TECHNICAL UNIVERSITY OF MOMBASA

DEPARTMENT OF ACCOUNTING AND FINANCE UNIVERSITY EXAMINATION FOR

DIPLOMA IN ACCOUNTING
DIPLOMA IN BUSINESS ADMINISTRATION

## BAC 2210: MANAGEMENT ACCOUNTING II

## END OF SEMESTER EXAMINATION

SERIES: APRIL 2022
TIME: 2 HOURS
INSTRUCTION: ANSWER QUESTION ONE (COMPULSORY) AND ANY OTHER TWO QUESTIONS.

## QUESTION 1 (COMPULSORY)

(a) Bamburi Ltd makes one product, X . Two types of labour are involved in the preparation of one unit of product X, skilled and semi-skilled. Skilled labour is paid sh. 1,000 per hour and semi-skilled sh. 500 per hour. Twice as many skilled labour hours as semiskilled labour hours are needed to produce one unit of product X , four semi-skilled labour hours being needed.

One unit of X is made up of three different direct materials. 7 kilograms of direct material E, 4 litres of direct material N and 3 metres of direct material S are needed. Direct material E costs sh. 100 per kilogram, direct material N sh. 200 per litre and direct material S sh. 300 per metre

Variable production overheads are incurred at Bamburi Ltd at the rate of sh. 250 per direct labour (skilled) hour.

A system of absorption costing is in operation at Bamburi Ltd. The basis of absorption is direct labour (skilled) hours. For the forthcoming accounting period, budgeted fixed
production overheads are sh. 25 million and budgeted production of product X is 5,000 units.

Administration, selling and distribution overheads are added to products at the rate of sh. 1,000 per unit.

A mark-up of $25 \%$ is made on product X .

## Required,

Using the above information, prepare a standard cost card for product X .
(b) Sokoto multinational company has two divisions, A and B, whose respective performances are under review.
Division A is currently earning a profit of sh. 35 million and has net assets of sh150million.

Division B currently earns a profit of sh. 70million with net assets of sh. 325 million. Sokoto has a current cost of capital of $15 \%$.

Required;
Using the above information, calculate ROI and RI figures for the two divisions under review and comment on your results.
(c) Discuss the functions of budgets.

## QUESTION 2

XYZ company produces three products $\mathrm{X}, \mathrm{Y}$ and Z . For the coming accounting period budgets are to be prepared based on the following information:

Budgeted sales

| Product X | 2,000 units @ sh. 100 |
| :--- | :--- |
| Product Y | 4,000 units @ sh. 130 |
| Product Z | 3,000 units @ sh. 150 |

Budgeted usage of raw materials

Raw material 11 Raw material 22 Raw material 33

| Product X | 5 kg |
| :--- | :---: |
| Product Y | 3 kg |
| Product Z | 2 kg |
| Cost per kg of | $\mathrm{Sh} 5$. |
| material |  |

2 kg
2 kg
1 kg
Sh. 3

2 kg
3 kg
Sh. 4

Finished inventories budget

|  | Product X | Product Y | Product Z |
| :--- | :---: | :---: | :---: |
| Opening | 500 | 800 | 700 |
| Closing | 600 | 1,000 | 800 |

Raw materials inventory budget in kgs

|  | Raw material 11 | Raw material 22 | Raw material 33 |
| :--- | :---: | :---: | :---: |
| Opening | $21,000 \mathrm{~kg}$ | $10,000 \mathrm{~kg}$ | $16,000 \mathrm{~kg}$ |
| Closing | $18,000 \mathrm{~kg}$ | $9,000 \mathrm{~kg}$ | $12,000 \mathrm{~kg}$ |

## Labour budget

|  | Product X | Product Y | Product Z |
| :--- | :---: | :---: | :---: |
| Expected hours per 4 6 |  |  |  |
| unit |  | 8 |  |
| Expected hourly rate | Sh. 9 | Sh. 9 | Sh. 9 |

## Required;

Prepare the following:
(a) Sales budget
(4marks)
(b) Production budget
(4marks)
(c) Material usage budget
(4marks)
(d) Material purchases budget (4marks)
(e) Labour budget

## QUESTION 3

Discuss the decision-making process.
(20 marks)

## QUESTION 4

Bahari Co. Ltd has prepared the following standard cost information for one unit of product A

Direct materials

Direct labour

Fixed overheads

4 kg @ sh. 100 per kg
2 hours @ sh. 40 per hour

3 hours @ sh. 25

The fixed overheads are based on budgeted expenditure of sh. 750,000 and budgeted activity of 30,000 hours.

Actual results for period were recorded as follows:

Production
9,000 units
Materials - $33,600 \mathrm{~kg}$
Sh. 3,360,000
Labour - 16,500 hours
Sh. 685,000
Fixed overheads
Sh. 700,000

Required;
Calculate the following:
(a) The direct material price and usage variances
(b) The direct labour rate and efficiency variances
(c) The total fixed production overhead variance

## QUESTION 5

(a) Compare and contrast the use of residual income (RI) and return on investment (ROI)in divisional performance measurement, stating the advantages and disadvantages of each.
(b) Division Y of Coca-cola company currently has capital employed of sh. 100,000,000 and earns an annual profit after depreciation of sh. 18million. The divisional manager is considering an investment of sh. 10million in an asset which will have a 10-year life with no residual value and will earn a constant annual profit after depreciation of sh. 1.6 million. The cost of capital is $15 \%$.

Required;
Calculate the following and comment on the results:
(i) The return on divisional investment, before and after the new investment. ( $5^{1 / 2}$ marks)
(ii) The divisional residual income before and after the new investment. ( $51 / 2$ marks)

