$\frac{\text { UNIVERSITY }}{\text { OF }}$
Department of Commercial Accounting

## Cost and Management Accounting 2

CCZ2-2

## LAST ASSESSMENT OPPORTUNITY

Date: 05 November 2015

Time: 180 minutes
Marks: 100
Assessors: MrRRhodes
Moderator: $\quad$ Mrs N Williams (internal)
Mr G Wissing (external)

## INSTRUCTIONS:

- This paper consists of 9 pages (including the cover page).
- Answer all questions. Show all calculations and workings clearly.
- Draw a line under each question.
- Silent, non-programmable calculators may be used.
- Where applicable, round all calculations to two decimal places, unless stipulated otherwise.
- The question paper must be handed in.

| Question | Topic | Marks | Time |
| :---: | :---: | :---: | :---: |
| 1 | Job costing | 15 | 27 minutes |
| 2 | Process costing | 26 | 47 minutes |
| 3 | Cash budget | 17 | 30 minutes |
| 4 | Master budget | 26 | 47 minutes |
| 5 | Flexible budget | 16 | 29 minutes |
|  |  | 100 | 180 minutes |

## QUESTION 1

(15 marks)

RWCB make special edition toys for international events. With the approach of the rugby world cup, they are busy with jobs that have a rugby world cup theme. RWCB had one outstanding job (job CL024) from August 2015, clocks with flags, which had not yet been completed. A total cost of R123 342 had been charged to this job. RWCB charges all the variable overhead costs directly to the job concerned but allocates the fixed overhead costs at $20 \%$ of the prime cost for the month. All the over or under recoveries of overheads are written off in the month they are incurred.

In September, three new jobs were commissioned but only two were completed. At the end of September following costs had been charged to the respective jobs during September:

| Job Num. | Description | Material <br> R | Labour <br> $R$ | Variable O/h <br> CL024 |
| :--- | :--- | ---: | ---: | ---: |
| Clock with flag | 23427 | 12663 | 1350 |  |
| BO106 | Boots with ball | 85632 | 45448 | 3704 |
| JE223 | National jerseys | 125625 | 65610 | 10518 |
| CA421 | National caps | 12655 | 6820 | 1630 |

All the jobs except job CA421 were completed by the end of September and were transferred to finished goods.

## REQUIRED:

1.1) Calculate the prime cost for each of the four jobs for September.
1.2) Calculate the fixed overheads for each of the four jobs for September.
1.3) Calculate the total cost for each of the four jobs for September.
1.4) Complete and balance the Manufacturing Overhead Control account if the actual total overheads for September was R90 000.

## QUESTION 2

(26 marks)

Ball ' $n$ All Ltd manufactures rugby balls in a continuous process. The process commences with the plastic (material 1) being melted and injection molded into the two halves of the ball. The two halves are then given time to set before the valve (material 2 ) is introduced and set into the one half of the ball at $30 \%$ of the process. The inner half of the mold is then removed and the two halves of the ball are brought together after heating the edges. The seams are then checked in an x-ray machine before the balls are printed and packaged (material 3) for delivery at $90 \%$ of the process. Opening work in process at the beginning of the month was at $50 \%$ completion and closing work-in-process at the end of the month was at $25 \%$ completion.

Ball ' $n$ All Ltd supplied you with the following information set up by the previous cost accountant:

## Step 1

Opening WIP
Units started
Units worked
Less: Closing WIP
Completed and transferred

## Unit Flow

| 4500 |
| ---: |
| 20000 |
| 24500 |
| $(6500)$ |
| 18000 |


| Step 2 Equivalent units | Total | Material 1 | Material 2 | $\frac{\text { Material 3 }}{}$ | Conv. cost |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Opening WIP @ 50\% | 4500 | 0 | 0 | 4500 | 2250 |
| Started and completed | 13500 | 13500 | 13500 | 13500 | 13500 |
| Completed and transferred | 18000 |  |  |  |  |
| Closing WIP @ 25\% | 6500 | 6500 | 0 | 0 | 1625 |
| U worked / Equivalent units | 68875 | $\mathbf{2 0 0 0 0}$ | $\mathbf{1 3 5 0 0}$ | $\mathbf{1 8 ~ 0 0 0}$ | $\mathbf{1 7 3 7 5}$ |


