:

For Mercury Manufacturing Limited, prepare the following budgets (a) to (h) for 2009:

- (a) Sales budget for each of the two products; (2 marks)**
- (b) Production budget (in units) for each of the two products; (4 marks)**
- (c) Direct material purchase budget for each of the two materials; (3 marks)**
- (d) Direct labour budget for each of the two products; (2 marks)**
- (e) Pre-determined factory overhead absorption rate; (1 mark)**
- (f) Factory cost of goods produced showing all cost elements for each of the two products; (5 marks)**
- (g) Unit production costs for each of the two products, rounded to dollar amount; and (1 mark)**
- (h) Budgeted cost of goods sold for each of the two products. (3 marks)**
- (i) Explain the reason why some companies normally prepare the sales budget first among all functional budgets while the other companies start with the labour or other budget first in the budgetary planning process. (4 marks)**

(Total: 25 marks)

C2. (a) Neptune Company currently purchases 1,500 units of material Alpha at a time and makes 8 orders a year. It is reviewing its stock policy and has considered the following alternatives for re-order quantity of material Alpha.

- (1) Purchase 1,000 units at a time
- (2) Purchase 2,000 units at a time
- (3) Purchase 2,400 units at a time

It is ascertained that the purchase price per unit is \$10 for deliveries up to 1,000 units. A 5% discount is offered by the supplier on the whole order where deliveries are from 1,001 up to 2,000 units, and 10% reduction on the total order for deliveries in excess of 2,000 units.

Each purchase order incurs administration costs of \$50. Storage, interest on capital and other holding costs are \$3 per unit of average stock quantity held.

REQUIRED:

Advise management on the optimum order size amongst the alternatives.

(7 marks)

(b) Uranus Optical Company Limited manufactures and sells a single type of digital camera at a unit selling price of \$1,250. The company's budgeted sales for next accounting year is 36,000 units, which represent 60% of its capacity, and the budgeted production information of 36,000 units is as follows:

	\$'000
Direct materials	17,810
Direct labour	540
Production overheads : fixed	12,590
: variable	1,226
Selling overheads : fixed	2,110
: variable	224
	34,500

REQUIRED:

(i) Calculate the breakeven point in units and the margin of safety in dollar.
(5 marks)

(ii) The marketing director proposes to expand the sales to 80% of the company's output capacity by cutting the selling price by 10% and spending \$3,000,000 more on advertising. Advise management whether the proposal would increase the company's profitability and should be adopted.

(8 marks)

(c) Explain the possible interrelationship between the direct material price and usage variance as well as the direct labour rate and efficiency variance.

(5 marks)

(Total: 25 marks)

- C3.** Jupiter Silverware Products Limited is a leading manufacturer of silver picture frames. The company used a traditional costing system to allocate production overheads to products using machine hours.

The newly appointed financial controller believes that activity based costing would provide a better allocation of production overheads to products than the current system. You are provided with the following total production overheads for the last period recorded by the cost accounting system.

	\$
Utility costs related to machine hours	189,000
Production set up costs	120,000
Cost of ordering materials	18,000
Cost of handling materials	33,000

Details of the three models of products and relevant actual information for the last period are also provided as follows.

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>
Number of production runs	17	25	18
Number of material orders	20	30	40
Number of material requisitions	30	100	70
Units produced	1,000	2,000	2,500
Machine hours per unit	1	1.5	2
Direct labour hours per unit (\$60 per hour)	0.5 hour	1 hour	2 hours
Direct material per unit	\$10	\$12	\$15

REQUIRED:

- (a) Calculate the unit production cost of each of the three products using
- (i) the traditional absorption costing, and
 - (ii) the activity based costing approach respectively.
- (20 marks)
- (b) Comment on the calculations in part (a) above and explain why the activity based costing approach is superior to traditional absorption costing.
- (5 marks)
- (Total: 25 marks)

[END OF EXAMINATION PAPER]

Suggested Answers

Pilot Examination Paper

Paper 3

Management Accounting

SECTION A (MULTIPLE-CHOICE QUESTIONS) (20 marks)

(Questions A1 to A10 carry 1 mark each. Total: 10 marks)

- A1. B
- A2. A
- A3. B
- A4. C
- A5. C
- A6. B
- A7. A
- A8. C
- A9. B
- A10. D

(Questions A11 to A15 carry 2 marks each. Total: 10 marks)

- A11. B
- A12. C
- A13. A
- A14. D
- A15. A

(Total: 20 marks)

