

General Comments

Overall candidates' performance was disappointing and below that achieved in the first examination of this paper.

Performance in the multiple choice questions in the first part of Section A, worth 20 marks, was generally satisfactory. However, many candidates failed to attempt all of the short-form questions in the remaining part of section A, worth 30 marks. Questions 1.14, 1.15 and 1.16 were generally attempted but all of the other questions were omitted on occasions, especially questions 1.17 and 1.18.

Many candidates had difficulty with questions 1.12 to 1.16 which all covered mainstream topics and techniques. Overall, the performance in these short-form questions was disappointing, partly as a result of the failure to answer all parts.

Candidates' performance in the largely narrative question 2 (Section B – also a compulsory question) was, apart from the answers to part (a), also disappointing. A common problem was the failure of candidates to read carefully, and/or respond to, the specific questions asked.

In Section C question 3 was much more popular than question 4. While some excellent answers were submitted for both questions, many candidates provided poor or incomplete answers.

Candidates must try to manage the time spent on questions according to the marks available. In both Sections B and C candidates are advised to study more carefully what is being asked and to improve their ability to apply management accounting principles to the particular circumstances described in the questions.

Section A – 50 marks

The following data are given for sub-questions 1.1 and 1.2 below.

The following data relate to a manufacturing company. At the beginning of August there was no inventory. During August 2,000 units of product X were produced, but only 1,750 units were sold. The financial data for product X for August were as follow:

	£
Materials	40,000
Labour	12,600
Variable production overheads	9,400
Fixed production overheads	22,500
Variable selling costs	6,000
Fixed selling costs	<u>19,300</u>
Total costs for X for August	<u>109,800</u>

Question 1.1

The value of inventory of X at 31 August using a marginal costing approach is

- A** £6,575
- B** £7,750
- C** £8,500
- D** £10,562

(2 marks)

The answer is **B**

Workings

Marginal cost of inventory is an approximation of variable production cost of £62,000.
1/8th production in inventory = £7,750

Question 1.2

The value of inventory of X at 31 August using a throughput accounting approach is

- A £5,000
- B £6,175
- C £6,575
- D £13,725

(2 marks)

The answer is **A**

Workings

Throughput approach values inventory at direct materials cost = $1/8^{\text{th}}$ of £40,000 = £5,000

Question 1.3

1.3 A company has a budget to produce 5,000 units of product B in December. The budget for December shows that for Product B the opening inventory will be 400 units and the closing inventory will be 900 units. The monthly budgeted production cost data for product B for December is as follows:

Variable direct costs per unit	£6.00
Variable production overhead costs per unit	£3.50
Total fixed production overhead costs	£29,500

The company absorbs overheads on the basis of the budgeted number of units produced.

The budgeted profit for product B for December, using **absorption costing**, is

- A £2,950 lower than it would be using **marginal costing**.
- B £2,950 greater than it would be using **marginal costing**.
- C £4,700 lower than it would be using **marginal costing**.
- D £4,700 greater than it would be using **marginal costing**.

(2 marks)

The answer is **B**

Workings

Absorption costing overhead rate is $£29,500 / 5,000 \text{ units} = £5.90 \text{ per unit}$
Absorption costing profit greater by $£5.90 \times 500 \text{ units} = £2,950$

Question 1.4

Y has set the current budget for operating costs for its delivery vehicles, using the formula described below. Analysis has shown that the relationship between miles driven and total monthly vehicle operating costs is described in the following formula:

$$y = £800 + £0.0002x^2$$

where

y is the total monthly operating cost of the vehicles, and
x is the number of miles driven each month

The budget for vehicle operating costs needs to be adjusted for expected inflation in vehicle operating costs of 3%, which is not included in the relationship shown above.

The delivery mileage for September was 4,100 miles, and the total actual vehicle operating costs for September were £5,000.

The total vehicle operating cost variance for September was closest to

- A £713 Adverse
- B £737 Adverse
- C £777 Adverse
- D £838 Adverse

(2 marks)

The answer is **A**

Workings

$y = £800 + (0.0002 \times 4,100^2) = £4,162$
Total budgeted vehicle costs are $£4,162 \times 1.03 = £4,287$
Variance is $£4,287 - £5,000 = £713$ adverse

Question 1.5

The CIMA official definition of the “variable production overhead efficiency variance” is set out below with two blank sections.

