CERTIFIED ACCOUNTING TECHNICIAN (CAT)

LEVEL 2 EXAMINATIONS

L2.3: MANAGEMENT ACCOUNTING

TUESDAY: 5 JUNE 2018

INSTRUCTIONS:

1. **Time Allowed: 3 hours 15 minutes** (15 minutes reading and 3 hours writing).
2. This examination has **seven** questions and only **five** questions are to be attempted.
3. Marks allocated to each question are shown at the end of the question.
4. Show all your workings.

QUESTION ONE

(a) With examples, distinguish between avoidable and unavoidable costs.

(4 Marks)

(b) Explain any **four** features of contract costing.

(4 Marks)

(c) Gatanazi Clays Ltd (GCL) deals in the production of clay products that are on a rising demand due to the growing construction industry in the western province of Karongi. The company is steadily gaining goodwill and has also started exporting to neighbouring countries.

Management is, however, concerned about the management of over heads in the different departments. Operations are conducted under 5 departments that include three production departments A, B, C and two service departments D, E.

After primary analysis of the overheads, the cost accountant provided the following data relating to the period ended 31 May, 2018.

Departments	Production	Service
	Frw '000'	Frw '000'
A	2,520,000	
B	2,960,000	
C	1,120,000	
D		1,800,000
E		800,000

Technical analysis shows that service department overheads are shared out as below:

Details	Production departments			Service departments	
	A	B	C	D	E
Department D	50%	20%	10%		20%
Department E	40%	30%	20%	10%	

REQUIRED:

Reapportion the service department overheads to production departments using the simultaneous equation method.

(12 Marks)
(Total 20 Marks)

QUESTION TWO

(a) Hakizimana Textiles Ltd deals in the production of first class clothes mainly consumed by the urban population in the capital Kigali. The firm conducts its operations through three processes in order to generate a finished product.
The cost data below has been provided by management in relation to opening work in progress of the clothes for the month of May 2018:

Particulars	Frw '000'
Direct Labour	80,000
Direct materials (Metres)	320,000
Overheads	160,000
Total	560,000

Additional data relating to the month of May 2018 has been provided as below:

Opening work in progress, 800 units, 60% complete.
Closing work in progress, 900 units, 30% complete.

Variable costs incurred during the month:

	Frw '000'
Direct Labour	220,500
Direct Materials (Metres)	385,000

The firm incurred Frw 441,000,000 on overheads during the period whereas 1,100 metres of materials were introduced to the process during the same period. It is a technical requirement for all materials to be added at the beginning of the process.

REQUIRED:

Using the first in first out (FIFO) method, prepare the following:

(i) Statement of equivalent production. **(5 Marks)**
(ii) Statement of cost per unit. **(3 Marks)**
(iii) Statement showing the cost of output. **(4 Marks)**
(iv) Statement of closing work in progress. **(4 Marks)**
(v) Process account. **(4 Marks)**

(Total 20 Marks)

QUESTION THREE

(a) (i) Distinguish between opportunity cost and irrelevant costs for decision making giving an example for each.

(4 Marks)

(ii) Bakunda Manufacturers Ltd produces two products Yoghurt and Ghee. The company is currently developing its production plan for the month of June, 2018.

The increased competition and unfavourable climate have affected the supply milk, a raw material for both products.

The milk supplier has advised that only 35,000 litres will be supplied during the month of June, 2018 as opposed to the 37,000 litres required.

Production of a single unit of Yoghurt and Ghee requires 1.5 litres and 2 litres of milk respectively.

The following additional information has also been provided by management:

	Yoghurt	Ghee	Company
Production/ sales(packets)	10,000	11,000	21,000
Selling price per packet (Frw)	1,500	1,800	
Variable costs per packet (Frw):			
Direct materials	500	500	
Direct labour	300	400	
Variable overheads	300	400	
Fixed overheads (Frw)			50,000,000

REQUIRED:

Determine the firm's profit maximising production plan for the month.

(10 Marks)

(b) Explain any three factors that influence the size of the economic order quantity for an organisation.

(6 Marks)

(Total 20 Marks)

QUESTION FOUR

(a) Differentiate between the following types of standards:

(i) Current and Basic. **(2 Marks)**

(ii) Ideal and Attainable. **(2 Marks)**

(b) Explain any **two** merits and demerits of standard costing.

(4 Marks)

(c) Gisa Distillers Ltd located in Gisenyi is a fast growing firm dealing in the production of alcoholic spirits that are mainly consumed by the youth in the sub urban areas. The firm currently relies on Red Waragi as its leading product for which it prepares a specific plan.

The product's budget for the month of May, 2018 has been provided by management as shown below:

Sales (litres)	1,200,000	
	Frw '000'	Frw '000'
Sales revenue		1,680,000
Less variable costs:		
Direct materials (½ litre at Frw 1,000 per litre)	(600,000)	
Direct labour (0.25 hrs at Frw 2,400 per hour)	(720,000)	
Variable overheads (200 per unit)	(240,000)	1,560,000
Contribution		120,000
Less fixed costs		(80,000)
Profit		40,000

Details of the firm's actual results in relation to Red Waragi product for the month have been provided below:

Sales (litres)	1,500,000	
	Frw '000'	Frw '000'
Sales revenue		2,025,000
Less variable costs:		
Direct materials	(765,000)	
Direct labour	(870,000)	
Variable overheads	(277,500)	1,912,500,
Contribution		112,500
Less fixed costs		(80,000)
Profit		32,500

REQUIRED:
Prepare the firm's operating statement for the month.

