CERTIFIED PUBLIC ACCOUNTANT

STRATEGIC LEVEL EXAMINATIONS

BP3.6: MANAGING BUSINESS PERFORMANCE

DATE: MONDAY 24, AUGUST 2026

INSTRUCTIONS:

1. Time Allowed: **3 hours 15 minutes** (15 minutes reading and 3 hours writing).
2. This examination has **Two** sections: **A & B**.
3. Section **A** has **One Compulsory Question** while **Section B** has **Three Optional Questions** to choose any **Two**.
4. In summary attempt **Three Questions**.
5. Marks allocated to each question are shown at the end of the question.
6. Show all your workings where necessary.
7. The question paper should not be taken out of the examination room.

SECTION A

QUESTION ONE

Nyaruguru FoodWorks PLC (NFW) is a listed company operating in the bakery and confectionery manufacturing sector in East Africa. The company's stated long-term strategic goal is to become the leading branded bakery and confectionery manufacturer in the East African region within five years, while sustainably improving profitability and strengthening its financial position. NFW is well known for producing and selling three high-quality products, Classic Biscuit, Premium Cake, and Standard Bread, to schools, supermarkets and other retailers across the region. In pursuit of its strategic goal, the company's board has, over the past year, become increasingly concerned about a number of issues: weaknesses in decision-making, production inefficiencies, intensifying competition from multinational manufacturers, and growing scarcity of the resources used in production.

As part of its strategic expansion, NFW's retail bakery division is preparing its operating budget for the next quarter (October–December 2026), which the division refers to as Quarter 3 of its rolling three-quarter planning cycle. For the past several years, the division has used a fixed quarterly budgeting approach, with largely the same budget lines each period. The following are the budgets for the previous two quarters (April–June 2026 and July–September 2026), which should be used as a basis for next quarter's budget.

Budget line	**Q1 (Apr–Jun 2026)**	**Q2 (Jul–Sep 2026)**
	FRW	**FRW**
Direct materials	23,750,000	24,937,500
Skilled labour	9,500,000	9,975,000
Semi-skilled labour	6,750,000	7,087,500
Unskilled labour	8,500,000	8,925,000
Marketing costs	12,000,000	14,500,000
Sales commissions	3,875,000	4,068,750
Sales staff salaries	6,000,000	6,000,000
Rent of warehouses	3,200,000	3,200,000
Electricity and water	5,200,000	5,330,000
Rent of premises	7,200,000	7,200,000
Total	**85,975,000**	**91,223,750**

Additional information:

1. Activity levels: Quarter 1 (Apr–Jun 2026): 25,000 units, all sold domestically; Quarter 2 (Jul–Sep 2026): 26,250 units, all sold domestically. In Quarter 3 (Oct–Dec 2026), domestic sales are forecast to fall slightly to 24,000 units, reflecting the intensifying competition described earlier. However, NFW has separately signed its first export contract, with a retail chain in Tanzania, for 5,000 units in Quarter 3, giving total planned production and sales of 29,000 units for the quarter.
2. The domestic selling price per unit was FRW6,200 in both Q1 and Q2, and is expected to rise by the 4.8% inflation rate in Q3. The Tanzania export contract is priced at a fixed FRW7,000 per unit under the contract terms.