“Measures the difference between the variable overhead cost budget flexed on _____ and the variable overhead cost absorbed by _____.”

Which combination of phrases correctly completes the definition?

	<i>Blank 1</i>	<i>Blank 2</i>
A	actual labour hours	budgeted output
B	standard labour hours	budgeted output
C	actual labour hours	output produced
D	standard labour hours	output produced

(2 marks)

The answer is **C**

The following data are given for sub-questions 1.6 to 1.8 below.

The following data relate to Product Z and its raw material content for September.

<i>Budget</i>	
Output	11,000 units of Z
Standard materials content	3 kg per unit at \$4.00 per kg

<i>Actual</i>	
Output	10,000 units of Z
Materials purchased and used	32,000 kg at \$4.80 per kg

It has now been agreed that the standard price for the raw material purchased in September should have been \$5 per kg.

Question 1.6

1.6 The materials planning price variance for September was

- A** \$6,000 Adverse
- B** \$30,000 Adverse
- C** \$32,000 Adverse
- D** \$33,000 Adverse

(2 marks)

The answer is **B**

Workings

Planning price variance
 $30,000 \times (\$4.00 - \$5.00) = \$30,000$ adverse

Question 1.7

The materials operational usage variance for September was

- A \$8,000 Adverse
- B \$9,600 Adverse
- C \$9,600 Favourable
- D \$10,000 Adverse

(2 marks)

The answer is **D**

Workings

Operational usage variance
 $[30,000 - 32,000] \times \$5.00 = \$10,000$ adverse

Question 1.8

The materials operational price variance for September was

- A \$6,000 Adverse
- B \$6,400 Favourable
- C \$30,000 Adverse
- D \$32,000 Adverse

(2 marks)

The answer is **B**

Workings

Operational price variance
 $32,000 \times [\$5.00 - \$4.80] = \$6,400$ favourable

Question 1.9

A company operates a just-in-time purchasing and production system and uses a backflush accounting system with a single trigger point at the point of sale. A summary of the transactions that took place in June (valued at cost) is:

	£
Conversion costs incurred	890,000
Finished goods produced	1,795,000
Finished goods sold	1,700,000
Conversion costs allocated	840,000

The two items debited to the cost of goods sold account in June would be

- | | £ | | £ |
|----------|-----------|-----|--------|
| A | 890,000 | and | 95,000 |
| B | 1,700,000 | and | 50,000 |
| C | 1,700,000 | and | 95,000 |
| D | 1,795,000 | and | 50,000 |

(2 marks)
The answer is **B**

Workings

Items debited to Cost of Goods Sold account will be:

Finished goods sold £1,700,000

Difference between conversion costs incurred and conversion costs allocated,
that is, £890,000 - £840,000 = £50,000

Question 1.10

Division Y has reported annual operating profits of £40.2 million. This was after charging £6 million for the full cost of launching a new product that is expected to last three years. Division Y has a risk adjusted cost of capital of 11% and is paying interest on a substantial bank loan at 8%. The historical cost of the assets in Division Y, as shown on its balance sheet, is £100 million, and the replacement cost has been estimated at £172 million.

Ignore the effects of taxation.

The EVA[®] for Division Y is

- A £23.28 million
- B £25.28 million
- C £29.20 million
- D £30.44 million

(2 marks)

The answer is **B**

Workings

Adjustments needed are:

1. for launch costs – spread over 3 years; and
2. need to use replacement cost of net assets.

So EVA = (£40.2 million + £4 million) – (£172 million x 11%) = £25.28 million.

Question 1.11

Z plc has found that it can estimate future sales using time-series analysis and regression techniques. The following trend equation has been derived:

$$y = 25,000 + 6,500x$$

where y is the total sales units per quarter, and
 x is the time period reference number.

Z has also derived the following set of seasonal variation index values for each quarter using a multiplicative (proportional) model:

Quarter 1	70
Quarter 2	90
Quarter 3	150
Quarter 4	90

Using the above model, calculate the forecast for sales units for the third quarter of year 7, assuming that the first quarter of year 1 is time period reference number 1.

