



The Institute of Certified Management Accountants

STRATEGIC COST MANAGEMENT

INSTRUCTIONS TO CANDIDATES

1. **CANDIDATE ID No:** _____

EXAM PAPER IS TO BE HANDED IN INTACT INSIDE YOUR ANSWER SCRIPT BOOKS AT CONCLUSION OF EXAM.

2. READING TIME IS OF 10 MINUTES DURATION
3. EXAMINATION IS OF 3 HOURS DURATION
4. This paper consists of 7 questions. PLEASE CHECK BEFORE COMMENCING.
5. This is a FINAL paper.
6. **THIS IS AN OPEN BOOK EXAM.** All material is permitted excepting for laptop computers, and mobile phones
7. Please read instructions at the top of each section carefully before answering.
8. Each section has an equal weighting in the allocation of marks.
9. Electronic hand held calculators are permitted.

PART A

Question One is a compulsory question.

Question One

Mellow Ltd manufactures and sells a wide range of machine tools. In the past few years the company has been performing reasonably well, but its market share has been declining as a result of severe competition.

The company uses absorption costing for both external reporting as well as for providing individual product information for decision making. In 2008, although the company performed well overall, senior management was concerned with the profit performance of some specific product lines. The production manager was surprised when the accountant showed him that some difficult and time consuming products produced in small batches had made very attractive profit margins, while some of his favourites which sold very well and were produced in large quantities showed rather poor or negative margins.

On the advice of the company's financial consultants, management decided to trial a system of activity based costing (ABC) for 2009, while still retaining the traditional costing system. The consultants stated that an ABC system would provide more accurate product cost and margin information to guide the company's strategic production and marketing effort as well as highlight value adding and non value adding activities performed by the company.

At the end of the first quarter of 2009, the following information was available:

(a) Income statement for the quarter using absorption costing:

	\$'000	\$'000	\$'000
Sales			40,000
<i>Less</i> Cost of goods sold			
Materials		8,000	
Labour		7,500	
Production overheads		<u>10,000</u>	
Total			<u>25,500</u>
 Gross margin			 14,500
 <i>Less</i> Marketing expenses			
Delivery expenses	400		
Sales commissions	2,000		
After sales service	500		
Advertising and promotions	2,000		
Sales administration	<u>1,000</u>	5,900	
Administration expenses		<u>3,000</u>	
Total			<u>8,900</u>
 Net income before tax			 <u>5,600</u>

(b) Production overhead application rate per direct labour hour for absorption costing used for all products manufactured: \$20.00

(c) Activity cost pools, cost drivers identified, costs and driver units used for the ABC system:

Production Expenses

Activity Cost Pools	Cost \$
Purchasing	1,200,000
Materials handling and storage	1,000,000
Machine set-up	1,350,000
Quality control	800,000
Labour and other overhead	10,650,000
Packaging	2,500,000

Marketing Expenses

Activity Cost Pools	Cost \$
Delivery expenses	400,000
Sales commission	2,000,000
After sales service	500,000

Activity Cost Pools	Driver Units
No. of purchase orders	3,000
No. of components used	5,000,000
No. of set-ups	9,000
No. of batches	3,200
No. of machine hours	500,000
No. of units	625,000
No. of sales orders	4,000
Sales dollars	\$40,000,000
No. of service calls	10,000

Note:

For the purpose of the ABC system the company has classified production wages as an overhead expense.

It was also decided not to allocate administration (general) expenses, advertising and promotions, and sales administration expenses to products under the ABC system.

(d) Data regarding TWO of the MANY products produced by the company:

Products		“The Tim”		“The Allen”
<u>Per Unit Data:</u>				
Price	_____	\$80.00	_____	\$400.00
Direct materials cost	_____	\$20.00	_____	\$120.00
Direct wages	_____	\$15.00	_____	\$60.00
Labour hours	_____	1	_____	4
<u>Other data:</u>				
No. of purchase orders	_____	200	_____	200
No. of components used	_____	450,000	_____	100,000
No. of set-ups	_____	50	_____	1,000
No. of batches	_____	50	_____	200
No. of machine hours	_____	30,000	_____	8,000
No. of units produced & sold	_____	30,000	_____	2,000
No. of sales orders	_____	300	_____	400
Sales dollars	_____	\$2,400,000	_____	\$800,000
No. of service calls	_____	50	_____	500

Required:

- (i) Identify an appropriate cost driver for each cost pool and calculate a cost driver unit for each activity cost pool;
- (ii) Prepare income statements for products ‘Tim’ and ‘Allen’ using a system of activity based costing (ignore costs not allocated to products), and calculate the gross and net margin percentages for ‘Tim’ and ‘Allen’.
- (iii) Prepare income statements for products ‘Tim’ and ‘Allen’ using a system of absorption costing, (up to gross margin stage only), and calculate the gross margin percentages for ‘Tim’ and ‘Allen’.

PART B

Answer one of either Questions Two or Three

Question Two

“Conventional accounting has failed to recognise that the *transaction* is the common denominator between the product and the customer outlet, and is therefore, the *ultimate profit centre*.”

Discuss the above in terms of profitability analysis, and the role of ABC in such analyses.

Question Three

Discuss the way that Activity Analysis can support business improvement approaches such as “continuous improvement” and “re-engineering”. Include in your discussion some appropriate reference to productivity and efficiency measures.

PART C

Answer any two of Questions Four, Five, Six and Seven

Question Four

“Benchmarking has not traditionally been an integral part of strategy setting and strategic planning...Corporate histories have recorded some notable crashes by fine companies that tried to fly without looking out for what others were doing and accomplishing.”

Discuss this comment in depth.

Question Five

“Today’s high-technology manufacturing processes require up-to-the-minute controls using computer generated non-financial indicators of performance. Accountants’ financial controls reported at the end of the month or quarter are obsolete and have no place in such an environment.”

Discuss.

Question Six

"Too often the factory is regarded as a self-contained, self-sufficient body, and its dependence upon integration with the rest of the system is recognised only when other parts of the enterprise change. The dangers of this tunnel-vision are great."

Discuss the above from an organisational systems and control perspective.

Question Seven

Discuss the major characteristics of Japanese management accounting systems. How do they differ from Western management accounting systems?