# UGANDA MARTYRS UNIVERSITY

## FACULTY OF BUSINESS ADMINISTRATION AND MANAGEMENT

## DEPARTMENT OF ACCOUNTING AND FINANCE

**ACADEMIC YEAR: 2023/2024 SEMESTER: TWO**

**COURSE CODE: ACC2204**

**COURSE NAME:** COST ACCOUNTING

**BAM II**

**DATE: Monday, 13th May 2024**

**Time allowed: 3 Hours (9:30am 12:30pm)**

**INSTRUCTIONS:**

*Read the following before answering the examination questions*

- Do not write anything on this question paper.
- Attempt any four (4) questions of your choice
- All Questions carry equal marks
- Show all necessary workings

## QUESTION ONE

a) Explain meaning the of the Cost Accounting as a branch of accounting. **(5 marks)**
b) Explain the relevancy is this branch of accounting to any organization of your choice. **(10 marks)**
c) Elaborate on the difference between Cost Accounting and Financial Accounting. **(10 marks)**

## QUESTION TWO

a) Briefly explain the difference between the following cost classifications giving relevant examples. **(3 marks each)**
   i) Product costs and Period costs
   ii) Direct costs and Indirect costs
   iii) Fixed costs and Variable costs
b) The following costs and activities were incurred by a manufacturing concern;

| Period | Activities (units) | Costs ($) |
|---|---|---|
| 1 | 120 | 2,200 |
| 2 | 50 | 1,500 |
| 3 | 90 | 1,900 |
| 4 | 140 | 2,400 |
| 5 | 150 | 2,500 |

**Required:**

1. Using the Least squares method of regression, compute the variable cost per unit of output. **(6 marks)**
2. Compute the fixed costs for the period. **(3 marks)**
3. Determine the total cost function. **(1 mark)**
4. Using the determined total cost function, compute the total costs the factory is planning to produce 2,000 units. **(3 marks)**
5. How many units can the factory produce with a budget of $5,000 **(3 marks)**

## QUESTION THREE

(a) Explain any five factors that Organizations need to take into consideration when setting Stock levels? **(5 marks)**
(b) The following details relate to the stores records of BAM Ltd for the month of February 2024

| | |
|---|---|
| 1st Feb: | Received 500 units @ $20 per unit |
| 10th Feb: | Received 300 units @ $24 per unit |
| 15th Feb: | Issued 700 units |
| 20th Feb: | Received 400 units @ $28 per unit |
| 25th Feb: | Issued 300 units |
| 26th Feb: | Returns of 10 units @ $20 were made back to the stores |
| 27th Feb: | Received 500 units @ $22 per unit |
| 28th Feb: | Issued 200 units. |

**Required:** 1Prepare a stores ledger record card using;

- First In First Out (FIFO) method **(9 marks)**
- Simple Average method **(9 marks)**

2. For both methods, determine the value of closing stock. **(2 marks)**

## QUESTION FOUR

a) Bonus/Incentive systems are systems that guarantee workers that they will be compensated for any extra effort in terms of extra units produced/work done outside the set/agreed number of units. Explain some of the characteristics of a good incentive system. **(5 marks)**

b) Kasasa Enterprises Ltd employs 6 workers with the following pay details for the month of May 2023.

| No. and Name of Worker | Hours worked in the month |
|---|---|
| 1. Abacha | 120 |
| 2. Bokello | 100 |
| 3. Chandiru | 80 |
| 4. Dratibi | 80 |
| 5. Ezati | 90 |
| 6. Faula | 95 |

Additional information:

a. The basic working time in a month is 80 hours and any access hours (overtime) are paid for as follows: The first 10 hours are paid for at a time and half ($1^{1/2}$) of the basic rate while extra hours are paid for at double (twice) the basic rate.

b. The basic hourly rate of pay is shs 5,000

c. Transport allowance is payable to all workers at a rate of shs 40,000 per month per worker.

d. Dratibi is a supervisor and he is entitled to a responsibility allowance of 50,000 per month.

e. The following deductions are made:
   - National Social Security Fund (NSSF)
   - Pay As You Earn (PAYE)
   - Each worker pays a subscription fee of 10,000 per month to a staff association.
   - Local service tax: all employees are assessed to pay according to the schedule. The amount is deductible in the first 4 calendar months with equal instalments.

**Required**:

Design a suitable payroll for Kasasa Enterprises Ltd for the month of May 2023. **(20 marks)**

**QUESTION FIVE**

a. Distinguish between overhead cost allocation and apportionment. **[4 marks]**

b. The following costs were incurred by Marikas Manufacturing for the year 2022/2023

| **Direct Material cost** | | **Direct Wages** | |
|---|---|---|---|
| Machining Department A | 20,000,000 | Machining Department A | 8,000,000 |
| Machining Department B | 16,000,000 | Machining Department B | 4,000,000 |
| Assembly Department | 12,000,000 | Assembly Department | 2,000,000 |

| **Indirect Materials cost** | | **Indirect Wages** | |
|---|---|---|---|
| Machining Department A | 1,200,000 | Machining Department A | 1,600,000 |
| Machining Department B | 800,000 | Machining Department B | 800,000 |
| Assembly Department | 400,000 | Assembly Department | 1,200,000 |
| Stores Department | 200,000 | Stores Department | 400,000 |
| Estates Department | 160,000 | Estates Department | 240,000 |

| **Other Costs** | |
|---|---|
| Rent and Rates | 8,000,000 |
| Depreciation of Machinery | 4,000,000 |
| Staff Welfare Costs | 12,000,000 |

| | |
|---|---|
| Machine Power Costs | 20,000,000 |
| Maintenance Costs | 12,000,000 |