SECTION B (COMPULSORY QUESTION) (30 marks)

B1. (a) Calculation of equivalent unit and cost per equivalent unit:

	<u>Materials input</u>	<u>Labour</u>	<u>Overheads</u>
Completed units (W1)	7,800	7,800	7,800
Closing work in progress (WIP)	3,000	1,800	1,200
Abnormal loss (W2)	200	200	200
Opening WIP	<u>(2,000)</u>	<u>(800)</u>	<u>(600)</u>
Equivalent units	<u>9,000</u>	<u>9,000</u>	<u>8,600</u>
	[2 marks]	[2 marks]	[2 marks]
Costs	(W3) \$67,500	\$36,000	\$25,800
	[1 mark]	[0.5 mark]	[0.5 mark]
Cost per equivalent unit	\$7.5	\$4	\$3
	[0.5 mark]	[0.5 mark]	[0.5 mark]

Process account

Marks		Units	\$		Units	\$	Marks
[1]	Opening WIP	2,000	24,800	To next process (W5)	7,800	117,900	[0.5]
[1]	Materials input	10,000	72,500	Normal loss	1,000		[1]
[0.5]	Labour		36,000	Scrap value		5,000	[1]
[0.5]	Overheads		25,800	Abnormal loss	200	2,900	[1]
				Closing WIP (W4)	3,000	33,300	[0.5]
		<u>12,000</u>	<u>159,100</u>		<u>12,000</u>	<u>159,100</u>	

Abnormal loss

Marks		Units	\$		Units	\$	Marks
[1]	Process	200	2,900	Scrap value	200	1,000	[1]
				Profit and loss		1,900	[1]
		<u>200</u>	<u>2,900</u>		<u>200</u>	<u>2,900</u>	

Workings:

(W1) $(2,000 + 10,000 - 1,200 - 3,000)$ units = 7,800 units

(W2) $(1,200 - 10,000 \times 10\%)$ units = 200 units

(W3) Materials input costs \$72,500
 Less: Scrap value $(1,000 \times \$5)$ 5,000
67,500

(W4)	Closing WIP valuation		Marks
	Materials input (3,000 × \$7.5)	\$22,500	[1]
	Labour (1,800 × \$4)	7,200	[1]
	Overheads (1,200 × \$3)	3,600	[1]
		33,300	

(W5)	Valuation of completed units to next process		Marks
	Opening WIP	\$24,800	[0.5]
	Costs incurred during current period		
	Labour (2,000 × 60% × \$4)	4,800	[0.5]
	Overheads (2,000 × 70% × \$3)	4,200	[0.5]
	Units started and completed in current period		
	[(7,800 – 2,000) × \$14.5]	84,100	[1]
		117,900	

(25 marks)

- (b)** Losses during processing may arise due to liquids evaporating or wastage during the cutting and forming of metal. **[1 mark]** Normal losses are the losses that are inevitable and expected even in a very efficient process. **[2 marks]** When actual losses in a process are great than the normal expected losses, it is possibly due to poor workmanship and sub-standard materials etc. The difference between the actual losses and the expected normal losses are the abnormal losses. **[2 marks]**

(5 marks)

(Total: 30 marks)

SECTION C (OPTIONAL QUESTIONS) (50 marks)

C1. (a) Sales budget

Product	Quantity	Price	Sales	Marks
P1	6,000	\$500	\$3,000,000	[1]
P2	4,800	\$1,000	<u>4,800,000</u>	[1]
			<u>7,800,000</u>	

(2 marks)

(b) Production budget (in units)

	P1 Units	P2 Units	Marks
Budgeted sales	6,000	4,800	[1]
Budgeted stock increase (decrease)	<u>650</u>	<u>(50)</u>	[1]
	6,650	4,750	
5% loss on output (5/95)	<u>350</u>	<u>250</u>	[1]
Production budget	<u>7,000</u>	<u>5,000</u>	[1]

(4 marks)

(c) Direct material purchase budget

	M3 kg	M4 Kg	Marks
To produce:			
7,000 units of P1 (7,000 × 10)	70,000	(7,000 × 5) 35,000	
5,000 units of P2 (5,000 × 6)	<u>30,000</u>	(5,000 × 8) <u>40,000</u>	
Direct material usage	100,000	75,000	[1]
Increase (decrease) in stock	<u>(8,000)</u>	<u>2,000</u>	
Direct material purchases	<u>92,000</u>	<u>77,000</u>	[1]
Price per kg	\$10	\$12	
Purchase costs	<u>\$920,000</u>	<u>\$924,000</u>	[1]