| Step 3 Cost statement | Total | Material 1 | Material 2 | Material 3 | Conv. <br> cost |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Opening WIP balance b/f | R31 750 | R13 100 | R9 900 | 0 | R 8 750 |
| Current month costs | R156 250 | R80 000 | R24 300 | R45 000 | R6 950 |
|  | R188 000 | R93 100 | R34 200 | R45 000 | R15 700 |

## REQUIRED:

2.1 Using the FIFO method of accounting for inventories, complete step 4-Cost per equivalent units - of the 5-step process cost reports.
2.2 Using the FIFO method of accounting for inventories, complete step 5 Production cost statement - of the 5-step process cost reports.
2.3 Using the Weighted Average Method of accounting for inventories, complete step 4 - Cost per equivalent units - of the 5 -step process cost reports.
(Hint: Completed and transferred is 18 000units. Equivalent units = Completed and transferred plus closing WIP units)
2.4 Using the Weighted Average Method (WAM) of accounting for inventories, complete step 5 - Production cost statement - of the 5 -step process cost reports.
2.5 Ball and All Ltd use $20 \%$ of all their products as commemorative gifts. These units are then sent through to a second department where the balls are printed with famous signatures and then mounted on a commemorative wood block. Use your answer in question 2.4 above to calculate the quantity and value of finished product to be transferred to finished goods and the quantity and value of product to be transferred to department 2.

## QUESTION 3

(17 marks)

The following information was obtained from the books of Wending Products Ltd:

- The positive cash balance at $1^{\text {st }}$ August is R9 000.
- Sales:

In the following table, June and July information are actual sales amounts and August and September are forecast sales amounts:

|  | Actual |  | Forecast |  |
| :--- | ---: | ---: | ---: | ---: |
|  | June <br> R | July <br> R | August <br> R | September <br> R |
| Cash sales | 4610 | 6500 | 5250 | 7400 |
| Credit sales | 10000 | 20000 | 30000 | 40000 |
| Total | $\mathbf{1 4 6 1 0}$ | $\mathbf{2 6 5 0 0}$ | $\mathbf{3 5 2 5 0}$ | $\mathbf{4 7 4 0 0}$ |

Credit sales are collected over a three month period as follows:

- $10 \%$ in the month of sale,
- $70 \%$ in the first month following sale,
- $18 \%$ in the $2^{\text {nd }}$ month following sale,
- $2 \%$ is written off as a bad debt.
- Purchases are as follows:

|  | July <br>  <br>  <br>  <br> R | August <br> R | September <br> R |
| :--- | ---: | ---: | ---: |
| Cash Purchases | 3000 | 4000 | 5000 |
| Credit Purchases | 12000 | 16000 | 20000 |
| Total | $\mathbf{1 5 0 0 0}$ | $\mathbf{2 0 0 0 0}$ | $\mathbf{2 5 0 0 0}$ |

Credit purchases are paid in full in the month after purchase.

- Selling and Administration expenses are budgeted at R13 000 per month. 30\% of this amount is depreciation.
- Equipment Costing R18 000 will be purchased for cash during September and will be paid off in six equal instalments. The first R3 000 will be paid during the month of September.
- Other Expenses
- Wages amount to R6 000 per month.
- Overheads will be R2 540 for August and R2 150 for September.
- Other income consist of interest receivable at $12 \%$ per annum on a fixed deposit of R100 000 and rental received of R 4000 per month. The interest is received annually on 1 August.


## REQUIRED:

3.1 Prepare the cash budget for August.
3.2 Prepare a schedule showing the cash receipts for September.
(6)

## QUESTION 4

(26 marks)

## PART A

The Roberts Company manufactures home cleaning products.

One of the products, Quickclean, requires 2 kg of Material A and 5 kg of Material B per unit manufactured. Material A can be purchased from the supplier for R5.30 per kg and Material B can be purchased for R4.50 per kg.