3. Sales commission is paid at 2.5% of domestic sales revenue only; under the terms of the Tanzania export contract, the retailer's own procurement team manages the order directly, and no commission is payable on export sales.
4. NFW's procurement team has separately renegotiated the division's direct materials supply contract, securing a 4% reduction in the price per unit of direct materials, effective from the start of Q3, under a new long-term supply agreement with a local supplier. This reduction applies only to the price of direct materials; the rates for all three direct labour categories are unaffected and remain unchanged from Q1 and Q2.
5. Marketing costs in Quarter 2 included a one-off product launch campaign costing FRW2,500,000, which will not recur.
6. Rent of premises is fixed under a three-year lease agreement that escalates by 3% only on 1 January each year.
7. Rent of warehouses and sales staff salaries are fixed costs and should be increased in line with the 4.8% expected inflation rate.
8. Electricity and water is a semi-variable cost. Using the high-low method on the Quarter 1 and Quarter 2 figures, separate the fixed and variable elements. Inflate the fixed element by 4.8% and inflate the variable rate per unit by 4.8% before applying it to the Quarter 3 total volume of 29,000 units.
9. Servicing the new export contract requires additional freight forwarding, customs clearance, and export compliance work. This will cost the division a new, additional FRW2,400,000 in Quarter 3, a cost that did not exist in Q1 or Q2 and will not be incurred again once the initial export process is established.
10. The division's existing production supervision team can oversee total quarterly output of up to 27,000 units. For every additional 2,000 units (or part thereof) of output above this threshold, one additional temporary supervisor must be engaged, at a cost of FRW1,500,000 per quarter.
11. In preparing a first draft of the Quarter 3 budget, the division's finance assistant added the planned FRW18,000,000 R&D investment within the marketing costs line shown above, reasoning that the investment is intended to support the future marketing of new products once developed.

Once the budget is set, NFW must still operate within its actual resource constraints for the month. Each of NFW's three products requires two special ingredients sourced from a remote part of the region, honey and cassava flour, both of which have recently become difficult to source in sufficient quantities. The total fixed production costs for next month are budgeted at FRW8,000,000. NFW has just been informed that the supply of cassava flour will be limited to 12,000 kilograms, the supply of honey will be limited to 8,000 kilograms, and the supply of labour will be limited to 16,000 hours next month. Prior to this, NFW had signed a contract with a leading regional retail chain, Simba Supermarket, to supply it with 800 Premium Cakes each month, at a discounted price of FRW11,500 per cake, starting immediately. The order for the 800 cakes is not included in the expected demand levels shown below.

NFW's projected manufacturing costs, selling prices, and expected demand, as estimated by the marketing director in a recent senior management meeting, for the three products are as follows:

Details	**Classic Biscuit**	**Premium Cake**	**Standard Bread**
Expected demand(Units)	4,500	3,000	1,800
Per unit	**FRW**	**FRW**	**FRW**
Selling price	5,500	13,500	6,800
Ingredients: Honey (FRW1,400 per Kg)	700	1,400	700
Ingredients: Cassava flour (FRW1,100 per Kg)	1,100	2,750	1,320
Other ingredients	500	2,200	650
Labour costs (FRW1,100 per hour)	1,100	2,200	1,100
Variable overheads	300	2,000	400
Total variable costs	3,700	10,550	4,170
Contribution	1,800	2,950	2,630

Looking back over recent years, NFW has also been affected by broader financial management challenges, including working capital management, liquidity, gearing, and profitability, as well as uncertainty in production and sales caused by intense competition and rapid advances in production technology. The board takes the view that benchmarking performance against the sector average is essential to judging progress toward the company's strategic goal. The finance director has presented the following industry averages, to be used to assess the company's performance relative to the sector.

Ratio type	**Industry average**
1. Liquidity ratios	
Quick ratio	1:1
Current ratio	2:1
2. Profitability ratios	
Annual revenue growth	20%
Gross profit margin	35%
Operating profit margin	15%
Return on capital employed	16%
Return on equity	15%
3. Gearing ratios	
Debt-to-equity ratio	40%
Interest cover	4 times
4. Working capital (activity) ratios	
Receivable days	30 days
Payable days	70 days
Inventory days	60 days

Statement of financial performance for the years ended 31 December 2023, 2024 and 2025

Description	2023	2024	2025
	FRW "000"	FRW"000"	FRW"000"
Revenue	620,000	700,000	790,000
Cost of sales	(421,600)	(490,000)	(568,800)
Gross profit	198,400	210,000	221,200
Operating expenses	(124,000)	(136,500)	(150,100)
Operating profit	74,400	73,500	71,100
Finance costs	(18,000)	(22,000)	(27,000)
Profit before tax	56,400	51,500	44,100
Income tax expense (30%)	(16,920)	(15,450)	(13,230)
Profit after tax	39,480	36,050	30,870