(3 marks)

Workings

$x = 27$ so trend value is $25,000 + (6,500 \times 27) = 200,500$ units

Quarter 3 adjustment is 150%, so forecast is 300,750 units

Question 1.12

Three products P, Q and R are produced together in a common process. Products P and Q are sold without further processing, but product R requires an additional process before it can be sold. No inventories are held. There is no loss of volume in the additional process for product R.

The following data apply to March.

<i>Output</i>	Product P	3,600 litres
	Product Q	4,100 litres
	Product R	2,800 litres
<i>Selling prices</i>	Product P	£4.60 per litre
	Product Q	£6.75 per litre
	Product R	£10.50 per litre
	Costs incurred in the common process	£42,500
	Costs incurred in the additional process for R	£19,600

Calculate the value of the common process costs that would be allocated to product R using the sales proxy method (notional sales value method).

(3 marks)

Workings

Post separation costs per unit are $£19,600 / 2,800 = £7$ per litre

Notional price at separation point is $£10.50 - £7 = £3.50$ per litre

Weighted sales value is	P	$3,600 \times £4.60 =$	£16,560
	Q	$4,100 \times £6.75 =$	£27,675
	R	$2,800 \times £3.50 =$	<u>£9,800</u>
			<u>£54,035</u>

Allocation of common process costs to R is $£42,500 \times (£9,800 / £54,035) = £7,708$

Question 1.13

A company is preparing its cash budget for February using the following data. One line in the cash budget is for purchases of a raw material, J. The opening inventory of J in January is expected to be 1,075 units. The price of J is expected to be £8 per unit. The company pays for purchases at the end of the month following delivery.

One unit of J is required in the production of each unit of product 2, and J is only used in this product. Monthly sales of product 2 are expected to be:

January	4,000 units
February	5,000 units
March	6,000 units

The opening inventory of product 2 in January is expected to be 1,200 units.

The company implements the following inventory policies. At the end of each month the following amounts are held:

Raw materials: 25% of the requirement for the following month's production

Finished goods: 30% of the following month's sales

Calculate the value for purchases of J to be included in the cash budget for February.

(4 marks)

Workings

	<i>January</i> <i>units</i>	<i>February</i> <i>units</i>	<i>March</i> <i>units</i>
Sales	4,000	5,000	6,000
Closing inventory - 30% next month	1,500	1,800	
less opening inventory	<u>(1,200)</u>	<u>(1,500)</u>	
Production in month	<u>4,300</u>	<u>5,300</u>	

Raw material requirement	<i>January</i> <i>units</i>
Monthly production	4,300
Closing inventory: 25% of next month's production	1,325
Less opening inventory	<u>(1,075)</u>
Material purchases	<u>4,550</u>

Payments for purchases for the cash budget in February are the actual purchases delivered in January, that is:

4,550 units at £8 per unit = £36,400

The following data are given for sub-questions 1.14 to 1.16 below

K makes many products, one of which is Product Z. K is considering adopting an activity-based costing approach for setting its budget, in place of the current practice of absorbing overheads using direct labour hours. The main budget categories and cost driver details for the whole company for October are set out below, excluding direct material costs:

<i>Budget category</i>	<i>£</i>	<i>Cost driver details</i>
Direct labour	128,000	8,000 direct labour hours
Set-up costs	22,000	88 set-ups each month
Quality testing costs*	34,000	40 tests each month
Other overhead costs	32,000	absorbed by direct labour hours

* A quality test is performed after every 75 units produced

The following data for Product Z is provided:

Direct materials	budgeted cost of £21.50 per unit
Direct labour	budgeted at 0.3 hours per unit
Batch size	30 units
Set-ups	2 set-ups per batch
Budgeted volume for October	150 units

Question 1.14

Calculate the budgeted unit cost of product Z for October assuming that a direct labour-based absorption method was used for all overheads.

(2 marks)

Workings

Total overhead cost	£88,000
Direct labour hours	8,000
Absorption rate	£11 per direct labour hour

Budgeted unit cost for product Z for October is:

	<i>£</i>
Direct materials	21.50
Direct labour 0.3 x £16	4.80
Overhead costs 0.3 x £11	<u>3.30</u>
Total unit cost	<u>29.60</u>

Question 1.15

Calculate the budgeted unit cost of product Z for October using an activity-based costing approach.

