

### **CERTIFIED ACCOUNTING TECHNICIAN**

### **STAGE 3 EXAMINATIONS**

### **S3.2: MANAGEMENT ACCOUNTING**

### DATE: THURSDAY 29, FEBRUARY 2024

### **INSTRUCTIONS:**

- 1. Time allowed: 3 hours.
- 2. This examination has three sections: A, B and C.
- 3. Section **A** has **10 multiple choice questions** equal to 2 marks each.
- 4. Section **B** has **2 questions** equal to 10 marks each.
- 5. Section C has **3 questions** equal to 20 marks each.
- 6. All questions are compulsory.
- 7. The question paper should not be taken out of the examination room.

#### SECTION A

#### **QUESTION ONE**

The Successful implementation of the budget plan depends on the managers' attitudes towards the budgetary control system at the planning stage.

# Which one of the following managers' attitudes will positively impact the implementation of the budget plan?

- A Actively participating in contribution of ideas during the budget making process.
- B Always excusing themselves to do administrative work during budget planning.
- C Delegating the coordination of budget making process to junior staff.
- D Not listening and taking into account all the contributions from junior staff

(2 Marks)

#### **QUESTION TWO**

.....is a method of sampling in which the total population is divided into strata after which a random sample is selected from each stratum.

- A Random sampling method
- B Stratified random sampling method
- C Cluster sampling method
- D Systematic sampling method

(2 Marks)

#### **QUESTION THREE**

#### Which of the following is not a function of standard costing in an organisation?

- A Determining product pricing.
- B Used as a benchmark against which performance is measured.
- C Allocation of organisation's scarce resources.
- D Estimating the cost of manufacturing a given product.

(2 Marks)

#### **QUESTION FOUR**

Fixed production overheads are absorbed into production on the basis of fixed overhead absorption rates which are predetermined based on the budgeted activity level.

# What is the effect of both underproduction and overproduction to fixed production overheads absorbed during the year?

- A Underproduction results into over absorption of fixed production overheads whereas overproduction results to under absorption of fixed production overheads.
- B Both underproduction and overproduction are inconsequential to the fixed production overheads absorbed during the year
- C Both underproduction and overproduction have one effect of increasing the fixed production overhead absorbed.
- D Underproduction results to under absorption of fixed production overheads whereas overproduction results to over absorption of fixed production overheads absorbed during the year

(2 Marks)

#### **QUESTION FIVE**

When clients are not satisfied with products or services the company is offering, the company will always get customer feedbacks which forms the basis of managerial action to improve on customer relations.

### Which one of the following is not an indicator of customer dissatisfaction with company products or services?

- A Getting replacement of an item within the warranty period if it is malfunctioning.
- B Goods returned back to the business by the customers.
- C Customer shifting to another company for purchase of similar products.
- D Making payment for the product only after confirming that it is functioning well.

(2 Marks)

#### **QUESTION SIX**

Service providing companies are concerned with non-financial performance indicator more often than financial indicators.

# What is the reason as to why these service companies have so much focus on non-financial performance indicator as opposed to financial performance indicators yet both of them play significant role?

- A Financial performance indicators are only useful to product manufacturing companies.
- B Non-financial indicators are directly linked to customers hence they help in ensuring that customer satisfaction is always accorded the first priority.
- C There is no reason to warranty the choice of non-financial performance indicators over the financial performance indicators by service companies.
- D Non-financial performance indicators play both roles of financial and non-financial performance indicators.

(2 Marks)

#### **QUESTION SEVEN**

The objective of any business is profit and wealth maximisation when managing costs properly. Total Quality Management (TQM) is one of the most progressive management tools applicable across the globe in the management of organisational activities, operations and processes to enhance efficiency and smooth flow of operations. Inefficiency is the costs that Total Quality Management (TQM) is meant to address.

# Which one of the following is not a form of inefficiency cost that is meant to be addressed by Total Quality Management (TQM)?

- A Cost of loss of customer goodwill.
- B Cost of re-inspection.
- C Cost of operations.
- D Cost of replacing faulty goods.

(2 Marks)

#### **QUESTION EIGHT**

Company XYZ Ltd has the following features regarding their recently conducted SWOT analysis over their planned action plan:

- (i) The company has one of the best trained and dedicated team of personnel
- (ii) There a gap in the job market and they have developed a new product
- (iii) The rate the company staff turnover is alarming
- (iv) There are other companies that are in the process of developing the same product.

