# UNIVERSITY OF SWAZILAND DEPARTMENT OF ACCOUNTING SUPPLEMENTARY EXAMINATION PAPER 2012 

DEGREE/DIPLOMA AND YEAR OF STUDY: B. COM 1V<br>TITLE OF PAPER<br>: introduction to cost accounting<br>TIME ALLOWED<br>: TWO (2) HOURS

## INSTRUCTIONS <br> :1. TOTAL NUMBER OF QUESTIONS

 ON THIS PAPER: FOUR (5)2. ANSWER QUESTION 1 AND ANY OTHER TWO QUESTIONS.
3. THE MARKS AWARDED FOR A QUESTION/PART ARE INDICATED AT THE END OF EACH QUESTION I PART OF QUESTION.
4. ALL WORKING NOTES AND CALCULATIONS MUST BE SHOWN ON THE ANSWER SHEET.

NOTE: YOU ARE REMINDED THAT IN ASSESSING YOUR WORK. ACCOUNT WILL BE TAKEN OF ACCURACY OF THE LANGUAGE AND THE GENERAL QUALITY OF EXPRESSION, TOGETHER WITH THE LAYOUT AND PRESENTATION OF YOUR FINAL ANSWER.

SPECIAL REQUIREMENTS: NONE

THIS PAPER IS NOT TO BE PPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR.

## Question 1

A. Zondle Ltd is planning its advertising campaign for 2013 and has prepared the following preliminary budget based on the zero advertising expenditure:

| Normal plant capacity |  | 200000 units |
| :--- | :--- | :--- |
| Sales | E25 per unit |  |
| Selling price | 150,000 units |  |
| Variable manufacturing costs | E15 per unit |  |

## Fixed Costs:

| Manufacturing | E800,000 |
| :--- | :--- |
| Selling and admin | 700.000 |

An advertising agency claims that an aggressive advertising campaign would enable Zondle Ltd to increase its unit sales by $20 \%$.

REQUIRED: Compute the maximum amount that Zondle Ltd can pay for advertising and achieve a target oerating profit of E200,000
B. Makhonza Ltd is a retailer for DVD's. The projected after-tax net profit for the coming year is E120,000 based on a sales volume of 200,000 DVDs' $^{\prime}$. The company has been selling the DVDs at E16 each. The variable costs consists of E10 unit purchase price and E2 handling cost per DVD. Makhonza's annual fixed costs are E600,000 and the company is subject to $40 \%$ income tax.

REQUIRED: Compute
a) the break- even point in units
(4 Marks)
b) the increase in after-tax profit assuming unit sales volume increases by $10 \%$
c) contribution margin ratio
d) sales in money (Emalangeni) needed to achieve a target after-tax profit of E120,000 assuming the unit purchase price of the DVD will increase purchase by $30 \%$
e) selling price needed to maintain the contribution-margin ration in © assuming the unit purchase price of the DVD will increase by $30 \%$

## Question 2

Kamo Ltd adopted a standard cost system several year ago. The standard costs for the prime costs of its single product are as follows:

Mateiral 8 kilos @ E5.00 per kilo = E40
Direct labour 6 hours @E8.20 per hour = E49.20
The following operating data were taken from the records for November 2012:

| Units completed | 63000 units |
| :--- | :--- |
| Budgeted output | 6000 units |
| Purchases of materials | 50.000 kilos |
| Total actual labour costs | E300760 |
| Actual hours of labour | 36500 hours |
| Material efficiency variable | E1500 unfavourable |
| Material price variance | E750 favourable |
| REQUIRED: |  |

a) labour rice variance ( $31 / 2$ Marks)
b) labour efficiency variance
( $3^{1 / 2}$ Marks)
c) actual kilogrammes of material
( 3 12 Marks)
used in the production process
( $31 / 2$ Marks)
d) actual priced paid for killogrammes of material, assuming the material price variance is isolated at the time of purchases ( $3^{1 / 2}$ Marks)
e) total amount of material cost transferred to.
finished goods
f) total amount of labour cost transferred to finished goods( $31 / 2$ Marks)
B. Is it possible to use more quantities of raw materials than quantities bought? ( 4 Marks)