(3 marks)

Workings

Cost driver rates are needed

Set-ups	$\text{£}22,000 / 88 =$	$\text{£}250$ per set-up
Quality tests	$\text{£}34,000 / 40 =$	$\text{£}850$ per test
Other overheads	$\text{£}32,000 / 8,000 =$	$\text{£}4$ per direct labour hour
(note this is not a true cost driver)		

Activity-based cost of product Z

	£
Direct materials	21.50
Direct labour	4.80
Set-up costs $2 \times \text{£}250 / 30$	16.67
Quality tests $\text{£}850 / 75$	11.33
Other overhead costs $0.3 \times \text{£}4$	1.20
Total activity-based costs for October	<u>55.50</u>

An alternative approach to these calculations would be:

Set-up costs = $[(150 / 30) \times 2 \times \text{£}250] / 150 = \text{£}16.67$

Quality costs = $(2 \times \text{£}850) / 150 = \text{£}11.33$

Question 1.16

Explain in **less than 50 words**, why the costs absorbed by a product using an activity-based costing approach could be higher than those absorbed if a traditional labour-based absorption system were used, and identify **two** implications of this for management.

(4 marks)

Workings

Costs under ABC could be higher where: there is production complexity not represented in direct labour hours; small batch sizes; or high levels of non-manufacturing activity. This may lead management to: increase batch sizes, simplify processes to reduce activities, or review pricing if this is not in line with ABC costs.

Three implications are given, though only two are required.

The following data are given for sub-questions 1.17 to 1.18 below

The KL Company provides legal and secretarial services to small businesses. KL has two divisions.

Secretarial Division

This division provides secretarial services to external clients and to the Legal Division. It charges all its clients, including the Legal Division, at a rate of £40 per hour. The marginal cost of 1 hour of secretarial services is £20.

Legal Division

The Legal Division provides legal services. One service, called L&S, involves a combination of legal and secretarial services. Each hour of L&S charged to clients involves one hour of legal services and one hour of secretarial services. The secretarial element of this service is purchased from the Secretarial Division. The likely demand for L&S at different prices is as follows:

<i>Demand (hours)</i>	<i>Price per hour (£)</i>
0	100
1,000	90
2,000	80
3,000	70
4,000	60
5,000	50

The marginal cost of one hour of legal services is £25.

Question 1.17

Calculate the level of sales (hours) and total contribution of L&S that would maximise the profit from this service for the Legal Division. Assume the Legal Division pays the Secretarial Division at a rate of £40 per hour for secretarial services.

(3 marks)

Workings

<i>Hours sold</i>	<i>Price per hour (£)</i>	<u>LD view (VC = 25+40)</u>		<u>KL view (VC = 25 + 20)</u>	
		<i>Contribution per hour (£)</i>	<i>Contribution (£)</i>	<i>Contribution per hour (£)</i>	<i>Contribution (£)</i>
0	100				
1,000	90	25	25,000	45	45,000
2,000	80	15	*30,000	35	70,000
3,000	70	5	15,000	25	*75,000
4,000	60	-5	-20,000	15	60,000
5,000	50	-15	-75,000	5	25,000

The level of sales for the Legal division that will maximise the profit in the Legal Division is 2,000 hours, giving contribution to the division of £30,000.

Question 1.18

Calculate the level of sales (hours) and total contribution that would maximise the profit from L&S for the KL Company as a whole.

(3 marks)

Workings

<i>Hours sold</i>	<i>Price per hour</i>	<u>LD view (VC = 25+40)</u>		<u>KL view (VC = 25 + 20)</u>	
		<i>Contribution per hour</i>	<i>Contribution</i>	<i>Contribution per hour</i>	<i>Contribution</i>
	£	£	£	£	£
0	100				
1,000	90	25	25,000	45	45,000
2,000	80	15	*30,000	35	70,000
3,000	70	5	15,000	25	*75,000
4,000	60	-5	-20,000	15	60,000
5,000	50	-15	-75,000	5	25,000

The level of sales for the KL company that will maximise the profit in KL company is 3,000 hours giving a contribution of £75,000.

