## DAY:

WEDNESDAY
TIME:
4.00 - 6.00 P.M

DATE:
13/04/2011

## INSTRUCTIONS:

- Answer ANY FOUR questions. Be neat and orderly.
- Show all the workings.
- Time allowed two hours.
- Where appropriate give your answer to two decimal places.


## QUESTION ONE

Nakuru county council which is trying to estimate its cost function provides you with the following records of wages expenses and the number of employees working for the last six months ending October 2010 in the revenue collection department:

| Month | Wages costs | Number of workers |
| :--- | ---: | ---: |
| May | Ksh.238 | 140 |
| June | 242 | 180 |
| July | 201 | 120 |
| Aug | 183 | 140 |
| Sep | 154 | 100 |
| Oct | 291 | 200 |

## Required:

i) Estimate the cost function $\mathrm{Y}=\mathrm{a}+\mathrm{bx}$ under the least square method.
[13marks]
ii ) Estimate the cost function $\mathrm{Y}=\mathrm{a}+\mathrm{bx}$ under the high low method.
[6 marks]
iii) Briefly explain six steps of developing the cost function.

## QUESTION TWO

United ltd, a producer of bread has five production processes organized as follows: shaping, graphics, moulding, sanding and finishing. The following information is available regarding production in the first department; shaping department during the month of October, 2009:

## Production data

- Kilograms in process, October 1st: $100 \%$ complete as to materials, $75 \%$ complete as to labour and $40 \%$ as to factory overheads $\qquad$
- Kilograms started into production during October $2009 \ldots . . . . . . . . . . . . .8,000 \mathrm{kgs}$.
- Kilograms completed and transferred out during October to graphics Department...7,000 kgs.
- Kilograms in process, October 31st: $100 \%$ complete as to materials, $80 \%$ complete as to labour and $60 \%$ as to factory overheads. $\qquad$
- Normal spoilage is $10 \%$ of good production (completed and transferred out).
- Spoiled units realized $\$ 0.5$ per kilogram


## Cost data

(a) Work in process inventory, October, $1^{\text {st }} 2009$ :

Materials
Ksh.100,000.
Labour
Overheads $\qquad$
Ksh. 60,000.
Ksh. 20,000.
(b) Costs added during October ; 2009 :

Materials
Ksh. 300,000.
Labour.
Ksh. 205,000.
Overheads
Ksh. 200,000.

## Required;

(a) Prepare a production report for the Department using the weighted average (WAM) method of valuation.
(b) Prepare journal entries to record the above information. [6 marks]
(c) Post the above journals to relevant ledger accounts.
[6 marks]

## QUESTION THREE:

Pake Ltd manufactures and sells two products namely: TVS and Radios. The manager who is trying to estimate the company's break-even points for the next month presents you with the following forecast concerning the unit selling prices, sales mix and variable costs per unit for the two products as follows;

| Products | TVS | Radios |
| :--- | :---: | :---: |
| Unit variable cost | Sh. 120 | Sh. 70 |
| Sales units | 600 | 400 |
| Unit selling price | Sh. 200 | Sh100 |

The fixed production costs are budgeted at ksh. 175, 000 and the company's fixed selling and administration expenses are forecasted to be $\mathrm{Sh} .25,000$. The company has an effective tax rate of $40 \%$.

## Required:

(a) Determine Super's budgeted net income.
[4marks]
(b) Determine total break even points in: (i) units (ii) shillings
[8marks]
(c) Calculate Break-even points in (i) units (ii) shillings for each product.
(d) Determine the total sales the manager must make in order to earn a net income of sh.80, 000 for the next month.
[4marks]
(e) Critically examine any five assumptions the manager is likely to encounter when using the cost volume profit model.
[5marks]

## QUESTION FOUR

NTC ltd the manufacturer of biscuits is seeking your advice with regards to fluctuations in the costs of the company. The following information is available from their records:

## i ). The standard cost per unit is given as follows;

- Direct materials ....................... 2.82 kilograms at $\$ 4.80$ per kilogram.
- Direct labour:

b) Type II ............................. 3.85 hours at $\$ 4.25$ per hour
- Variable overhead ................................... 3 hours at $\$ 4$ per hour.

ii). Actual results for the year ended $31^{\text {st }}$ July $\mathbf{2 0 0 9}$ was as follows:
- Budgeted output 2,000 units.
- Actual output $\qquad$ 1, 100 units.
- Actual material purchased and used ......... 3,200 kgs costing \$ 15,100.
- Wages paid:
a) Type I (7,120 hours) costing \$27,056.
b) Type II (4,235 hours) costing $\$ 18,210$.
- Actual fixed overheads. \$57,750.
- Actual variable overheads ................................... \$24,750.


## Required:

(a) Compute the budgeted cost of making one unit of the product.

## [5marks]

(b) Calculate the following variances:
i. Direct material price variance.
[4marks]
ii. Direct material usage variance.
[4 marks]
iii. Direct labour rate variances.
iv. Direct labour efficiency variance.
(c) State four causes of direct materials price variances.

## QUESTION FIVE:

(a) Clearly state the steps that should be followed in developing a master budget for a merchandize company.
[6 marks]
(b) Discuss the suitability, merits and demerits of a zero based budget.
[19 marks]