Statement of financial position as at 31 December 2023, 2024 and 2025

Description	2023	2024	2025
	FRW"000"	FRW"000"	FRW"000"
Non-current assets	380,000	430,000	490,000
Current assets	168,000	195,000	230,000
Total assets	548,000	625,000	720,000
Equity (share capital + reserves)	250,000	270,000	290,000
Non-current liabilities	224,500	274,200	343,200
Current liabilities	73,500	80,800	86,800
Total equity and liabilities	548,000	625,000	720,000

Additional information: details of current assets and liabilities

Description	2023	2024	2025
	FRW"000"	FRW"000"	FRW"000"
Current assets			
Inventory	75,000	94,000	117,000
Trade receivables	68,000	86,000	108,000
Bank	25,000	15,000	5,000
Total	168,000	195,000	230,000
Current liabilities			
Trade payables	63,500	69,800	74,800
Accruals	10,000	11,000	12,000
Total	73,500	80,800	86,800

Required:

a) Develop the Quarter 3 (October–December 2026) operating budget for the retail bakery division, showing supporting calculations for each cost line, and assess the appropriateness of the treatment applied to the planned R&D investment.

(20 Marks)

b) Advise the production director on the optimum production plan that would maximise contribution and profit for the three products (Classic Biscuit, Premium Cake and Standard Bread) for next month, taking into account the resource constraints and the Simba Supermarket contract described above. (12 Marks)

c) Write a memo to the Chief Executive Officer evaluating the extent to which Nyaruguru FoodWorks PLC's recent financial performance and position support its stated strategic goal, using the industry averages provided as a basis for comparison. (18 Marks)

(Total: 50 Marks)

SECTION B

QUESTION TWO

ABC Ltd is a retailer of classroom materials for teachers. The company buys its products from many different suppliers and holds items in stock ready for distribution to its own customers. At the beginning of the peak period of sales for ABC, ABC acquires most of its stock based on an estimate of demand. Often ABC runs out of some items and is left with surplus inventory of others.

ABC mails a catalogue to every school in the country at the end of the school year when teachers are planning and spending their budgets for the next year. The mailing list is taken from a publicly available list of schools. Producing and mailing the catalogue is a major expense. ABC addresses the catalogues for the attention of the principal or head teacher but has no way of knowing whether the catalogue reaches the right people in any school. The catalogue provides pictures, prices and details of ABC's stock and directs customers to the ABC website where they can make purchases.

For its accounting processes, ABC uses a manual system of double entry bookkeeping and prepares financial statements using spreadsheets. HR records are held in a locked filing cabinet. The payroll (completed weekly for waged staff and monthly for salaried managers) is prepared by HR and checked and approved by the accounting function. Waged staff are paid in cash while managers receive cheques. In the stock room, which is a large warehouse, the store manager maintains records on index cards. When a customer places an order, a member of the fulfilment team produces a requisition form to take the required items from stock and the store manager updates the index cards. An annual stock take is made prior to ABC's purchase of its new stock items for the new school year.

The Chief Executive Officer (CEO) of ABC has been reluctant to invest in information systems for three reasons. Firstly, the present system works well enough. Secondly, the time, cost and disruption of investing in IT are thought to exceed the likely benefits. Thirdly, the CEO worries about the disadvantages of relying on IT systems. The CEO has recently been approached by an IT consultant who identified five technologies that other retailers in ABC's sector are increasingly adopting: unified corporate databases, big data and data analytics, artificial intelligence, cloud computing, and network technology.

