



CERTIFIED PUBLIC ACCOUNTANT

FOUNDATION LEVEL 2 EXAMINATIONS

F2.1: MANAGEMENT ACCOUNTING

DATE: WEDNESDAY, 30 NOVEMBER 2022

INSTRUCTIONS:

- 1. Time Allowed: 3 hours 15 minutes (15 minutes reading and 3 hours for writing).**
- 2. This examination has seven questions and only five questions should be attempted.**
- 3. Marks allocated to each question are shown at the end of each question.**
- 4. Show all your workings where applicable.**
- 5. The question paper should not be taken out of the examination room.**

QUESTION ONE

(a) CYOVU Games Association Ltd, a software company has developed a new game “AGUKA” which they launched in recent years. CYOVU Games Association Ltd has recently introduced an Activity Based Costing System. You as CYOVU Games Association’s management accountant provided the following details for the month of June 2021:

Cost Pool	Overhead Cost
	FRW
Machine maintenance	18,000
Stores	10,000
Spare parts	20,000
Administration	2,000

You have also ascertained the following activity related key information:

Number of employees	40
Total number of spare parts	500
Number of materials requisitions	20
Machine maintenance hours	600 hours

During the mentioned month, 1,400 units of AGUKA were produced. This production run required 400 spare parts and 200 machine maintenance hours; 10 material requisitions were made and 20 employees worked on the units.

Required:

Compute the total amount of overhead absorbed by each unit of AGUKA under Activity Based Costing within CYOVU. (10 Marks)

(b) You have been appointed as the Management accountant within AKANYARU Manufacturing Company. Your manager is planning to submit a proposal of adopting a new accounting for overheads absorption to senior management. He has been told by his young brother who is a CPA Student at ICPAR that Activity Based Costing (ABC) Method is one of the best overheads absorption method but he is not fully informed on the advantages of this method.

Required:

Provide to your manager any five advantages of Activity Based Costing (ABC) method utilization in allocating overhead costs to products. (10 Marks)

(Total: 20 Marks)

QUESTION TWO

(a) With regard to variance analysis for all production costs (direct material, direct labour, and overhead), it is important to note that each variance does not represent a separate and distinct problem to be handled in isolation. Variances may be interdependent through some connecting factors.

Required:

Justify how the labour variances are interdependent with material variance. (4 Marks)

(b) AKENGETSE Ltd has just introduced a new standard marginal costing system to assist in the planning and control of the production activities for the single product which the company manufactures. AKENGETSE Ltd produces one type of strong and affordable popular banana beer. The management accountant has produced the following variance analysis information for management discussions.

The standard variable cost for the product manufactured by AKENGETSE limited is given below:

Particulars		FRW
Direct materials	2 kg at FRW 3	6
Direct labour	0.75 hours at FRW 4	3
Variable overheads	0.75 hours at FRW 1.3334	1

The fixed costs are treated by AKENGETSE Ltd as the periodic costs and hence they are not charged to the product.

The following information relate to the month of May 2020.

Opening stock as at 1 May 2020.

Details	1 May 2020	Unity cost
	FRW	FRW
Stock of the raw materials	12,000	1.5
Stock of the finished goods at the standard cost	36,000	10

Closing stock as at 31 May 2020

Details	31 May 2020	Unity cost
	FRW	FRW
Stock of the raw materials	6,000	2.5
Stock of the finished goods at the standard cost	42,500	10

The following actual information is also available for the month of May 2020:

Details	FRW
Sales at FRW 20 per unit	200,000
Material purchases at FRW 3.5 per kg	42,000
Direct labour cost (8,000 hours)	30,000

Details	FRW
Variable overheads	12,000
Material price variance (adverse)	21,000

Actual production in unit for the month of May 2020 was 9,350

Required:

Calculate the following variances:

- i) **Material usage variance** (4 Marks)
- ii) **Labour rate variance.** (2 Marks)
- iii) **Labour efficiency variance.** (2 Marks)
- iv) **Variable overhead expenditure variance:** (2 Marks)
- v) **Variable overhead efficiency variance.** (2 Marks)
- vi) **Comment on two possible causes of each variance in (i) to (iv) above.** (4 Marks)

(Total: 20 Marks)

QUESTION THREE

Tumusime Ltd is a company registered under Rwanda Development Board and deals in the distribution of coffee in Rwanda. The following data relate to forecasted and actual sales for the year 2021/2022.

Actual sales

2021	Amount FRW
September	130,000,000
October	140,000,000
November	160,000,000
December	170,000,000

Forecasted sales

2022	Amount FRW
January	180,000,000
February	150,000,000
March	200,000,000
April	250,000,000

Additional information

- 1) Sales: 40% of total sales are for cash. The remaining 60% will be collected during the following month.

- 2) It is the company policy to purchase coffee from local cooperatives at FRW 100,000,000 every month whereby 50% is paid immediately and the remaining to be paid in the following month.
- 3) Selling and general administrative expenses are FRW 1,500,000 per month.
- 4) Interest payments: an interest payment on FRW 200,000,000 of bonds outstanding (5% coupon) will continue to be paid every month starting from January 2022.
- 5) Dividends: FRW 10,000,000 dividend payment will be declared and made in March 2022.
- 6) Capital expenditures: FRW 20,000,000 will be invested in plant and equipment with due payment fall in April 2022.
- 7) Income tax payments of FRW 1,500,000 will be made in April 2022.
- 8) On 31 December 2021, the company had a balance of FRW 40,000,000 on its bank accounts.

Required:

(a) Prepare a cash budget covering the following months: January, February, March and April 2022. (15 Marks)

(b) Tumusime Ltd has another manufacturing company located in Rubavu that manufactures alcohol drink known as UMUTI. Among other raw material include banana juice. To produce 1 liter of UMUTI it requires 0.5 liters of banana wine. The management of Tumusime Ltd has set a target of selling 1,000 litres of UMUTI for the year 2022.