Which of the following correctly show the company Strength, Weaknesses, Opportunities and Threats (SWOT) as per the table below?

	Strength	Weaknesses	Opportunities	Threats
А	(iv)	(ii)	(iii)	(i)
В	(iii)	(i)	(iv)	(ii)
С	(ii)	(iv)	(i)	(iii)
D	(i)	(iii)	(ii)	(iv)

#### **QUESTION NINE**

Change is as good as rest, however not everyone in an organisation is comfortable with the change of the system.

#### Which one of the following cannot contribute to the resistance to change in an organisation?

- A Continuous staff appraisals
- B Natural fear for change because of unknown outcomes
- C Not being involved in the process of the change
- D Fear of compulsory trainings especially employees of advanced age.

(2 Marks)

#### **QUESTION 10**

Activity Based Costing (ABC) was introduced as an alternative method of absorbing overhead cost into units of a product to address the challenge of using traditional method of absorbing overhead costs into the units of a product:

### Which one of the following best describe the challenge being addressed by ABC and how it has addressed it?

	The challenge of using traditional method of absorption	Way of addressing the challenge
А	Normal apportionment of overhead costs	Single basis of apportionment
В	Inequitable apportionment of overhead costs	Use of cost drivers to apportion
С	Allocation of overheads	Use of limiting factor
D	Re-apportionment of overheads	Use of a single basis

(2 Marks)

#### **SECTION B**

#### **QUESTION 11**

(a) Briefly explain how the balanced scored card is used in performance appraisal. (2 Marks)
(b) Kelana Ltd has been successfully producing a single product for couple of years. Last year the company management kicked off the process of new product development and as at 31<sup>st</sup> December 2023 the new product development process was completed and launching done immediately. The process of incorporating the new product to the product range is on course. The following table shows the list of the company's activities, operations, processes and output for the month January 2023.

Details	Existing product	New product
Output (units)	50,000	10,000
Total production cost (FRW)	750 million	140 million
Turnover (FRW)	1.1 billion	250 million
Actual hours worked	10,000	2,500

#### Additional information:

1. Development cost amounted to FRW 94 million.

#### **Required:**

Calculate for Kelana Ltd the performance indicators that can be used for each of the four perspectives in the balanced score card. (8 Marks)

(Total: 10 Marks)

#### **QUESTION 12**

The following data was extracted from the financial statements of XYZ Ltd for the financial years ended 31<sup>st</sup> December 2022 and 2023 respectively.

Details	2022 FRW '000'	2023	FRW '000'
Non-Current Assets			
PPE	1,850,000		1,650,000
Current Assets			
Cash and bank balances	200,000		150,000
Inventories	450,000		350,000
Trade receivables	240,000		160,000
Total current assets	890,000		660,000
Total Assets	<u>2,740,000</u>		<u>2,310,000</u>
Equity And Liabilities			
Equity			
Ordinary share capital	1,500,000		1,500,000
Share premium	100,000		100,000
Revenue reserve	250,000		160,000
Total equity	1,850,000		1,760,000
Long term liabilities			
10% long term bank loan	600,000		350,000
Current liabilities			
Trade payables	290,000		200,000
Total liabilities	890,000		550,000
Total Equity & Liabilities	2,740,000		2,310,000

#### Additional information:

- 1. Profit before interest charges and tax for the year ended 31<sup>st</sup> December 2023 amounted to FRW 126,600,000.
- 2. Credit sales and purchases were FRW 800 million and FRW 490 million respectively.
- 3. Cost of sales amounted to FRW 500 million.
- 4. Number of days in a year is 365.

#### **Required:**

#### Calculate for the year ended 31<sup>st</sup> December 2023;

	e /	
<b>(a)</b>	Inventory turnover ratio	(2 Marks)
<b>(b)</b>	Receivables collection period	(2 Marks)
(c)	Payables payment period.	(2 Marks)
( <b>d</b> )	Interest cover.	(2 Marks)
<b>(e)</b>	Debt: Equity ratio.	(2 Marks)
		(Total: 10 Marks)

#### **SECTION C**

#### **QUESTION 13**

The following data was extracted and presented by the management accountant of KN Ltd for the year ended 31<sup>st</sup> December 2023.

