

## **SOLUTION 1**

(a)

(i) COST CONTROL

This is usually carried out by the formal comparison of actual results with those planned – eg budget, standard cost etc and investigating the variances for corrective measures.

COST REDUCTION

An attempt to reduce cost below the previously accepted norm or standard without reducing the quality or effectiveness it is not carried out frequently – eg could be carried out during the financial crisis of a firm.

(ii) TECHNIQUES/PRINCIPLES OF COST CONTROL

- i. Budgeting control
- ii. Standard costing
- iii. Setting of spending limits by level of management
- iv. Procedures for formal authorization of recruitment
- v. Control of capital expenditure

(iii) VALUE ANALYSIS

Is used to examine all aspects of an existing or proposed product or components, in order to reduce costs, whilst maintaining or improving quality. It is useful in areas of design, planning, buying and manufacturing.

(iv) It investigates every aspect of existing or proposed work in order to find the best way of performing tasks. It involves setting standards and solving problems which include bottlenecks, low morale, large amount of defective work and low productivity. It is comprised of method study and work measurements.

(b)

1. (i) Budgeting is the major formal way in which the organisational objectives are translated into specific plans, it should provide clear guidelines for current operations.
2. It is an important medium of communication for organisational plans and objectives and of the progress towards meeting those objectives.
3. The development of budgets helps to achieve co-ordination between the varying depts and functions of the organisation.
4. Management time can be saved and attention directed to areas of most concern.
5. The integration of budgets makes possible better cash and working capital management and makes stock and buying policies more realistic.

- (ii)      - Training  
             - Management Support  
             - Effective Communication

**SOLUTION 2**

- (a)      Variable cost per unit on normal sales:

	GHC
Direct materials	38.80
Direct labour	9.70
Variable manufacturing overhead	2.30
Variable selling & administrative expense	<u>1.70</u>
Variable cost per unit on normal sales	<u>52.50</u>

Variable cost per unit on special order:

	GHC
Normal variable cost per unit	<u>52.50</u>
Reduction in variable selling & admin expenses	<u>0.20</u>
Variable cost per unit on special order	<u>52.30</u>

Selling price for special order	75.30
Variable cost per unit on special order	<u>52.30</u>
Unit contribution margin on special order	<u>23.00</u>
Number of units in special order	3,000
Increase (decrease) in net operating income	GHC69,000

- (b)      The opportunity cost is just the contribution margin on normal sales:

	GHC
Normal selling price per unit	81.10
Variable cost per unit on normal sales	<u>52.50</u>
Unit contribution margin on normal sales	<u>28.60</u>

- (c)      Minimum acceptable price:

Unit contribution margin on normal sales	GHC28.60
Displaced normal sales	1,000 units

	GHC
Lost contribution margin displaced sales	28,600
Total variable cost on special order	<u>156,900</u>
	<u>185,500</u>
Number of units in special order	3,000
Minimum acceptable price on special order	GHC61.83

**SOLUTION 3**

- (a)
1. Theft
  2. Over and under issue of stock
  3. Counting and coding error
  4. Unrecorded receipts and issues
  5. Breakages and evaporation
  6. Short deliveries
  7. Defective measuring devices used
  8. Absorption of moisture
  9. Placing of materials in wrong bins

(b) **ABLE LIMITED**  
**CASH BUDGET TO JUNE 2011**

<u>Receipts</u>	<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
Sales	<u>45,650</u>	<u>30,780</u>	<u>62,586</u>	<u>70,780</u>	<u>80,936</u>	<u>88,400</u>
<u>Payments</u>						
Purchases	14,000	27,440	41,160	35,280	44,100	40,180
Equipment	-	-	-	-	-	9,000
Overheads	6,500	6,500	6,500	8,400	8,400	8,400
Wages & Salaries	16,000	16,000	16,000	16,000	16,000	16,000
Commission	<u>1,400</u>	<u>3,591</u>	<u>4,309</u>	<u>5,171</u>	<u>5,600</u>	<u>6,160</u>
	<u>37,900</u>	<u>53,531</u>	<u>67,969</u>	<u>64,851</u>	<u>74,100</u>	<u>79,740</u>
NCF	7,750	(22,751)	(5,383)	5,929	6,836	8,660
Opening cash	<u>124,000</u>	<u>131,750</u>	<u>108,999</u>	<u>103,616</u>	<u>109,545</u>	<u>116,381</u>
Closing cash	<u>131,750</u>	<u>108,999</u>	<u>103,616</u>	<u>109,545</u>	<u>116,381</u>	<u>125,041</u>

**WORKINGS**

**Purchases**

Jan.	14,000
Feb. (28,000 x 0.98)	27,440
March (42,000 x 0.98)	41,160
April (36,000 x 0.98)	35,280
May (45,000 x 0.98)	44,100
June (41,000 x 0.98)	40,180

Sales

	<u>Jan</u>	<u>Feb</u>	<u>March</u>	<u>April</u>	<u>May</u>	<u>June</u>
Sales	<u>51,300</u>	<u>61,560</u>	<u>73,873</u>	<u>80,000</u>	<u>88,000</u>	<u>96,800</u>
Jan,	20,000					
Feb.	25,650					
March		30,780				
April			25,650			
May				30,780		
June					36,936	
				40,000		
					44,000	
						48,400
	<u>45,650</u>	<u>30,780</u>	<u>92,586</u>	<u>70,780</u>	<u>80,936</u>	<u>88,400</u>

