Advanced Management Accounting

Solutions

August 2011

IIPA Paper 13
August 2011
Suggested
Solutions

Question 1

	Price €10	Price €5
Units	250000	750000
Sales Revenue	2500000	3750000
Var Costs	-450000	-1350000
Contribution	2050000	2400000
Fixed Costs	-950000	-950000
Profit	1100000	1450000
	3 Marks	***3 Marks***

b) Optimal Pricing model

P = a - b Q P = 12.5 - 0.00001Q

a= price where qty is zero 10+ (250000/500000*5)
b is the rate of change 5/500000

TR P x Q = 12.5Q - 0.00001Q^2

MR 12.5-0.00002Q ***2 Marks***

TC 1.8Q + 950000

MC = 1.8 ***2 Marks***

Optimal profitability where MR = MC

12.5-0.00002Q = 1.8

12.5-1.80 = 0.00002Q
10.7 = 0.00002Q
Q = 10.70/.00002

Q = 535000 = optimal quantity ***2 Marks***

P = 12.50 - (0.00001 x 535,000)

12.50 -5.35 = € 7.15 ***2 Marks***

	Price €7.15
Units	535000
	€
Sales Revenue	3825250
Var Costs	-963000
Contribution	2862250
Fixed Costs	-950000
Profit	1912250

2 Marks

C) Other pricing strategies
Premium Pricing - aim top slice
Free/discount offer first x no. of customers
Low price to gain market share
Pricing for different levels of programme.
Other relevant points ***4 Marks***

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Question 2

a) Balanced scorecard

Explanation of a balanced scorecard - 4 perspectives and sample measures

4 Marks

Explanation of how it can be used ***2 Marks***
Argument/discussion of statement ***2 Marks***

b) Strategic management accounting
Explanation of what is SMA
Describe it how may be used ***3 Marks***
Relevance of SMA in particular to changing economic circumstances ***3 Marks***

c) Life cycle costing
Explanation of LCC
Link to Product Life Cycle
Relevance of it to products with life < one year
Write off of development costs to P&L

6 Marks

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Question 3

a) Relevant Costing Approach

	Reason	€	
Software programmers	2 New	80,000	
Software Architect	6 month contract	28,000	
Systems Analyst 1	Not relevant	-	
Systems Analyst 2	Salary - Bonus	25,000	35000-10000 opp cost
Telesalesx 4	4x20000	80,000	
New offices	capital work only	20,000	
New computers	x 3	3,000	
General Variable O/H	20% of project salary	51,600	(160000+28000+35000+35000) x 20% excludes telesales
Total Relevant Cost		287,600	
Traditional accounting model costs		517,000	
Difference		229,400	***10 Marks***

b)	Relevant	Traditional	
Total Cost	287,600	517,000	
Units	100,000	100,000	
Cost per unit	2.88	5.17	
Mark-up 500%	14.38	25.85	
Selling Price	17.26	31.02	
	2 Marks		***2 Marks***

Implications :
Pricing and profitability
Impact on demand
Are industry norms applicable.
1 Mark

c) Relevant Costing model
Explanation of principle of relevance = only cashflows that change as result of decision
Use of Sunk costs, oppportunity costs, replacement costs etc.
Historic cost model by trad accounting
4 Marks

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Question 4

			€		
Original Budgeted Cost		990,000			***1***
Volume Variance		-94,000	U		***1,084,000***
DM A Price Var	(5-4.80) x 45000	9,000	F		***1***
DM B Price Var	(6-6.30) x 53200	-15,960	U		***1***
DM C Price Var	(4 - 4.1) x 12500	-1,250	U		***1***
DL Rate Var	(15 - 14.80) x 22200	4,440	F		***1***
Var. OH Exp Var	(22200*5) -111000	-			***1***
Fix POH Exp	50000-48500	1,500	F		***1***
DM Mix Var	See Below	3,580	F		***3***
DM Yield Var	See Below	-3,780	U		***3***
DL Effic	(22000-22200) *15	-3,000	U		***1***
Var POH Effic	(22000-22200) *5	-1,000	U		***1***
					1
					-6,470
		1,090,470			***16 Marks***
					-8,410

	Original	Flex	Actual
	€	€	€
DM A	200,000	220,000	216,000
DM B	300,000	330,000	335,160
DM C	40,000	44,000	51,250
DL	300,000	330,000	328,560
Var. OH	100,000	110,000	111,000
FOH	50,000	50,000	48,500
Total Costs	990,000	1,084,000	1,090,470

b)

	AQ in Amix	AQ in SM	SQ in SM
DM A	45,000	44,280	44,000
DM B	53,200	55,350	55,000
DM C	12,500	11,070	11,000
	110,700	110,700	110,000

	Mix		Yield		Efficiency	
DM A	- 3,600	U	- 1,400	U	- 5,000	U
DM B	12,900	F	- 2,100	U	10,800	F
DM C	- 5,720	U	- 280	U	- 6,000	U
	3,580	F	**- 3,780**	U	- 200	U

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Question 5

a)		A	B	C	D	Total	
SP		80	100	50	75		
VC p.u		50	60	30	30		
Contribution p.u.		30	40	20	45		
Units		20,000	14,000	10,000	6,000		
Total Contribution	€	600,000	560,000	200,000	270,000	1,630,000	
Less Fixed costs	€					750,000	
Profit	€					880,000	***4 Marks***

b)						
Avg Contribution p.u	€	32.6				***1 Mark***
B/e Units		750,000/32.60		23,006		***2 Marks***
		A	B	C	D	
B/e Units spilt by product		9,202	6,442	4,601	2,761	***1 Mark***
x Selling price p.u.		80	100	50	75	
B/e Sales Rev.	€	736,196.3	644,171.8	230,061.3	207,055.2	***2 Marks***

c)	A	B	C	D		
Contribution p.u.	30	40	20	45		
Labour Hours p.u	2	3	1	1.5		
Contrib p.labour hours	15	13.33	20	30		***2 Marks***
Rank	3	4	2	1		***1 Mark***
Alloc 85,000 hours	40,000	26,000	10,000	9,000	85,000	***2 Marks***
Units	20,000	8,667	10,000	6,000		
Total Contribution	600,000	346,667	200,000	270,000	1,416,667	
Less Fixed costs					750,000	
Profit					666,667	***1 Mark***

d)		Outsource B	
		€	
SP		100	
VC p.u		-72	
Contribution p.u.		28	
Units short		5,333	
Additional Contribution	€		

		149,333
Less additional fixed cost	€	- 100,000
Extra Profit	€	49,333

Financially option should be accepted.
Other factors:
Quality, control, worker resistance, what to do with capacity

4 Marks

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Question 6
a) Cost reduction and management
Crash programmes - explanation of and examples such as closing profitable plants to move to unproven lower cost environments.
Planned programmes - structured approach towards reducing and managing costs. More beneficial and less reactionary
Use of examples such as value analysis and value engineering ,
total quality management, benchmarking etc.
Other relevant points

10 Marks

b) Management Information systems

Discussion of design of system
Track financial and non-financial system
Be able to manipulate data to produce reports fit for purpose
Advantages and characteristics of good information.
Have various managers in design of system.
Other relevant points

10 Marks