



## National University of Science and Technology

### FACULTY OF COMMERCE

### DEPARTMENT OF ACCOUNTING

#### FIRST SEMESTER SUPPLEMENTARY EXAMINATION PAPER

**DATE:** SEPTEMBER 2013

**SUBJECT:** MANAGEMENT AND COST ACCOUNTING 11:  
CAC 4105

**TIME ALLOWED:** THREE (3) HOURS

**MARKS:** 100

#### INSTRUCTIONS TO CANDIDATES

1. Answer **ALL** QUESTIONS
2. Use the Answer book provided
3. Use black or blue pen
4. Begin each question on a new page and
5. Submit all answer books

### QUESTION 1 (30 Marks)

Kumbirai Ltd is a company manufacturing two products using one type of material and one grade of labour. Shown below is an extract from the company's working papers for the next period's budget.

	Product K	Product B
Budgeted sales (units)	3000	4500
Budgeted material consumption, per product (kg)	6	2
Budgeted material cost, \$3 per kg		
Standard hours allowed per product	5	3

The budgeted wage rate for the direct workers is \$4 per hour for a 40-hour week, overtime premium is 50% and there are 65 direct operatives.

The target productivity ratio (or efficiency ratio) for the productive hours worked by the direct operatives in actually manufacturing the products is 90%; in addition the amount of non-productive down-time is budgeted at 20% of the productive hours worked.

There are twelve 5-day weeks in the budget period and it is anticipated that sales and production will occur evenly throughout the whole period.

At the beginning of the period, it is anticipated that the stocks will be:

Product K	1050units
Product B	1200units
Raw material	3700kg

The target closing stocks, expressed in terms of the anticipated activity during the budget period are:

Product K	15 days sales
Product B	20 days sales
Raw material	10 days consumption

#### Required:

- (a) Calculate the material purchases budget and the wages budget for the direct workers, showing both quantities and values, for the next period. **(20 Marks)**
- (b) Describe the additional information required in order to calculate the weekly cash disbursements for materials and wages during the above budget period. **(10 Marks)**

**QUESTION 2 (30 Marks)**

C Ltd makes three domestic cleaning products for distribution through supermarkets and shops. The following data have been prepared in connection with the marketing director's annual presentation of the advertising and promotion budget requests. 'Profits' and 'losses' are shown below at values before charging expenditure on advertising and promotion (A&P); all figures are in thousands of dollars.

A&P is a fixed budget, which must be renegotiated annually, and needs justification by evidence of results achieved.

	<b>SKWEEZ Detergent</b>			<b>PHOAMY Detergent</b>			<b>SACHET Car Wash</b>		
<b>Date</b>	<b>Sales</b>	<b>Profit</b>	<b>A&amp;P</b>	<b>Sales</b>	<b>Profit</b>	<b>A&amp;P</b>	<b>Sales</b>	<b>Profit</b>	<b>A&amp;P</b>
2007	500	100	20	500	50	40	-	-	-
2008	450	80	20	560	68	50	-	-	-
2009	420	68	20	600	80	56	-	-	-
2010	400	80	20	700	110	60	40	(12)	10
2011	410	84	25	750	125	70	100	0	12
2012	320	48	25	710	113	75	150	10	15
<b>Budget</b>									
2013	310	50	30	800	140	71	250	30	20

**Required**

Evaluate the given data, state any conclusions and/or implications that may derive from your analysis, and state what further data the budget controller should request or what enquires he/she should make. Assume that sales prices per unit and total fixed costs have not changed over the time-span under review.

**(30 Marks)**

**QUESTION 3 (40 Marks)**

The following cost details apply to a manufacturing department:

	<b>Standard overhead Monthly</b>	<b>Actual overhead for month of.</b>
<b>Variable</b>	\$	\$
Consumables	400	380
Repairs and maintenance	150	140
Indirect wages	1 000	960
Power	150	140
Building services	<u>300</u>	<u>300</u>
Total	2 000	1 920
<b>Fixed</b>		
Supervision	600	630
Depreciation	800	800
Rates, insurance etc	<u>100</u>	<u>110</u>
Total	<u>1 500</u>	<u>1 540</u>
Grand Total	<b>3 500</b>	<b>3 460</b>

Standard hours per month	1750	
Overhead per standard hour	\$2	
Actual hours during month		1 600
Evaluation at standard rate of actual production		\$3 300
Standard hours represented by actual output		1 650

**Required:**

What variances, classified as to type of expense and to cause, have occurred during the month, and what are their amounts? **(40 Marks)**

**END OF EXAMINATION PAPER**