(12 Marks)
(Total 20 Marks)

QUESTION FIVE

(a) (i) Explain any four conditions necessary for the success of a labour incentive scheme.

(4 Marks)

(ii) Nkurunziza Furniture Mart (NFM) located in Gisagara produces a variety of furniture that is sold to locals at relatively lower price. Management has allocated only 5 workers to the production of a single sofa set and has set a standard time of 20 hours for completion of a single sofa set.

Each of the five workers earns a standard wage of Frw 500 per production hour.

In order to motivate its staff, management offers a bonus payment to all staff for any production time saved.

For the month of May, 2018 20 sofa sets were produced at an average time of 18 hours per set.

REQUIRED:

Using the Halsey premium scheme, calculate the firm's total monthly direct labour cost on the production of sofa sets.

(4 Marks)

(b) (i) Keza and sons Ltd produces and supplies agricultural inputs mainly to the farmers in Gakenke. The firm operates a central storage system for all its inputs including its major product the "fertilizer".

At the end of April, 2018 closing stock for fertilizers was 17,000 kg valued at Frw 300 per kg. However, the following transactions in fertilizers took place during the month of May, 2018:

Date	Particulars
2	Purchased 30,000 kg at Frw 280 per kg
6	Issued 16,000 kg
11	Purchased 20,000 kg at Frw 290 per kg
14	Purchased 40,000 kg at Frw 270 per kg
18	Issued 30,000 kg
24	Issued 15,000 kg
28	Issued 7,000 kg
30	Purchased 8,000 kg at Frw 300 per kg

REQUIRED:

Using the last in first out (LIFO) method of inventory valuation, determine the value of closing inventory.

(8 Marks)

(ii) Explain any **four** objectives of material control in an organization.

(4 Marks)

(Total 20 Marks)

QUESTION SIX

(a) (i) Distinguish between activity-based costing (ABC) and a cost driver.

(4 Marks)

(ii) Describe the steps involved in the ABC process.

(4 Marks)

(b) Mukunzi soft drinks Ltd is a renowned soft drinks plant located in kicukiro. The firm's poor performance during the month of May 2018 compelled the directors to hire new management.

The new management intends to improve on the control systems so as to improve on the company's performance.

For the month of June 2018, focus has been placed on the firm's latest product Zire sweet drink.

The following data has been extracted from the firm's financial plan for Zire Sweet drink:

1. Budgeted sales during June 2018 are estimated to be 300,000 cartons. Each carton requires 10 litres of raw material X purchased at a constant price of Frw 250 per litre.
2. Closing stock of finished goods for May 2018 was 30% of the estimated sales for the month of June 2018 while the opening stock of finished goods for July 2018 is expected to be 180,000 cartons.
3. The opening stock of raw materials for June 2018 was 1,100,000 litres while closing stock is expected to be 800,000 litres.
4. The firm spends Frw 25, 000 on distribution on a daily basis.

REQUIRED:

Prepare the following budgets for the month of June, 2018:

(i) Production. **(3 Marks**

(ii) Raw material purchases. **(3Marks)**

(c) Gatanazi Crafts Ltd is a locally owned plant located in Kayonza in the East province of Rwanda. The firm produces a variety of products including craft shoes, mats, and baskets among others which are sold both locally and internationally.

The company's management has just accepted an order for 500 baskets to be supplied in batches of 50 baskets each.

Production cost information regarding the production of one basket has been provided as below:

Direct materials:

Material type	Details
A	0.5metres at Frw 400 per metre
B	0.25 litres at Frw 400 per litre
C	0.2 metres at Frw 600 per metre

Direct labour:

Department	Details
Production	0.1 hours at Frw 500 per hour
Finishing	0.05 hours at Frw 600 per hour

Variable over heads:

Department	Details
Production	Frw 150 per unit
Finishing	Frw 200 per unit

All fixed overheads are absorbed at a rate of Frw 300 per unit produced.

REQUIRED:

Determine the total costs per batch to be produced for the order.

(6 Marks)

(Total 20 Marks)

QUESTION SEVEN

(a) Explain any **four** roles of a management accountant in the modern manufacturing environment.

(4 Marks)

(b) (i) Explain the impact of absorption and marginal costing on the profits reported by an organization.

(6 Marks)

(ii) Ntampaka Publications Ltd a newly established firm in Gikongoro town is experiencing a great start after two of its major products the Agriculture magazine and the bride and groom magazine receiving a great reception from the public.
The firm's production manager is currently carrying out research on how to increase efficiency so as to meet the increasing demand.

The following information has been provided by the production manager regarding the production of both products:

The Agriculture Magazine

Particulars	Unit requirements
Direct labour	0.75 hours at Frw 1,500 per hour
Direct materials	1.5 rolls at Frw 1,000 per roll.
Packaging	Frw 300 per unit
Variable overheads	Frw 650 per unit
Selling price	Frw 5,000 per unit

The Bride and Groom Magazine

Direct labour	0.65 hours at Frw 1,400 per hour
Direct materials	2 rolls at Frw 600 per roll
Packaging	Frw 250 per unit
Variable overheads	Frw 600 per unit
Selling price	Frw 4,500 per unit

The company currently incurs Frw 2,000,000 and Frw 900,000 on fixed production and sales and administrative overheads respectively per month.
The sales and marketing manager expects to sell 2,000 copies and 1,800 copies for the Agriculture Magazine and the Bride and Groom Magazine respectively during the month of June, 2018.

REQUIRED:

Using marginal costing, determine the firm's expected profit or loss for the month.

(10 Marks)

(Total 20 Marks)

END OF QUESTION PAPER