(3 marks)

(d) Direct labour budget

Product	Hours		\$	Marks
P1 (7,000 × 30 / 60)	3,500	at \$120	420,000	[1]
P2 (5,000 × 45 / 60)	<u>3,750</u>	at \$120	<u>450,000</u>	[1]
	<u>7,250</u>		<u>870,000</u>	

(2 marks)

(e) Pre-determined factory overhead absorption rate:

Budgeted factory overheads / Budgeted direct labour hours
 = \$362,500 / 7,250 hours = \$50 per hour (1 mark)

(f) and (g) Factory cost of goods produced and unit factory cost:

		P1		P2	Marks
		\$		\$	
Direct materials:					
M3	(70,000 × \$10)	700,000	(30,000 × \$10)	300,000	[1]
M4	(35,000 × \$12)	<u>420,000</u>	(40,000 × \$12)	<u>480,000</u>	[1]
		1,120,000		780,000	
Direct labour		420,000		450,000	[1]
Factory overheads	(3,500 × \$50)	<u>175,000</u>	(3,750 × \$50)	<u>187,500</u>	[1]
Total factory cost		<u>1,715,000</u>		<u>1,417,500</u>	[1]
Good output units		6,650		4,750	
Unit factory cost		\$258		\$298	[1]

(6 mark)

(h) Budgeted cost of goods sold:

		P1		P2	Marks
		\$		\$	
Opening stock		144,000		182,000	
Production cost		<u>1,715,000</u>		<u>1,417,500</u>	
		1,859,000		1,599,500	[1]
Less: Closing stock	(1,250 × \$258)	<u>322,500</u>	(650 × \$298)	<u>193,700</u>	[1]
Cost of goods sold		<u>1,536,500</u>		<u>1,405,800</u>	[1]

(3 marks)

(i) The budgetary planning process usually starts with sales budget because a company is usually restricted from making and selling more of its products. Under this assumption, sales demand is the principal budget factor, in which it restricts the performance or level of activity of a company. **[2 marks]** The other limiting factors could be machine capacity, distribution and selling resources, the availability of key raw materials or labour. **[1 mark]** However, if the principal budget factor is the availability of labour, the first functional budget to prepare is the labour budget, in which a company needs to consider how the limited labour hours are assigned to the optimal mix of products to maximise its profit. **[1 mark]**

(4 marks)

(Total: 25 marks)

C2. (a) Schedule of relevant costs:

<u>Size of order</u>	<u>Annual order costs</u>	<u>Annual purchase cost</u>	<u>Annual holding cost</u>	<u>Total relevant costs</u>	<u>Marks</u>
	\$	\$	\$	\$	
1,000	12 × \$50 = 600	12,000 × \$10 = 120,000	500 × \$3 = 1,500	122,100	[1.5]
1,500	8 × \$50 = 400	12,000 × \$10 × 95% = 114,000	750 × \$3 = 2,250	116,650	[1.5]
2,000	6 × \$50 = 300	12,000 × \$10 × 95% = 114,000	1,000 × \$3 = 3,000	117,300	[1.5]
2,400	5 × \$50 = 250	12,000 × \$10 × 90% = 108,000	1,200 × \$3 = 3,600	111,850	[1.5]

It is recommended that 2,400 units should be ordered at a time because it gives the lowest total relevant costs. [1 mark]

(7 marks)

(b) (i) Variable costs:

	\$'000
Direct materials	17,810
Direct labour	540
Production overheads: variable	1,226
Selling overheads: variable	224
	<u>19,800</u>

Variable costs per unit: \$19,800,000 / 36,000 = \$550 [1.5 marks]

Contribution per unit: \$1,250 – \$550 = \$700 [0.5 mark]

Breakeven point in units: \$(12,590,000 + 2,110,000) / 700 = 21,000 units [1 mark]

Margin of safety in dollar sales: (36,000 – 21,000) × \$1,250 = \$18,750,000 [2 marks]

(5 marks)

(ii) Current situation:

	\$'000	Marks
Total contribution (\$700 × 36,000)	25,200	[1]
Less: Fixed costs (12,590,000 + 2,110,000)	<u>14,700</u>	[1]
Net profit	<u>10,500</u>	[0.5]

New proposal:

Revised sales volume: 36,000 units × 80 / 60 = 48,000 units [1 mark]

Revised selling price per unit: \$1,250 × 90% = \$1,125 [0.5 mark]

Revised contribution per unit: \$1,125 – \$550 = \$575 [0.5 mark]

	\$'000	Marks
Total contribution (\$575 × 48,000)	27,600	[1]
Less: Fixed costs (12,590,000 + 2,110,000 + 3,000,000)	<u>17,700</u>	[1]
Net profit	<u>9,900</u>	[0.5]

The proposal from the marketing director should not be adopted as it will lower the company's profit by \$600,000 (\$10,500,000 – \$9,900,000). [1 mark]

(8 marks)

- (c) The favourable direct material price rate variance might be due to the use of an inferior material bought at a lower rate and excessive wastage might occur as reflected by the adverse direct material usage variance. **[2 marks]** The favourable direct labour rate variance might be due to the use of less skilled labour employed at a lower rate and goods were produced less efficiently as reflected by the adverse direct labour efficiency variance. **[2 marks]** Moreover, the use of an inferior material might contribute to the adverse direct labour efficiency variance as direct labour were used in the production process even though some output items were rejected because of the poor material quality. **[1 mark]**

(5 marks)

(Total: 25 marks)

C3. (a) (i) Using traditional absorption costing:

Total machinery hours in the period:

	Hours	
Model 1 (1,000 × 1)	1,000	
Model 2 (2,000 × 1.5)	3,000	
Model 3 (2,500 × 2)	<u>5,000</u>	
	<u>9,000</u>	[2 marks]

Production overhead absorption rate:

$$\$ (189,000 + 120,000 + 18,000 + 33,000) / 9,000 = \$40 \text{ per machine hour}$$

[1 mark]

Cost summary

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	Marks
Per unit:	\$	\$	\$	
Direct materials	10	12	15	[1]
Direct labour	<u>30</u>	<u>60</u>	<u>120</u>	[1]
Prime costs	40	72	135	
Production overheads (\$40 per machine hour)	<u>40</u>	<u>60</u>	<u>80</u>	[1]
Unit production costs	<u>80</u>	<u>132</u>	<u>215</u>	[1]
Units produced	1,000	2,000	2,500	
Total production overheads absorbed	<u>40,000</u>	<u>120,000</u>	<u>200,000</u>	

(7 marks)

(ii) Using activity based costing:

Calculation of cost driver rates:

	\$	Marks
Utility costs per machine hour (\$189,000 / 9,000)	21	[1.5]
Set up cost per production run (\$120,000 / 60)	2,000	[1.5]
Cost of ordering per order (\$18,000 / 90)	200	[1.5]
Cost of material handling per requisition (\$33,000 / 200)	165	[1.5]

<u>Cost summary</u>				
	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	Marks
	\$	\$	\$	
Production overheads:				
Utility costs (\$21 per machine hour)	21,000	63,000	105,000	[1]
Set up cost (\$2,000 per production run)	34,000	50,000	36,000	[1]
Cost of ordering (\$200 per order)	4,000	6,000	8,000	[1]
Cost of material handling (\$165 per requisition)	<u>4,950</u>	<u>16,500</u>	<u>11,550</u>	[1]
	<u>63,950</u>	<u>135,500</u>	<u>160,550</u>	
Units produced	<u>1,000</u>	<u>2,000</u>	<u>2,500</u>	
Per unit:	\$	\$	\$	
Production overheads	63.95	67.75	64.22	[1]
Prime costs	<u>40.00</u>	<u>72.00</u>	<u>135.00</u>	[1]
Production costs	<u>103.95</u>	<u>139.75</u>	<u>199.22</u>	[1]

(13 marks)

- (b)** Activity based costing (ABC) charges more overheads to lower volume production (Model 1) and relatively less to higher volume production (Model 3). Traditional absorption costing approach penalises products in high volume (volume based overhead allocation method). In fact some factory activities are not associated with production volume. **[2 marks]**

Traditional absorption costing approach is used for a narrow range of products and overhead costs accounted for a relatively small proportion of total costs. The nature of some overhead costs has also changed in today's industries due to automation. Production overheads now take up a relatively larger proportion of total costs. ABC recognises that costs may be analysed by activities rather than production volume. ABC provides a better allocation of overhead costs in a more precise manner based on cause-and-effect relationship. **[3 marks]**

(5 marks)

(Total: 25 marks)

[END OF SUGGESTED ANSWERS]