Additional Information

| | DEPARTMENTS | | | | |
|---|---|---|---|---|---|
| | Machining | | Assembly | Stores | Estates |
| | A | B | | | |
| No of Employees | 8 | 6 | 10 | 4 | 2 |
| Area (sqm) | 100 | 150 | 50 | 60 | 40 |
| Machine Power (in Horse Power) | 10 | 20 | 20 | | |
| Maintenance Hours | 1,000 | 500 | 500 | | |
| Machine hours | 1,000 | 500 | | | |
| Labour hours | 600 | 400 | 200 | | |
| Value of Machinery (in millions) | 40 | 30 | 10 | | |

Machining Departments A, B and Assembly Department C are production departments while Stores and Estates Departments are service departments.

The costs of the service departments are redistributed to the production departments as follows:

| | DEPARTMENTS | | | | |
|---|---|---|---|---|---|
| | Machining | | Assembly | Stores | Estates |
| | A | B | | | |
| Department X | 50% | 30% | 20% | - | - |
| Department Y | 60% | 20% | 20% | - | - |

**Required**: Carry out

i. Primary apportionment of overheads, clearly spelling out the cost drivers **(15 marks)**
ii. Secondary apportionment of overheads using the direct method **(3 marks)**
iii. Using appropriate criteria, compute overhead recovery rates for each of the production departments. **(3 marks)**

## QUESTION SIX

a) Describe any five (5) differences between marginal costing and absorption costing techniques. **(5 marks)**

b) Allan Ltd, a producer of a single product has the following cost structure.

| | Cost per unit ($) |
|---|---|
| Material cost | 4 |
| Direct labour | 3 |
| Variable Manufacturing overheads | 5 |
| Fixed Manufacturing overheads | 3 |
| **Total** | **15** |

The above cost structure is based on the normal activity level of 40,000 units. The budgeted selling and administration overheads amount to $100,000 per quarter. The company sells the products at $25 per unit.

The production and sells for each Month were:

| | **January** | **February** | **March** |
|---|---|---|---|
| Production (units) | 55,000 | 35,000 | 42,000 |
| Sales (units) | 50,000 | 40,000 | 32,000 |

**Required;**

Produce in a columnar form, Cost statements based on Marginal costing technique. **(20 marks)**

*Some relevant formulae to be used*

**PAY AS YOU EARN**

**Residents**

| Chargeable income (per month) | Rate of tax |
|---|---|
| Not exceeding Ug.shs 235,000 | Nil |
| Exceeding Ug.shs 235,000 but not exceeding Ug.shs 335,000 | 10% of the amount by which chargeable income exceeds Ug.shs 235,000. |
| Exceeding Ug.shs 335,000 but not exceeding Ug.shs 410,000 | Ug.shs 10,000 plus 20% of the amount by which chargeable income exceeds Ug.shs 335,000. |
| Exceeding Ug.shs 410,000 | (a) Ug. shs 25,000 plus 30% of the amount by which chargeable income exceeds Ug.shs 410,000 and<br>(b) (b) Where chargeable income of an individual exceeds Ug.shs 10,000,000 an additional 10% charged on the amount by which chargeable income exceeds Ug.shs 10,000,000 |

**Non residents**

| Chargeable income (per month) | Rate of tax |
|---|---|
| Not exceeding Ug.shs 335,000 | 10% |
| Exceeding Ug.shs 335,000 but not exceeding Ug.shs 410,000 | Ug.shs 33,500 plus 20% of the amount by which chargeable income exceeds Ug.shs 335,000. |
| Exceeding Ug.shs 410,000 | (a) Ug.shs 48,500 plus 30% of the amount by which chargeable income exceeds Ug.shs 410,000 and<br>(b) Where chargeable income of an individual exceeds Ug.shs 10,000,000 an additional 10% charged on the amount by which chargeable income exceeds Ug.shs 10,000,000 |

**Least Squares method of regression**

$$a = \frac{\Sigma y \Sigma x^2 - \Sigma x \Sigma xy}{n(\Sigma x^2) - (\Sigma x)^2}$$

$$b = \frac{n\Sigma xy - \Sigma x \Sigma y}{n(\Sigma x^2) - (\Sigma x)^2}$$

**Local Service tax schedule**

Table 1

| | Amount of monthly income earned (in shs) | Rate of local service shs) per year |
|---|---|---|
| 1 | Exceeding 100,000/= but not exceeding 200,000/= | 5,000 |
| 2 | Exceeding 200,000/= but not exceeding 300,000/= | 10,000 |
| 3 | Exceeding 300,000/= but not exceeding 400,000/= | 20,000 |
| 4 | Exceeding 400,000/= but not exceeding 500,000/= | 30,000 |
| 5 | Exceeding 500,000/= but not exceeding 600,000/= | 40,000 |
| 6 | Exceeding 600,000/= but not exceeding 700,000/= | 60,000 |
| 7 | Exceeding 700,000/= but not exceeding 800,000/= | 70,000 |
| 8 | Exceeding 800,000/= but not exceeding 900,000/= | 80,000 |
| 9 | Exceeding 900,000/= but not exceeding 1,000,000/= | 90,000 |
| 10 | Exceeding 1,000,000/= | 100,000 |