CERTIFIED ACCOUNTING TECHNICIAN

STAGE 3 EXAMINATIONS

S3.2: MANAGEMENT ACCOUNTING

DATE: THURSDAY 27, AUGUST 2026

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

Data used to inform planning by an ice cream manufacturer is usually gathered from multiple sources and in many different forms.

Which of the following is an example of data that is continuous and from a secondary source?

A Rainfall as detected by a gauge operated by personnel from within the manufacturing organisation
B Numbers of mechanical failures of ice cream trucks operated by the company, reported monthly by its own engineers
C Highest recorded temperature each day, reported by the TV weather forecast
D New flavours of ice cream introduced by competitors the previous year, according to a leading trade magazine

(2 Marks)

QUESTION TWO

A manufacturing organisation is planning to upgrade its old machinery used in the production process over the next 3-5 years. **What kind of budget is needed to help the organisation prepare for this?**

A Production budget
B Material budget
C Labour budget
D Capital budget

(2 Marks)

QUESTION THREE

The finance department of a large retail organisation uses a process of coding for its revenue and cost data. When asked to describe why the finance department uses coding, the chief accountant is out of the office and a new bookkeeper provides the following answers:

i) Coding removes the risk of mistakes such as confusing similar-looking characters (for example, the letter O and the number 0), since a well-designed coding system corrects such errors automatically.
ii) Coding speeds up our processes.
iii) Coding makes it easier to keep the financial information confidential.
iv) Coding helps with cost analysis and control.

With which of the reasons given by the new bookkeeper will the chief accountant agree as reasons for using coding?

A (i) and (iii) only
B (i) and (iv) only
C (ii) and (iii) only
D (ii) and (iv) only

(2 Marks)

QUESTION FOUR

An accurate cash flow forecast is vital for organisations to manage their liquidity and ensure that strategic objectives are met. Understanding the fundamentals of preparing a reliable forecast enables effective decision-making and supports financial sustainability.

Which of the following steps is most important in preparing an accurate cash flow forecast that aligns with organisational objectives?

A Estimating sales revenue based solely on previous year's figures
B Focusing on anticipated cash receipts only, since these determine whether the organisation can meet its strategic objectives
C Incorporating both anticipated receipts and payments, and regularly reviewing actual results against the forecast
D Preparing the forecast without consulting other departments

(2 Marks)

QUESTION FIVE

A production manager asks the management accountant to prepare a report each month showing, for every product line, the standard cost per unit compared with the actual cost per unit, broken down by material, labour, and overhead, alongside commentary on which variances are controllable by the production department and which are not.

Which characteristic of this request best reflects the primary purpose of management accounting information?

A The report is requested monthly, which ensures the information remains historical and suitable for statutory filing purposes
B The report separates controllable from non-controllable variances, allowing the production manager to take corrective action only where they have genuine influence over the outcome
C The report is broken down by material, labour, and overhead, which ensures the figures reconcile precisely with the external financial statements
D The report compares standard cost to actual cost, which is primarily useful for calculating the organisation's tax liability for the year

(2 Marks)

QUESTION SIX

A manufacturing company is reviewing its costing methods to improve its financial reporting and decision-making. **Which of the following statements best describes a key difference between marginal costing and absorption costing?**

A Marginal costing allocates all production costs to products, while absorption costing only allocates variable costs.
B Absorption costing excludes fixed production overheads from inventory valuation, whereas marginal costing includes them.
C Marginal costing values inventory using only variable production costs, while absorption costing values inventory using both variable and fixed production costs.
D Both marginal and absorption costing exclude non-production overheads from inventory valuation.

(2 Marks)

QUESTION SEVEN

A company's manufacturing division sells goods to its own retail division at a transfer price set centrally by head office, which the manufacturing division's manager has no authority to negotiate or change. The manufacturing division manager is currently evaluated based on the division's total profit, which is heavily influenced by this transfer price**.**

Based on the principle that responsibility centre managers should be judged only on factors within their control**, what is the most significant weakness in evaluating the manufacturing division manager in this way?**

A The manager's performance is affected by a transfer price they cannot control, which may not fairly reflect their own division's operating performance
B The manager should instead be evaluated as a revenue centre manager, since manufacturing divisions are only ever accountable for the revenue they generate
C The manager cannot be evaluated using profit at all, since manufacturing divisions do not incur any costs that could be included in a profit calculation
D The transfer price should be irrelevant to performance evaluation, since all divisions within the same company should be treated as entirely independent of each other's results

(2 Marks)

QUESTION EIGHT

A manufacturing company purchased a machine for FRW50,000,000 five years ago. Due to inflation, the current replacement cost of an identical machine is now FRW80,000,000. The company is comparing asset-based ratios calculated this year with those calculated five years ago, using the machine's original cost in both years' figures.