#### Inventories as at 1<sup>st</sup> January 2023:

Raw Materials: A	25,000 kgs
В	36,000 kgs
Finished goods: X	7,000 kgs
Y	8,000 kgs

Z 10,000 kgs

#### Material required per unit of output

Material A 2kgs @ FRW 50 Material B 3kgs @ FRW 40

#### Labour requirement per unit of output

Skilled labor 4 hours @ FRW 20 Semiskilled labor 5 hours @ FRW 10

Products	January	February	March	April	May	June
Χ	30,000	32,000	34,000	36,000	38,000	40,000
Y	40,000	43,000	46,000	49,000	52,000	55,000
Z	42,000	46,000	50,000	54,000	60,000	64,000

#### Additional information:

- 1. It is the company policy to maintain the closing inventory of finished goods at 25% of the next months projected sales.
- 2. The selling price per unit is FRW 12,000, FRW 10,000 and FRW 8,000 for products X, Y & Z respectively.
- 3. The closing inventory of raw materials is maintained at 10% of the next month's consumption.

#### **Required:**

Prepare for the month of February;	
(a) Production budget	(6 Marks)
(b) Material usage budget	(4 Marks)
(c) Material purchases budget	(6 Marks)
(d) Labor budget	(4 Marks)
	(Total: 20 Marks)

#### **QUESTION 14**

(a) The cost of an organization has an element that is fixed, variable or mixed in nature.

#### **Required:**

#### Citing 2 relevant examples, explain a mixed cost.

(4 Marks)

(b) The following data was obtained from the management accounting system of ABC Ltd for the accounting period ended 31<sup>st</sup> December 2023.

Months	Output '000'	Production cost FRW '000'
January	20,000	220,000
February	18,000	200,000
March	12,000	140,000
April	15,000	170,000
May	14,000	160,000
June	16,000	180,000
July	5,000	70,000
August	10,000	120,000
September	22,000	240,000
October	30,000	320,000
November	26,000	280,000
December	24,000	260,000
Total	212,000	2,360,000

#### **Required:**

Using High Low method of cost estimation;

- (i) Calculate the variable cost per unit(2 Marks)(ii) Calculate the value of the total fixed cost(2 Marks)(iii) Establish a cost function in the form of Y=a+bc(2 Marks)(iv) Calculate the total of producing 25,000,000 units(2 Marks)
- (v) Calculate the total cost of producing the units in (iv) if the total fixed increased by 25% while variable cost per unit decreased by 25%.
   (2 Marks)
- (c) KJ Ltd is a manufacturing company operating in the republic of Rwanda. The management accountant has presented the following managerial accounts for the year ended 31<sup>st</sup> December 2023

	Production Departments			Service Depa	rtment
Details	Α	В	С	X	Y
Allocated overheads	5,000,000	4,000,000	6,000,000	2,000,000	1,000,000
Production (units)	100,000	80,000	120,000	-	-
Labor hours	5,000	3,000	8,000	-	-
Machine hours	4,000	1,000	5,000		

#### Additional information:

- 1. Service department X is labor intensive
- 2. Service department allocated overhead are to be reapportioned to production departments on the basis of labor hours and machine hours for department X and Y respectively.
- 3. Overheads absorption rates are based on the units of output.

#### **Required:**

- (i) **Reapportion all the service department overheads to production departments.** (3 Marks)
- (ii) Compute the overheads absorption rates application in each production department.

(3 Marks) (Total: 20 Marks)

(4 Marks)

(4 Marks)

#### **QUESTION 15**

(a) Trinity is a company in the transport industry operating in most parts of East and Central Africa. Below is the financial data that was obtained from the company accountant for the year ended 31<sup>st</sup> December 2023:

Number of buses in operation are 15 acquired @ a cost of FRW 150 million

Fueling required is 100 litres per 10,000 kms per bus covered in a month @ FRW 2000 per liter Servicing required at FRW 100,000 per bus per month

Cost of the driver is FRW 400,000 per month.

Each bus driver has a co-driver

#### **Required:**

Calculate the total cost of offering transport service.

distribution overhead costs as used in an organization.

(b) Using examples, distinguish between general administration overhead costs and selling and

- (c) Differentiate between production costs and non-production costs in terms of meaning and accounting treatment in the income statement. (4 Marks)
- (d) Explain two reasons why an organization decides to adopt the use of cost codes in the accounting system when recording various items of costs. (4 Marks)
- (e) Explain the following terms as used in management accounting

(i) Cost unit	(1 Mark)
(ii) Cost center	(1 Mark)
(iii) Profit center	(1 Mark)
(iv) Revenue center	(1 Mark)
	(Total: 20 Marks)

#### **End of Question Paper**

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