The finished goods inventory on hand at the end of each month, therefore closing inventory, must be equal to 4000 units plus $25 \%$ of the next month's sales.

The raw materials inventory on hand at the end of each month, therefore closing inventory, for both Material A and Material B, must be equal to $80 \%$ of the following month's production needs.

Expected sales in June are 14000 units and expected sales in July are 18000 units. The Roberts Company sells Quickclean at R70 per unit.

## REQUIRED:

4.A. 1 Prepare a sales budget for the Roberts company for the product Quickclean for June.
4.A. 2 Prepare a production budget to calculate the number of units to be produced in June.
4.A. 3 Assume that 16000 units are produced in June and 18000 are produced in July. Prepare a purchase budget to calculate the quantity in kg and the value of material A to be purchased during June
4.A. 4 Assume that 16000 units are produced in June and 18000 are produced in July. Prepare a purchase budget to calculate the quantity in kg and the value of material B purchased during June.

## PART B

The Panza Company makes and sells only one product called a Deb. The company is in the process of preparing its Selling and Administrative Expense Budget for next year. The following budget data are available:

|  | Monthly fixed cost | Variable cost per Deb sold |
| :--- | ---: | ---: |
| Sales commissions |  | R 0.75 |
| Delivery of sales | R 30000 | R 1.30 |
| Advertising | R25 000 |  |
| Executive salaries | R15 000 |  |
| Depreciation on office equipment | R7 000 |  |
| Other admin expenses |  |  |

All of these expenses are paid in cash in the month they are incurred.

## REQUIRED:

4.B. 1 Assume the company has budgeted to sell 18000 Debs in January. Calculate the total budgeted variable selling and administrative expenses for January.
4.B. 2 Assume the company has budgeted to sell 16000 Debs in February. Calculate the total budgeted fixed selling and administrative expenses for February.
4.B. 3 Assume the company has budgeted to sell 20000 Debs in March. Prepare the selling and administration budget for March.

## QUESTION 5

(16 marks)

Codek Manufacturing Ltd manufactures desks for local schools. Manufacturing takes place on demand, and no opening or closing inventory is held. All desks are identical and use the same resources. Codek Manufacturing Ltd set the following fixed budgets for specific quantities of production per month for comparison with their actual July sales which are also shown in the table below.

| Sales units |  | Budgeted | Budgeted | July Actual |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 20000 | 30000 | 28000 |
| Sales Value | Variable | R 2400000 | R 3600000 | R 3000000 |
| Cost of Sales |  | R 1005000 | R 1485000 | R 1350000 |
| Material | Variable | R 500000 | R 750000 | R 670000 |
| Labour | Variable | R 300000 | R 450000 | R 430000 |
| Manufacturing overheads | Semi-variable | R 205000 | R 285000 | R 250000 |
| Gross Profit |  | R 1395000 | R 2115000 | R 1650000 |
| Less Expenses Selling expenses |  | R 693000 | R 913000 | R 895000 |
|  |  |  |  |  |
| Royalties | Variable | R 100000 | R 150000 | R 140000 |
| Advertising | Fixed | R 45000 | R 45000 | R 45000 |
| Other | Semi-variable | R 48000 | R 68000 | R 60000 |
| Admin expenses |  |  |  |  |
| Variable with sales | Variable | R 300000 | R 450000 | R 450000 |
| Fixed | Fixed | R 200000 | R 200000 | R 200000 |
| Profit |  | R 702000 | R 1202000 | R 755000 |

Codek has approached you to assist them in analyzing the months' activities. All the variable amounts are directly variable with the sales quantity. No opening or closing inventories are held. Semi-variable costs must be analysed using the high-low method.

## Required

5.1 Draft a flexed budget in the same format as above for the month of July clearly identifying what the budgeted income and expenses would have been at the actual level of operations.
5.2 Calculate the variances between the flexed budget and the actual operations during the month of July for ONLY the following items namely material, labour and overheads. Show if the variance is adverse or favorable.