## Question 3

A. The following static budget is available for Calani manufacturers:

| Normal production | $\underline{10,000}$ units |
| :--- | :--- |
| Direct material | 50000 |
| Direct labour | 200.000 |
| Variable overheads | 30.000 |
| Fixed overheads | $\underline{25.000}$ |
|  | $\underline{E 305.000}$ |
| REQUIRED: Prepare a flexible budget at 6000 units, 2 units and 15000 units. (12 Marks) |  |

B. Zakhele Ltd has prepared the following flexible budget for their manufacturing overheads:

|  | 10,000 units |  | 15,000 units |
| :--- | :--- | :--- | :--- |
| Depreciation | E28,000 | E28,000 |  |
| Insurance | 33500 | 48500 |  |
| Water and electricity | 25500 | 38000 |  |
| Supervision | 80,000 | 80,000 |  |
| Maintenance | 42500 | 63750 |  |
| Cleaning | 25000 | 35000 |  |
| REQUIRED: |  |  |  |

Draw up a flexible budget for Zakhele Ltd at 5000 units and 9 units. (Hint: use, the high-low method of cost separation to determine the variable cost per unit and the fixed cost component of each cost item)
( 13 Marks)

## Question 4

The following information was available from Moshe Ltd's records.

| Year 2012 | Purchases | Sales |
| :---: | :---: | :---: |
| Month-January | E42,000 | E72,000 |
| February | 48,000 | 66,000 |
| March | 36,000 | 60,000 |
| April | 54,000 | 78,000 |

Collections form customers are normally $70 \%$ in the month of sale, $20 \%$ in the month following the sale, and $9 \%$ in the second month following the sale. The balance is expected to be uncollectible. Moshe Ltd takes full advantage of the $2 \%$ discount allowed on purchases paid by the tenth of the following month. Purchases for May are budgeted at E60.000. Cash disbursements for expenses are expected to be E14,400 for the month of May. Moshe's cash balance at May 1 was E22,000.

REQUIRED: Compute the following:
a) Expected cash collections during May
b) Expected cash disbursements during May
( 8 Marks)
c) Expected cash balance at May 31

## Question 5

Zamani Ltd produces and sales two products, $Z$ and B. The following information is available for the budget year ended 31 December 2012:

| Product |  | Units |  |
| :--- | :--- | :--- | :--- |
| $Z$ |  | Price |  |
| Z |  | 60,000 |  |
| E70 |  |  |  |
| $B$ |  | 40,000 |  |
|  |  | E100 |  |

Year 2012 inventories - in units

## Expected Desired

| Product | Units | Price |  |
| :--- | :--- | :--- | :--- |
| $Z$ | 20,000 |  | 25,000 |
| B | 8,000 |  | 9,000 |

To produce one unit of $Z$ and $B$, the following raw materials are used:

## Amount used per unit

| Raw material | Unit | $\underline{Z}$ | $\underline{B}$ |
| :--- | :--- | :--- | :--- |
| $X$ | Kgs | 4 | 5 |
| $Y$ | Kgs | 2 | 3 |
| $Z$ | Kgs | - | 1 |

Projected data for year 2012 with respect to raw materials are as follows:

| Raw Materials | Expected | Expected | Expected |
| :--- | :--- | :--- | :--- |
|  | Purchase price | Inventories | Inventories |
|  | Perweek | $\underline{\text { Jan 1,2012 }}$ | Dec 31,2012 |
|  | E8 | $32,000 \mathrm{kgs}$ | 36000 kgs |
| $X$ |  | $29,000 \mathrm{kgs}$ | 32000 kgs |
| $Y$ | E5 | $6,000 \mathrm{kgs}$ | 7000 kgs |

Projected direct-labour requirement for 2012 and rates are as follows:

| Product | Hours / Units | Rate |
| :--- | :--- | :--- |
| $Z$ | 2 | E3 |
| B | 3 | E4 |

Overhead is applied at the rate of E2 per direct labour hour.

## REQUIRED:

Based on the above projections and budget requirements for year 2012 for eyar 2012 for $Z$ and B, prepare the following budgets:

1. Sales budget ( in Emalangeni)
2. Production budget in units
3. Raw materials usage budget
4. Raw materials purchases budget
( 4 Marks)
5. Direct labour budget in money
( 4 Marks)
6. Budgeted finished goods inventory at 31 December 2012 in Emalangeni