What is the most significant limitation of this ratio comparison, and how should it best be addressed?

A The ratios cannot be compared at all, since ratio analysis is never valid for a company that owns non-current assets
B The ratios are distorted because they are based on unadjusted historical cost figures across a period of inflation; the figures should be restated using an appropriate price index before being compared
C The ratios are distorted because the machine has physically depreciated over five years, and depreciation should be excluded entirely from any asset-based ratio
D The ratios cannot be compared because sales revenue figures are always stated in current prices, while cost figures are always stated using replacement cost

(2 Marks)

QUESTION NINE

A company has recently implemented a new accounting software system. Six months after implementation, the finance manager is assigned to review the effectiveness of the new system**.**

Which of the following should be the most appropriate first step in this review?

A Analyse feedback from employees using the system
B Conduct a complete audit of all transactions processed since implementation

C Compare actual financial reports to those prepared before implementation
D Evaluate whether the system's objectives and key performance indicators are being met

(2 Marks)

QUESTION 10

A local manufacturing company recently upgraded from a manual accounting system to a fully integrated cloud-based accounting software. Shortly after implementation, several department heads reported difficulties accessing real-time financial data, while others expressed concerns about data security and the learning curve associated with the new system.

Which of the following is the most likely impact of this change on the users of the accounting system?

A Potential short-term confusion and resistance as users adapt to the new system
B Increased accessibility to financial reports for all users without any errors
C Immediate improvement in staff morale due to the new technology
D Complete elimination of staff resistance once a single half-day training session is completed

(2 Marks)

SECTION B

QUESTION 11

Gisenyi Leather Footwear Ltd (GLF) manufactures leather shoes at a single factory in Gisenyi. The cost accountant has extracted the following items for the year ended 31 December 2025

SN	Item recorded for the year ended 31 December 2025	Amount (FRW)
1	Purchase returns of leather	150,000
2	Wages of shoemakers, paid on a piece-rate basis according to units produced	2,800,000
3	Royalty payable to a shoe designer, charged per pair of shoes sold under licence	200,000
4	Fixed monthly salaries of employees supervising the production workforce	2,100,000
5	Factory rent and rates	850,000
6	Factory power and electricity, which varies directly with machine usage	600,000
7	Depreciation of factory machinery	480,000
8	Factory manager's fixed monthly salary	950,000
9	Notional rent chargeable for the factory building, which is owned by the company	350,000
10	Purchases of leather	8,500,000
11	Rent of head-office building	1,300,000
12	General management salaries	3,400,000
13	Secretarial and accounting department expenses	2,700,000
14	External audit fees	320,000
15	Depreciation of office equipment	180,000
16	Delivery costs of finished shoes to customers, which vary with the number of deliveries made	4,200,000
17	Advertising of the footwear brand	3,600,000
18	Sales staff basic salaries	2,000,000
19	Sales commission, based on the volume of shoes sold	950,000
20	Cost of free samples distributed for sales promotion	130,000
24	Carriage inwards on leather purchased	280,000
26	Sale value of scrap generated during production	90,000

Required:

a) Calculate the total prime cost for the year. (2 marks)
b) Calculate the total non-production costs for the year. (2 marks)
c) Calculate the total variable costs for the year. (2 marks)
d) Calculate the total administrative costs for the year. (2 marks)
e) Calculate the total indirect costs for the year. (2 marks)

(Total: 10 Marks)

QUESTION 12

Huye Dairy Products Ltd is a growing company in Southern Province. The Managing Director has decided that, within the next five years, the company wants to become the leading supplier of processed milk products in Rwanda. To work towards this, the company analysed its production capacity, financial resources, and main competitors. Following this analysis, three possible strategies were identified: expanding the processing plant, introducing new packaged milk products, and forming a partnership with retail supermarkets.

The Board evaluated these three strategies and decided to pursue the plant expansion and new product strategies, which were then translated into a five-year plan showing projected cash flows, profits, and capital expenditure. This plan was broken down into a one-year budget for the coming year. After the first six months, the finance director compared actual performance against the budget and found that sales revenue was below target, prompting management to review its pricing and marketing strategy.

Required:

a) **Briefly explain the difference between planning and control elements of the planning and control cycle.** (2 Marks)
b) **With reference to the scenario above, identify and briefly explain how each of the seven steps of the planning and control cycle is illustrated by Huye Dairy Products Ltd.'s actions.** (8 Marks)

(Total: 10 Marks)

SECTION C

QUESTION 13

Kigali Precision Manufacturers Ltd (KPM) is considering an investment project. The investment will require an immediate investment of FRW 450 million with a discount rate of 6% to appraise capital projects. Expected receipts from the investment are as follows, Year 1 with FRW 130 million, Year 2 with FRW 90 million, Year 3 with FRW 100 million and Year 4 with FRW 160 million.

