

General Comments

Generally, this examination was well attempted by most candidates and this is reflected in the high pass rate for this paper. Some candidates performed poorly in the longer questions (6 and 8) and are advised to improve their knowledge and skills relating to the syllabus areas addressed by these questions. This post exam guide gives further details on how well students fared on particular questions.

Section A – 50 marks

ANSWER ALL FIVE QUESTIONS IN THIS SECTION. EACH QUESTION IS WORTH 10 MARKS. YOU SHOULD SHOW YOUR WORKINGS AS MARKS ARE AVAILABLE FOR THE METHOD YOU USE.

Question 1

- (a) **Calculate** the total budgeted profit (2 marks)
- (b) **Discuss** the suggestion to bundle products A and B. Your answer should include:
 (i) calculation of the original and revised breakeven points for the company;
 (ii) the sensitivity of the suggestion to the selling price of AB.

(8 marks)

(Total for Question One = 10 marks)

Rationale

This question relates to syllabus area A2(b) *interpret variable/fixed cost analysis in multiple product contexts to break-even analysis and product mix decision making, including circumstances where there are multiple constraints and linear programming methods are needed to identify optimal solutions.*

Suggested Approach

(a)

	A	B	C	D	Total
	\$	\$	\$	\$	\$
Revenue	360000	72000	126000	90000	648000
Variable Costs	220000	24000	90000	80000	414000
Contribution	140000	48000	36000	10000	234000
Fixed production costs	100000	18000	27000	25000	170000
Fixed administration costs	20000	6000	9000	5000	40000
Profit					24000

(b)

Consider variable cost of each of products A and B;
 Determine revised bundle profit, compared to original budget;
 Calculate overall contribution/sales ratio;
 Determine breakeven revenue compared to original budget;
 Determine the increase in profit per unit;
 Determine how much the unit selling price can be reduced
 Calculate % sensitivity of the alternative plan to the selling price.
 Discuss findings in relation to likely customer reaction to bundling and other alternative strategies for the company to increase sales of A and B.

Marking Guide

Marks

- (a)
 Calculate budgeted profit 2 marks

(b)	
Original B/E: \$581,537	1 mark
Revised B/E: \$571,815	1 mark
Conclude selling more of B is good	1 mark
Increased profit = \$17,200	1 mark
Could reduce price by \$9.56 per bundle	2 marks
Sensitivity = 3.7%	1 mark
Any other valid point	1 mark
Maximum marks awarded	10 marks
Examiner's Comments	
Candidates were good in calculating breakeven points (either revenue or units, or weighted units) but failed to provide the sensitivity of the suggestion to the selling cost.	

Question 2	
<p>Explain the changes that are likely to occur in each of the three later stages in the product life cycle of a typical AB product for each of the following:</p> <p>(i) Production costs</p> <p>(ii) Marketing costs</p> <p>(iii) Selling price</p> <p style="text-align: right;"><i>(10 marks)</i></p>	
Rationale	
This question examines candidates understanding in relation to syllabus area B1(i) <i>discuss the concept of life-cycle costing and how life-cycle costs interact with marketing strategies at each stage of the life-cycle.</i>	
Suggested Approach	
Discuss changes that are likely to occur in terms of production costs, marketing costs and selling price in relation to the Growth, Maturity and Declines phases.	
Marking Guide	Marks
For <u>each</u> 'direction' accompanied by an explanation	1 mark
Maximum marks awarded	10 marks
Examiner's Comments	
This question was generally very well attempted. Some candidates explained the stage of bringing the product to the market, but tended to miss out on explaining the growth stage of the product life.	

Question 3

(a) **Discuss** the relationship between quality conformance costs and product selling prices for GH.

(7 marks)

(b) **Explain** how Kaizen principles could be used by GH to extend the life of its products.

(3 marks)

(Total for Question Three = 10 marks)

Rationale

The question examines candidates' knowledge of quality costs, the relationship between price and quality and how this affects pricing decisions, and the use of Kaizen principles in the context of the product life cycle. Syllabus area B1(c).

Suggested Approach

(a)
 Define cost of quality conformance
 Explain the value placed by customers on both price and quality
 There is some trade-off between quality and price
 GH should understand its customer profile;
 Discuss the implications of the strategy.

(b)
 Definition of Kaizan;
 Valid comments in relation to GH adopting the Kaizan approach.

