

SOLUTION: MANAGEMENT ACCOUNTING AND CONTROL (PART A) NOV 2008

QUESTION 1

- (i) Cost centre:
It is a location, segment, department of an organization for which cost can be ascertained. The manager is normally responsible to account for amount assigned for various expenditure items.

The most appropriate form of report is a budget report that states budgeted costs against actual cost to bring out variances for investigations.

Other qualitative factors could be the review of performance to ensure that objectives are met at high quality standards.

- (ii) Profit Center:
This segment generates revenue and incurs costs.

The appropriate mode of evaluation is Segmental Income Statement that will show controllable contribution and divisional contribution.

The controllable contribution is used to evaluate the Divisional manager while the divisional contribution is used to measure the profitability of the division.

- (iii) Investment Center in addition to generating profit, gives the manager some authority over investment decision. He will have the right to decide on asset disposals and acquisitions.

Such divisions are normally evaluated using either Return on Investment or Residual Income.

ROI expresses the controllable profit/income on the asset at the disposal of the manager and used in generating the income.

Residual Income: Head Office management decides on the minimum returns expected from the division based on the total investment cost. This minimum returns called Imputed cost of capital is subtracted from the income generated and the balance or residue is credited to the division.

Minimum Transfer Price is the relevant cost of production where there is competition but idle capacity:

DM	120
DL	90
VOH	<u>70</u>
	<u>280</u>

Since the Ahensan plant can buy it at GH¢320 per tonne they will not be prepared to buy it more than that price.

Sales Rev:

			GH¢'000
280,000 @ 650	=	182,000	
100,000 @ 280	=	<u>28,000</u>	
		210,000	
Less VC		<u>106,400</u>	
		103,600	
Fixed Cost		<u>64,000</u>	
Gross Profit		<u><u>39,600</u></u>	

QUESTION 2

	<u>K</u>	<u>R</u>	<u>Y</u>
Fixed Overhead	20	20	10
Absorption Rate	2.5	2.5	2.5
Machine Hrs Required/Unit	8 hrs	8 hrs	4 hrs
Units required	375	350	500
Total Machine Hrs/Componet	3000 hrs	2800 hrs	2000 hrs
	Total		7,800
	Available Capacity		2,520
VC	20.0	23.5	6.0
	15.0	16.0	10.0
	<u>7.5</u>	<u>8.0</u>	<u>5.0</u>
	<u>42.5</u>	<u>47.5</u>	<u>21.0</u>
Buying Cost	55	40	30
Savings	12.5	(7.5)	9
Ranking	2 nd	-	1 st
Production Plan	Make 500 of Y		
	Make 65 of Y and Buy 310 Y		
	Buy 350 of R		

(iii) Other factors to consider:

- i. Possible alternative uses of the process facilities
- ii. Ways of increasing existing capacity such as overtime and shift work
- iii. Security and quality of outside supply
- iv. Stability of outside price

- v. An investigation of why the purchase price from outside is less for some of the components.

(b)	Cost of Equipment	800
	Rent	1,200
	Plant Hiring	500
	Skilled Labour	125
	Hiring & Overheads	4,400
	Materials	<u>1,650</u>
		8,675
	20% Mark Up	<u>1,735</u>
		<u>10,410</u>

Explanation to question 2 (b)

B₁ The relevant cost is ¢800. That is the loss in sale value as a result of the use. The asset could be sold now for ¢2,000 else ¢1,200 in two months time. The ¢800 should be charged to the cost of the order. The historical cost is sunk and therefore irrelevant.

B₂ The relevant cost to the project is ¢1,200 but not ¢1,600 allocated cost. If the order is not accepted, the cost of rental of ¢1,200 will not arise.

B₃ The relevant cost of is ¢500. That is manufacturing cost of ¢800 - ¢300 fixed allocated cost. Whether the order is accepted or not, the company will incur the ¢300 fixed cost. Again, the ¢500 is less than the buying price and therefore it is advisable the firm manufactures instead of buying at ¢600.

B⁴ The relevant cost to the order is only $350 \times .50 = \text{¢}125$. The skilled labour will be paid for whether the order is accepted or not and therefore not relevant to the project.

B₅ The relevant costs are:

(a)	Cost of hiring	2,500
(b)	Incremental Overheads	<u>1,900</u>
	Total relevant cost	4,400

The minimum rental cost of ¢2,500 is what ICA will pay and not ¢2,000 and only increase in overhead will be attributed to the cost of the project. The allocated overhead of ¢1,600 is irrelevant since the ICA will incur it whether it accepts the order or not.

(b)

Labour cost Variance

	SC	-	AC	
Blending	-		4,800 @ 2.5	= 12,000
Filtering	-		2,400 @ 2.25	= 5,400
Packing	-		800 @ 2	= <u>1,600</u>
				19,000/10,000
				= GH¢1.9

9,500 @ 1.9	=	18,050
Ac	=	<u>18,800</u>
		<u>750A</u>

<u>Rate</u>	=	(SR - AR) AH
B		500A
F		100F
P		<u>0</u>
		400A

Efficiency	=	(SH - AH) SR
B	=	(4,560 - 5,000) 2.5 = 1,100A
F	=	(2,280 - 2,000) 2.25 = 630F
P	=	(760 - 700) 2 = <u>120P</u>
		350A