The following data are given for sub-questions 1.19 and 1.20 below

T is a large pharmaceutical manufacturing company that is implementing a 'Kaplan and Norton style' Balanced Scorecard for its research and development division. The goals and measures for the 'customer perspective' and the 'financial perspective' have been set.

Question 1.19

For each of the two perspectives given in the question data, state an appropriate performance measure.

(2 marks)

Workings

Customer perspective performance measure could be the percentage of new product developments delivered to the manufacturing division on time.

Financial perspective performance measure could be number of projects completed within 5% of the budgeted cost.

Question 1.20

List the other two perspectives in the Balanced Scorecard for T's research and development division, and state for each of the perspectives a relevant goal and performance measure.

(3 marks)

Workings

Two perspectives required are 'Internal Business' perspective and 'Innovation and Learning' perspective.

Appropriate objectives or goals could be:

The Internal Business perspective captures the processes at which the division must excel, so a goal might be a continuous stream of new products to the market. A suitable measure could be measuring the trend in the average time it takes to bring new drugs to market.

The Innovation and Learning perspective emphasises how the division can continuously improve and create value. Thus the division's goal might be to maintain its reputation for innovating new products and treatments. A suitable measure might be the number of new patents registered.

Section B – 30 marks

ANSWER ALL SIX SUB-QUESTIONS. EACH SUB-QUESTION IS WORTH 5 MARKS

Question 2(a)

J Limited has recently been taken over by a much larger company. For many years the budgets in J have been set by adding an inflation adjustment to the previous year's budget. The new owners of J are insisting on a 'zero-base' approach when the next budget is set, as they believe many of the indirect costs in J are much higher than in other companies under their control.

- (i) Explain the main features of 'zero-based budgeting'.

(2 marks)

- (ii) Discuss the problems that might arise when implementing this approach in J Limited.

(3 marks)

Rationale

Covers learning outcome C(vi) – *Evaluate and apply alternative approaches to budgeting*

Suggested Approach

- (i) outline the main features
- (ii) discuss problems of *implementation*

Marking Guide

Marks

(i) 4 points with half mark for each

2

(ii) 3 problems to be discussed with up to 1 mark for each

3

Examiner's Comments

This was generally fairly well-answered although frequently not covered in sufficient depth.

Common Errors

- In (i) failing to appreciate the need for prioritisation with ZBB and how elements of cost may be justified.
- In (ii) demonstrating lack of awareness of the difficulties of undertaking such a process and the experience required.

Question 2(b)

An analysis of past output has shown that batches have a mean weight of 90 kg and that the weights conform to the normal distribution with a standard deviation of 10 kg. The company has a policy to investigate variances that fall outside the range that includes 95% of outcomes. In September one sample batch weighed 110 kg.

- (i) Calculate whether the material usage variance for this batch should be investigated according to the company policy described above. (3 marks)
- (ii) Discuss two other important factors that should be taken into account when deciding whether to investigate this variance. (2 marks)

Rationale

Covers learning outcome B(ii) – *Calculate and interpret material, labour, variable overhead, fixed overhead and sales variances*

Suggested Approach

- (i) use basic statistical test for significance for a normal distribution
(ii) discuss two factors relating to whether a variance *should be investigated*

Marking Guide

- | | Marks |
|--|--------------|
| (i) 2 marks for the statistical calculation and 1 for its interpretation | 3 |
| (ii) up to 1 mark for each additional factor discussed | 2 |

Examiner's Comments

Very few candidates scored many marks on either part of this sub-question.

Common Errors

- In (i) nearly all candidates were unable to use the normal distribution to evaluate the statistical significance of the sample batch deviation from the mean.
- In (ii) candidates frequently focused on possible reasons for the variance which often would not be known without investigation. Reasons suggested for the variance were in any case frequently unrelated to the specific situation.

Question 2(c)

UV Limited is a catering company that provides meals for large events. It has a range of standard meals at fixed prices. It also provides meals to meet the exact requirements of a customer and prices for this service are negotiated individually with each customer.

Discuss how a 'McDonaldisation' approach to service delivery would impact on budget preparation and control within UV Limited.