Sales Commission

70% Sales	<u>65,910</u>	<u>43,092</u>	<u>51,710.40</u>	<u>56,000</u>	<u>61,600</u>	<u>67,760</u>
10% Commission	<u>3,591</u>	<u>4,309.2</u>	<u>5,171</u>	<u>5,600</u>	<u>6,160</u>	<u>6,776</u>
Commission		<u>3,591</u>	<u>4,309</u>	<u>5,171</u>	<u>5,600</u>	<u>6,160</u>

**SOLUTION 4**

(a)

(i) Material Mix Variance

		GHC	
5/10 K (9200 - 101,000)	GHC2.40	=	2160 Fv
3/10 Y (68000 - 60600)	GHC2.00	=	14800 Adv
2/10 Z (42000 - 40400)	GHC2.88	=	<u>4608</u>
Mix variance			<u>2192 Fv</u>

(ii) Yield Variance

		GHC	
5/8 K (102222 - 101000)	GHC2.40	=	2933 Fv
3/8 Y (61333 - 68000)	GHC2.00	=	13334 Adv
2/10 Z (40,889 - 40000)	GHC2.88	=	<u>1408 Fv</u>
Yield variance			<u>5807 Fv</u>

(iii) Usage Variance

		GHC	
K (102222 - 92000)	GHC2.40	=	24533 Fv
Y (61333 - 68000)	GHC2.00	=	13334 Adv
Z (40889 - 42000)	GHC2.88	=	<u>3200 Adv</u>
Usage variance			<u>7999 Fv</u>

(b) Planning Variance

(i) It tests management's forecasting skills by comparing the original budget with the reused budget.

(ii) Operational Variance

It measures management's operating efficiency by comparing actual results with a revised standard/budget.

(c) Advantages

1. It ensures that standards do not become outdated, given changing business conditions.
2. It helps in revision of standard and provides feedback on the accuracy of original standards.
3. Realistic standards improve management motivation.
4. Isolation of operational variances helps responsibility accounting-factors under control of managers are identified and reported on.

Disadvantages

1. It is difficult to establish standards.
2. There is a heavier workload for accounting and managerial staff.

**SOLUTION 5**

(a)

	<u>Sales (GHC)</u>	<u>Profit (GHC)</u>
Year 2009	1,200,000	80,000
Year 2010	<u>1,400,000</u>	<u>130,000</u>
difference	<u>200,000</u>	<u>50,000</u>

(i) P/V Ratio =  $\frac{50,000}{200,000} \times 100 = \underline{\underline{25\%}}$

	GHC
Contribution in 2009 (1,200,000 x 25%)	300,000
Less Profit	<u>80,000</u>
Fixed Cost	<u>220,000</u>

(ii) Break-even point in sales value:

$$\frac{\text{Fixed Cost}}{\text{P/V Ratio}} = \frac{220,000}{25\%} = \underline{\underline{\text{GHC}880,000}}$$

(iii) Profit when sales is GHC1,800,000:

	GHC
Contribution (GHC1,800,000 x 25%)	450,000
Less Fixed Cost	<u>220,000</u>
Profit	<u>230,000</u>

(iv) Sales to earn a profit of GHC120,000:

$$\frac{\text{Fixed Cost} + \text{Target Profit}}{\text{P/V Ratio}} = \frac{220,000 + 120,000}{25\%} = \underline{\underline{\text{GHC}1,360,000}}$$

(v) Margin of safety in 2010:

$$\begin{array}{r} \text{Actual sales} - \text{Break-en sales} \\ 1,400,000 - 880,000 \end{array} = \underline{\underline{\text{GHC}520,000}}$$

- (b)
1. It helps in determining the Break-even point.
  2. It determines the selling price which will give the target profit.
  3. It helps determine the cost and revenue as different level of output.
  4. It helps in determining the most profitable sales mix.
  5. It shows the impact of increase or decrease in fixed and variable costs on profit.
  6. It helps in determining cash requirements at different levels of operation with the help of cash break-even chart.
  7. It aid management decision-making.
  8. It shows the effect of changes in selling price or of price differentiation in different markets.

- (c) Yehowa-da Ltd  
a. Capital allowances

	GHC	Tax saved at 28% GHC	Timing
Cost	5,000		
Year 0 WDA	<u>(1,000)</u>	<u>280</u>	t <sub>0</sub>
	4,000		
Year 1 WDA	<u>(800)</u>	<u>224</u>	t <sub>1</sub>
	3,200		
Year 2 WDA	<u>(640)</u>	<u>179</u>	t <sub>2</sub>
	2,560		
Year 3 WDA	<u>(512)</u>	<u>143</u>	t <sub>3</sub>
	2,048		
Year 4 sale proceeds	<u>-</u>		
Balancing allowances	<u>2,048</u>	<u>573</u>	t <sub>4</sub>

b. Investment decision

Cash flows

	t <sub>0</sub> GHC	t <sub>1</sub> GHC	t <sub>2</sub> GHC	t <sub>3</sub> GHC	t <sub>4</sub> GHC
Purchase of machine	(5,000)				
Tax saved through WDAs	280	224	179	143	573
Net revenues		3,000	3,000	1,000	1,000
Tax on net revenues		<u>(840)</u>	<u>(840)</u>	<u>(280)</u>	<u>(280)</u>
	<u>(4,720)</u>	<u>2,384</u>	<u>2,339</u>	<u>863</u>	<u>1,293</u>
Discount factors	1.000	0.909	0.826	0.751	0.683
Present value	(4,720)	2,167	1,932	648	883

NPV = + GHC910

Therefore accept the project.