Marking Guide

Marks

(a)	
Definition of quality conformance	1 mark
Consumer values price and quality	1 mark
Need for GH to understand profile of customers	1 mark
Quality vs price trade-off	2 marks
Implications for strategy	2 marks
(b)	
Definition of Kaizan	1 mark
Valid comment for GH	1 mark for each

Maximum marks awarded

10 marks

Examiner's Comments

Generally very well attempted by candidates.

Question 4

Prepare a statement for October 2012 that reconciles the budgeted contribution with the actual contribution.
 You should show the variances in as much detail as possible given the data provided.

(Total for Question Four = 10 marks)

Rationale

This question tests candidates' knowledge of flexible budgets and of the use of variance analysis to measure performance by requiring candidates to calculate variances and present them in the format of a profit reconciliation statement. This question addresses the following learning outcome: C2(c) *evaluate performance using fixed and flexible budget reports.*

Suggested Approach

identify budgeted gross profit and make adjustment to this, based on sales volume variance; standard profit on actual sales; selling price variance.

Calculate each of the following variances and identify them as adverse or favourable: Materials price variance; Materials usage variance; Labour rate variance; Labour efficiency variance; variable overhead expenditure variance; variable overhead efficiency variance; fixed overhead expenditure variance; fixed overhead volume variance.

Determine the overall 'adverse' variance (\$29,100) based on above and adjust the gross profit by this variance to arrive at the 'Actual gross profit' of \$36,500.

Marking Guide

Marks

For each variance calculated	1 mark (max = 8)
Suitable heading: "Standard Contribution on actual Sales"	1 mark
For each budgeted and actual contribution	0.5 mark
Suitable layout	1 mark

Maximum marks awarded

10 marks

Examiner's Comments

Generally very well attempted by candidates.

Question 5

- (a) **Discuss** how a Balanced Scorecard could be of benefit to BB. (4 marks)
- (b) **Explain** THREE non-financial performance measures (ONE from EACH of THREE different perspectives of a Balanced Scorecard) that BB could use as part of its performance management process. (6 marks)
- (Total for Question Five = 10 marks)*

Rationale

This question tests candidates' understanding of the Balanced Scorecard. It addresses the learning outcome: C3(c), *compare and contrast traditional approaches to budgeting with recommendations based on the balanced scorecard.*

Suggested Approach

Discuss the most common four perspectives: customer; internal business process; learning and growth; Financial.

Candidates may offer other appropriate perspectives, provided they follow through on these with appropriate performance measure for each.

Marking Guide

Marks

(a)	
For each acceptable point raised	1 mark (max = 4)
(b)	
Maximum of 2 marks per developed perspective	2 marks each (max 6 marks)

Maximum marks awarded

10 marks

Examiner's Comment

Generally very well attempted by candidates.

SECTION B – 50 MARKS

ANSWER *BOTH* QUESTIONS IN THIS SECTION. EACH QUESTION IS WORTH 25 MARKS. YOU SHOULD SHOW YOUR WORKINGS AS MARKS ARE AVAILABLE FOR THE METHOD YOU USE.

Question 6

- (a) During holiday weeks the availability of direct labour is limited to 1,800 hours.
- (i) **Calculate** the maximum profit achievable during a holiday week. (5 marks)
- (ii) **Discuss** the sensitivity of your **production plan** in (i) to changes in the selling price of product N. (You should consider increases and decreases in the selling price of N) (7 marks)
- (b) (i) If you were to determine the optimal weekly production plan for FG using linear programming, **state**:
- The objective function
 - The inequalities for each of the resources
 - The inequalities for the demand for each product (4 marks)
- (ii) **Calculate** using the above information the shadow price of Material B. (3 marks)
- (c) **Discuss** THREE problems associated with the use of cost-plus pricing. (6 marks)
- (Total for Question Six = 25 marks)

Rationale

Part (a) relates to syllabus area A1(b): *discuss the possible conflicts between cost accounting for profit reporting and stock valuation and information required for decision making*. Part (b) relates to syllabus area A2(b): *interpret variable/fixed cost analysis in multiple product contexts to break-even analysis and product-mix decision making, including circumstances where there are multiple constraints and linear programming methods are needed to identify 'optimal' solutions*. Part (c) relates to syllabus area A1(a): *discuss the principles of decision-making including the identification of relevant cash-flows and their use alongside non-quantifiable factors in making rounded judgements*.