(5 marks)

Rationale

Covers learning outcome B(i) – *Explain why and how standards are set in manufacturing and in service industries with particular reference to the maximisation of efficiency and minimisation of waste.*

Suggested Approach

- After a brief comment on the nature of McDonaldisation, discuss how this approach would affect budget preparation and control in UV Limited. It is important to distinguish the standardised products where McDonaldisation may be important, from the non-standard meals where this approach could be harmful.

Marking Guide

1 mark for comment on nature of McDonaldisation

Marks

1

Up to 1 mark for four points relating to budget preparation and control *in UV*

4

Examiner's Comments

Many candidates wrote a lot about McDonaldisation, describing fully each of the four dimensions as they relate to McDonalds, but invariably failed to apply it to either the scenario presented or the question asked.

Common Errors

- Failing to discuss McDonaldisation in relation to its impact on budget preparation and control.
- Failing to discuss the implications for budget preparation and control in the two separate parts of UV Limited's business.

Question 2(d)

A management consulting company had budgeted the staff requirements for a particular job as follows:

	£
40 hours of senior consultant at £100 per hour	4,000
60 hours of junior consultant at £60 per hour	<u>3,600</u>
Budgeted staff cost for job	<u>7,600</u>

The actual hours recorded were:

	£
50 hours of senior consultant at £100 per hour	5,000
55 hours of junior consultant at £60 per hour	<u>3,300</u>
Actual staff cost for job	<u>8,300</u>

The junior consultant reported that for 10 hours of the 55 hours recorded there was no work that she could do.

Calculate the following variances:

- Idle time variance
- Labour mix variance
- Labour efficiency variance

(5 marks)

Rationale

Covers learning outcome B(ii) – *Calculate and interpret material, labour, variable overhead, fixed overhead and sales variances*

Suggested Approach

- Calculate the three variances in the order given – this is deliberately the easiest way to approach the question

Marking Guide

	Marks
1 mark for idle time variance	1
2 marks for mix variance	2
2 marks for efficiency variance	2

Examiner's Comments

Most candidates were able to calculate the idle time variance but performed less well on mix and efficiency.

Common Errors

- Failing to exclude idle time from the mix variance calculations.
- Confusing labour efficiency with labour yield.
- Calculating the total labour variance as the efficiency variance.

Question 2(e)

ST plc is a medium-sized engineering company using advanced technology. It has just implemented an integrated enterprise resource planning (ERP) system in place of an old MRP (manufacturing resource planning) system.

Discuss the changes that are likely to be seen after the implementation of the ERP system in

- (i) the budget-setting process; and
- (ii) the budgetary control process

(5 marks)

Rationale

Covers learning outcome A(vii) – *explain the role of MRP and ERP systems in supporting standard costing systems, calculating variances and facilitating the posting of ledger entries.*

Suggested Approach

- Demonstrate how the new ERPS will have direct consequences for budget setting and for budgetary control.

Marking Guide

- (i) Up to 1 mark for 3 points
- (ii) Up to 1 mark for 3 points

Marks

Up to 3
Up to 3
Max of 5

Examiner's Comments

Candidates had a general awareness of ERP in comparison to MRP but were often unable to identify the consequences for budget setting and for budgetary control.

Common Errors

- Discussing generic aspects of budgetary planning and control rather than the impact of an ERP system.

Question 2(f)

W Limited has conducted a review of its budget-setting procedures. The review coordinator frequently heard the following comment from staff interviewed:

“It’s impossible to make this system work because senior managers want budgets to be a challenging target whereas the finance department require an accurate forecast.”

Discuss the issues raised in this comment, and advise the review coordinator on practical action that could be taken to alleviate the situation described.

(5 marks)

Rationale

Covers learning outcome C(xii) – *evaluate the impact of budgetary control systems on human behaviour.*

Suggested Approach

- The main issue in this comment is the difference between a budget as a target and as an estimate of expected performance. Discuss this and other issues first and then recommend two or three practical steps to alleviate any problems identified.

Marking Guide

Up to 1 mark for each of 5 points

Marks

5

Examiner’s Comments

Candidates failed to appreciate the main issue but were awarded marks for sensible interpretation of the situation described and for suggesting practical action that could be taken.

Common Errors

- Demonstrating lack of appreciation of the use of a budget both as a target and as an estimate of expected performance.
- Discussing irrelevant aspects of budgeting such as flexible budgets and rolling budgets.