Separately from the investment project above, KPM currently manufactures three products, X, Y and Z, all of which require skilled labour during production. Skilled labour hours are limited to 20,000 hours for the coming period. The cost and selling price details of each product are as follows:

Details	**Product X**	**Product Y**	**Product Z**
Selling price per unit (FRW)	30,000	50,000	40,000
Variable cost per unit (FRW)	20,000	32,000	28,000
Labour hours required per unit	2	3	4
Expected sales demand for the period (units)	4,000	3,000	2,500

Required:

a) Calculate the net present value of the proposed investment project and determine whether KPM should proceed with the investment or not. (7 Marks)

b) Identify THREE limitations of the discounted cash flow technique. (3 Marks)

c) Showing all workings, determine whether labour hours are a limiting factor on KPM's production of Products X, Y and Z for the coming period. (1 Mark)

d) Rank Products X, Y and Z in order of priority for production, based on contribution per unit of the limiting factor identified in part (c). (3 Marks)

e) Prepare the optimal production plan for the period and calculate the total contribution it would generate. (6 Marks)

(Total: 20 Marks)

QUESTION 14

Musanze AgroProcessors Ltd (MAP) processes and sells packaged maize flour. The company's bank balance on 1 January 2025 was FRW12,000,000. The following information relates to the three months ending 31 March 2025. All sales are made on credit, budgeted monthly credit sales are as follows:

	Oct-24	**Nov-24**	**Dec-24**	**Jan-25**	**Feb-25**	**Mar-25**
Credit sales (FRW'000)	35,000	40,000	45,000	50,000	55,000	60,000

Receipts from customers were as follows:

- 50% of each month's sales are collected in the month following the sale. Customers settling in this month are given a 2% discount for prompt payment.
- 30% of each month's sales are collected in the second month following the sale.
- 15% of each month's sales are collected in the third month following the sale.
- The remaining 5% of each month's sales is expected to be written off as bad debts and will never be collected.

Purchases and payments to suppliers

- Cost of sales is 60% of the sales value for the same month, and inventory is purchased in the month in which it is sold (there is no inventory held).
- Suppliers are paid in full one month after the month of purchase.

Other cash flows

- Running expenses (excluding depreciation) are budgeted at a fixed FRW6,000,000 per month.
- Depreciation on factory machinery is budgeted at FRW2,000,000 per month.
- A new delivery van costing FRW18,000,000 will be purchased in January 2025, to be paid in two equal instalments: one in January 2025 and one in March 2025.
- MAP will receive a bank loan of FRW20,000,000 on 1 February 2025. The loan is repayable in equal monthly instalments of FRW4,000,000, together with interest at 1% per month on the outstanding loan balance at the start of each month. The first repayment instalment is due in March 2025.

Required:

a) Prepare a cash budget for Musanze AgroProcessors Ltd for each of the three months ending 31 March 2025, showing clearly the closing cash balance for each month. (18 marks)

b) Briefly explain TWO actions the finance manager could take if the cash budget prepared in part (a) had revealed a cash shortfall in any of the three months. (2 marks)

(Total: 20 Marks)

QUESTION 15

Hols Company is a medium-sized enterprise based in Musanze District, specialising in the processing and packaging of Irish potatoes for supply to supermarkets and hotels across Rwanda. The company's production costs include a mix of fixed overheads (such as factory rent, machinery depreciation, and supervisory salaries) and variable costs (such as raw potatoes, packaging materials, and casual labour), which together make total production cost difficult to separate using simple observation alone.
The newly appointed management accountant has been asked to develop a reliable model for estimating total production cost at different levels of output, to support budgeting and pricing decisions for the coming season. The following data on monthly output and total

Month	**Output ('000 units)**	**Cost (FRW'000)**
Dec	80	340
Jan	100	390
Feb	120	430
Mar	110	410
Apr	90	350

Required:

a) Using the least squares method, **calculate an equation the management accountant can use to determine the expected level of production cost for any given volume of output**. (10 marks)

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

$$a = \frac{\sum y}{n} - \frac{b\sum x}{n}$$

b) Using the equation calculated in part (a), **forecast Hols Company's total production cost for May, if output is expected to be 105,000 units.** (2 marks)

c) As part of the planned expansion, senior management is deciding whether next year's production budget should be prepared using a top-down approach, with targets set centrally and passed down to the production supervisor, or a participative approach, in which the production supervisor is closely involved in setting the budget. **Explain TWO advantages and TWO disadvantages of using a participative approach in this situation** (8 Marks)

(Total: 20 Marks)

End of question paper