Suggested Approach

(a)
Candidates should calculate the 'contribution per unit' and 'contribution per labour hour' for each of M and N. Determine output of M and N in 1800 hours. Determine total contribution from this output. Subtract fixed cost from this to determine the maximum profit achievable.

Discuss the impact of the reduction in selling price of N; and the impact of increase in the selling price of N on the production plan.

(b)(i)

State the Objective function: $28M + 31N$
 Specify the inequalities for each resource: Materials A and B, Skilled Labour and Machine time.
 Specify the inequality for the demand for M and N.

(b)(ii)

Identify 'shadow price' as the increase in contribution that could be gained if one extra unit of a scarce resource became available.

Calculate the shadow price for Material B = $\frac{\text{increase in contribution}}{\text{Increase in resource}}$

(c) candidates need to explain what the problem is and why it is a problem associated with cost-plus pricing.

Marking Guide	Marks
(a) (i)	
Contribution per labour hour	2 marks
Output	1 mark
Total contribution	1 mark
Fixed costs	1 mark
(a) (ii)	
Decrease in selling price of N:	
No impact until \$104	1 mark
Below \$104 produce only contracted units	1 mark
Sensitivity = 23%	2 marks
Increase in selling price of N:	
No change until cont/hour = \$9.33	1 mark
Selling price = \$141.33	1 mark
Sensitivity = 4.7%	2 marks
New plan: 100M and 375N	1 mark
(b)(i)	
Objective function	0.5 mark each
Each resource inequality	0.5 mark each
Inequalities for the demand for each product	1 mark each
(b)(ii)	
Increase in contribution	1 mark
Shadow price	2 marks
(c)	
Each problem correctly identified and discussed	2 marks
Maximum marks awarded	25 marks
Examiner's Comments	
Candidates mainly lost marks in part (ii) because they failed to discuss the sensitivity of a production plan.	

Question 7

- (a) **Discuss** the gross profit margin on the sales that Y made to Z compared to the gross profit margin that Y made on its external sales.

(4 marks)

- (b) Following a complaint from the manager of Z, the directors of the YZ Group are going to impose a transfer pricing policy.

Explain THREE factors that the directors of YZ should consider when setting the transfer pricing policy.

(6 marks)

- (c) **Discuss** the relative performance of the two companies.
Your answer should show:

- (i) What the performance of Y would have been without the transfers to Z.
(ii) The impact of the age of the assets and the depreciation policy by adjusting the financial statements of Y to be comparable to those of Z.

Note: your answers to (i) and (ii) should include calculations of ROCE and the secondary ratios.

(15 marks)

(Total for Question Seven = 25 marks)

Rationale

This question tests candidates' ability to interpret the data provided and measure the performance of two companies within a group and the impact that internal transactions and their transfer prices have on the performance of each company. This question addresses the following learning outcomes: D2(c), *discuss alternative measures of performance for responsibility centres* and D3(c), *discuss the likely consequences of different approaches to transfer pricing for divisional decision making, divisional and group profitability, the motivation of divisional management and the autonomy of individual divisions.*

Suggested Approach

(a)
Calculate gross profit margin on internal sales, calculate gross profit margin on external sales. Identify the difference between the two as substantial; therefore conclude that Y is profiting from Z.

(b)
Explain three factors that should be considered when setting transfer pricing policy.

(c)
Calculate the ROCE for Y and Z, with and without transfers;
Calculate the % Profit for Y and Z, with and without transfers;
Determine asset turnover ratios with and without transfers.
Discuss therefore, the performance of Y, with and without transfers to Z.

Undertake asset age adjustment for Y.
Calculate revised performance ratios for Y.
Discuss the impact of the adjustment on Y.

Marks	
(a) For each relevant point: margin on internal sales; margin on external sales; difference; conclude Y is profiting from Z.	1 mark each (max=4)
(b) For each factor explained	2 marks (max = 6)
(c) (i) For each correctly calculated ratio Discussion about performance	0.5 mark/ratio 1 mark per valid point (max = 7)
(c) (ii) Age benefit to Y Age of Z's assets Age of Y's assets Adjustment to depreciation Adjustment to cost of sales Adjustment to profit Adjustment to NBV New ratios Valid comments	1 mark for each (maximum 8 marks)
Maximum marks awarded	25 marks
Examiner's Comments	
It would appear that candidates found it difficult to evaluate the performance of Y without price transfer to Z. Hardly any candidate assessed the age of the assets and the depreciation policy by adjusting the financial statements of Y to be comparable to Z.	