Section C – 20 marks

ANSWER ONE OF THE TWO QUESTIONS

Question 3(a)

Using the FIFO method, prepare the process account for October.

(12 marks)

Rationale

(a) and (b) cover learning outcome A(ii) – *Apply marginal and absorption costing approaches in job, batch and process environments.*

Suggested Approach

1. Calculate the cost per equivalent unit for each cost element
2. Use these unit costs to evaluate each part of the output, such as inventory, finished goods, losses
3. Prepare the actual process account

Marking Guide

	Marks
1. above	5
2. above	4
3. above	<u>3</u>
	<u>12</u>

Examiner's Comments

Correct answers were rare but many candidates made a reasonable attempt at each of the three stages of process account preparation. This question was much more popular than question 4.

Common Errors

- Identifying only one or two, rather than three, separate cost elements.
- Miscalculating the equivalent units for each cost element.
- Treating the loss as normal or valuing the abnormal loss at \$200.
- Including the cost of opening WIP with the period costs in the calculation of cost per equivalent unit, applying the AVCO method to the apportionment of costs.

Question 3(b)

Explain to the Managing Director any errors in the comment he had made, and discuss whether the data from the process account indicate that there has been production inefficiency. *(8 marks)*

Rationale

As above

Suggested Approach

- Analyse and discuss the comments made by the Managing Director

Marking Guide

1 or 2 marks for each good point made

Marks

8

Examiner's Comments

Most candidates appreciated the need to value the partly processed product. However they rarely appreciated that the major impact would be due to the differential between the opening and the closing work in progress (WIP) both in terms of units and also in terms of stage of completion.

Common Errors

- Limiting the discussion to WIP only.
- Not appreciating the effect of differences in WIP.

Question 4(a)

Calculate the annualised Return on Investment (ROI) for divisions Y and Z, and discuss the relative performance of the two divisions using the ROI data and other information given above.

(9 marks)

Rationale

The three parts of this question cover learning outcomes:

D(iv) – *Calculate and apply measures of performance for investment centres (often 'strategic business units' or divisions of larger groups), and*

D(v) – *Discuss the likely behavioural consequences of the use of performance metrics in managing cost, profit and investment centres.*

Suggested Approach

- Calculate the ROI using annualised data and comment on the results

Marking Guide

Marks

Calculation of ROIs

4

Comparison of performance at 1 mark per point

5

Examiner's Comments

This was a very unpopular question but it should have been straightforward for candidates who had studied investment centre performance measures. Many of the candidates who did choose to answer this question did not answer it particularly well, although the fact that it was generally the last question attempted may have been a factor.

Common Errors

- Failing to annualise the income figures for the two divisions despite this aspect being clearly indicated in the requirements of the question.
- Using controllable income, or even contribution, to calculate ROI, without justification.
- Failing to use the other information provided in the question.
- Providing a limited discussion of performance.

Question 4(b)

Calculate the annualised Residual Income (RI) for divisions Y and Z, and explain the implications of this information for the evaluation of the divisions' performance.

(6 marks)

Rationale

As above

Suggested Approach

- Calculate the RI using annualised data and comment on the performance of the divisions

Marking Guide

Marks

Calculation

3

Comment at 1 mark per point

3

Examiner's Comments

Many candidates were able to calculate RI, using their income figures from part (a), but interpretation of the results was often lacking.

Common Errors

- Demonstrating lack of appreciation of what the RI measure indicates.
- Providing a limited discussion of performance.

Question 4(c)

Briefly discuss the strengths and weaknesses of ROI and RI as methods of assessing the performance of divisions. Explain two further methods of assessment of divisional performance that could be used in addition to ROI or RI.

(5 marks)

Rationale

As above

Suggested Approach

- Comment on the strengths and weaknesses of ROI and RI and explain two alternative methods

Marking Guide

Marks

Comments on strengths and weaknesses at 1 mark per point made

3

State and brief comment on two alternatives

2

Examiner's Comments

Reasonable discussion of strengths and weaknesses was often provided but suggestions for further assessment methods were limited.

Common Errors

- Limiting discussion to one or two points only.
- Failing to suggest further measures for the assessment of divisional performance, or suggesting inappropriate measures