Additional information on stock

- 1) Estimated opening inventory of UMUTI 300 liters-finished goods
- 2) Estimated closing inventory of UMUTI 200 liters-finished goods
- 3) There is no opening and closing stock of Raw materials

Required:

(i) Determine liters of UMUTI required to be produced to meet the set sales target?

(3 Marks)

(ii) Determine number of liters of raw materials required to be purchased to meet the required production?

(2 Marks)

(Total: 20 Marks)

QUESTION FOUR

(a) MATAYO Ltd is located in Kigali and manufactures biscuits. All the ingredients are added at the start of the mixing process and output of process one is transferred to the next process. The company expects that a normal loss of 5% of new raw materials input will occur during the production process. At the end of every month some batches are partially completed (WIP).

The following information relates to the month of December:

Details	Degree of completion	FRW 000
Opening Work in Progress - 1,600 kgs		
-Materials	100%	2,160
-Conversion Costs	50%	400
Costs incurred during the period		
-Materials-10,000 kgs		13,680
-Conversion costs		5,992
Outputs -10,220 Kgs		
Closing WIP - 780 Kgs		
-Materials	100%	
-Conversion costs	60%	

Required:

(a) Calculate the equivalent costs units (using FIFO costing methods) (13 Marks)

(b) Prepare a process cost account (7 Marks)

(Total: 20 Marks)

QUESTION FIVE

RUHANGO XL Ltd started manufacturing one single product branded CASSAVA FLOUR. The following figures relate to the CASSAVA FLOUR from RUHANGO XL Ltd.'s management accountant:

Production level		50%	100%
Sales and productions (kg)		400 kg	800 kg
		FRW	FRW
Sales		8,000	16,000
Production costs	Variable costs	3,200	6,400
	Fixed costs	1,600	1,600
Sales and distribution costs	Variable costs	1,600	3,200
	Fixed costs	2,400	2,400

Additional information:

1. The normal level of activity for the year is 800 kilograms.
2. Fixed costs are incurred evenly throughout the year, and actual fixed costs are the same as budgeted.
3. There were no stocks of CASSAVA FLOOR at the beginning of the year.
4. In the first quarter of 2021, 220 kilograms were produced and 160 kilograms sold.
5. RUHANGO XL Ltd expects to increase its production capacity during the next year.

Required:

- (a) Using absorption costing, calculate the fixed production costs of CASSAVA FLOOR in the first quarter 2021 (3 Marks)
- (b) Calculate the profit for the first quarter using absorption costing (7 Marks)
- (c) Calculate the profit for the first quarter using marginal costing (7 Marks)
- (d) Explain why there is a difference between the answers in (b) and (c) above and show how this difference can be reconciled (3 Marks)

(Total: 20 Marks)

QUESTION SIX

Musanze Talent Aquisition Ltd (MTA) is organizing a concert whereby students from different schools located in Musanze district will have chance to perform. Musanze multipurpose hall owned by Musanze district is able to host all persons who wish to attend the event whereby everyone who will attend the concert will be served a dinner. MTA agreed with RUHUKA Hotel to deliver meals at a cost of Frw 20,000 per participant. MTA will pay the following costs prior to the beginning of the concert:

- To Musanze District for renting Musanze multipurpose hall: FRW 5,000,000
- To KURUJYEJURU live music Band. The musing band will charge MTA Ltd a fee of FRW 1,000 per participant who bought ticket
- The entrance fee will be 25% markup on the cost of the meal
- MTA Ltd expect to sell 1,450 entrance ticket specifically for the event.
- The only fixed cost is the rental cost to hire hall

Required:

The MTA management has approached you to help them assess the viability of this event:

(a) Prepare a briefing note explaining to MTA the following terms:

- Break event point and margin of safety in unit** (2 Marks)
 - Opportunity cost and sunk cost** (2 Marks)
 - Clearly explain Cost Volume profit analysis** (2 Marks)
- (b) Calculate breakeven tickets and sales value to breakeven** (6 Marks)
- (c) Calculate the margin of safety in unit and in percentage** (2 Marks)
- (d) How many tickets will MTA sell to realize a profit of FRW 4,000,000?** (2 Marks)
- (e) Outline four limitations of cost volume profit analysis.** (4 Marks)

(Total: 20 Marks)

QUESTION SEVEN

- (a) Explain 5 causes of high labor turnover (5 Marks)
- (b) Suggest solutions to the problem of high labor turnover that most of companies are facing right now in Rwanda (3 Marks)
- (c) NDINZI and SONS Ltd operate a time rate system of remuneration. Three (3) minutes is a standard time allowed per unit of Output. The Standard rate is FRW 3,000 per standard hour for an eight-hour working day. Gasigwa produced 300 units in eight hours on a particular day.

Required:

Calculate the gross pay of GASIGWA considering HALSEY system of bonus scheme

(5 Marks)

- (d) The following information were extracted from the books of GIRA Ltd a manufacturing company located in the Masoro industrial zone for the month of December 2021:

Name of employees	Hours worked	Pay rate /Hour FRW	Salary Advance
Gimmy Kalisa	180	1,500	0
Emmy Mugisha	200	1,500	30,000
Tukunde Elise	150	1,500	10,000

Note:

- 1. Normal working hours per month are 180 and overtime hours are paid at a rate of 50% above normal pay rate
- 2. Monthly statutory deductions of 3% for Pension and 30% taxes are applicable at gross pay of each employee.

Required:

In a tabular form, clearly show the gross pay, deductions, and net pay for each employee.

(7 Marks)

(Total: 20 Marks)

End of question paper