Required:

a) **Analyse how each of the technologies identified above could be used to improve ABC's marketing, and recommend, with justification, which would generate the greatest improvement.** (10 Marks)

b) **Evaluate the potential benefits and limitations to ABC of adopting a management information system, an accounting information system, an enterprise resource planning system, and a customer relationship management system, and advise the CEO on the order in which these should be implemented.** **(**10 Marks)

c) **Evaluate at least THREE key risks ABC would face in implementing new information systems, and advise the CEO, with reference to the three reasons given in the scenario for resisting IT investment, on how these risks could be managed.** (5 Marks)

(Total: 25 Marks)

QUESTION THREE

a) Kivu Roofing Manufacturers Ltd (KRM) is based in Rubavu, Rwanda, and manufactures pre-painted galvanised iron roofing sheets, which it sells to hardware distributors across the country. Demand is highly seasonal, peaking twice a year ahead of the long and short rainy seasons. KRM imports the steel coil used in production from a supplier reached via the port of Dar Es Salaam. Lead times for shipping and customs clearance run 10–12 weeks, so KRM must commit to a single production run for the coming season well before actual demand is known, and cannot economically adjust the production run once it has been committed. Sheets are sold at FRW 13,000 each. Variable production cost is FRW 8,500 per sheet. Fixed production overheads (factory lease, machine depreciation, permanent staff) are FRW 20,000,000 for the season, and are unaffected by the volume produced, provided output does not exceed plant capacity of 14,000 sheets. If demand in a season turns out to exceed the quantity produced, KRM can commission a local subcontractor to press additional sheets at short notice from emergency-sourced coil, at a cost of FRW 11,800 per sheet, in order to avoid turning customers away.

If demand turns out to be lower than the quantity produced, unsold sheets are sold at a discount to a secondary regional distributor at FRW 5,000 per sheet at the end of the season, rather than being carried into the next season. Based on distributor pre-orders and market research, KRM's sales team has produced the following estimate of seasonal demand:

Demand (sheets)	**Probability**
8,000	0.15
10,000	0.35
12,000	0.30
14,000	0.20

KRM's board is divided on how to use this information to decide the size of the production run. The Chairperson is concerned about a loan covenant attached to KRM's working-capital facility from a Rwandan commercial bank, and is anxious to avoid a season that makes a loss. The majority shareholder favours whichever production level delivers the best return on average across seasons. The board has delegated the final decision on production quantity to the Plant Manager, within parameters it will set.

Required:

Considering only the production levels of 8,000, 10,000, 12,000 and 14,000 sheets:

i) **Evaluate the profit or loss arising from each combination of production and demand level, taking full account of the emergency sourcing cost incurred on unsatisfied demand and the salvage revenue recovered on unsold sheets.** (8 Marks)

ii) **Assess, using the expected value criterion, which production level KRM should choose.** (2 Marks)

iii) **Assess which production level would be chosen under (1) a maximin decision rule and (2) a maximax decision rule.** (4 Marks)

iv) **Assess, using a minimax regret approach, which production level KRM should choose.** (3 Marks)

b) Kigali Allied Industries Ltd (KAI) is a large, long-established manufacturing conglomerate, producing soap, beverages and textiles for the Rwandan and regional market. The executive head of KAI is the Chief Executive Officer (CEO). The Board Chairperson is

the appointed non-executive head of the company. KAI is a highly bureaucratic organisation and decision-making power is centralised. It is one of the oldest manufacturing companies in the country and has occupied the same headquarters building in central Kigali since shortly after it was founded. The building was designed to resemble a palace but has been allowed to decay over many years. Many employees feel that KAI resembles its building, once powerful and imposing but now somewhat weakened and in some disarray.

There has been much turmoil at KAI in recent years. Positions have been cut, workloads have increased, salaries have been frozen, and staff morale is poor. Three different people have held the CEO position in the last 24 months amid boardroom disputes over succession. Frustrations are high and expectations are low. Another new CEO has just been appointed. At the CEO's interview, one of the members of the panel, a senior manager at KAI, told candidates that the company has a strong memory of a former CEO from about 30 years ago. The exploits and successes during the 10 years that leader held the position are still talked about, and new leaders will always be judged in comparison. The image of that former CEO is still highly visible in portraits and photos throughout the building.
Promotion within KAI has traditionally followed strict seniority rather than performance, and the same staff appraisal form has been used, unchanged, for over a decade. The senior management team meets weekly in a boardroom dominated by a large portrait of the former CEO, and new starters receive a single half-day induction from HR with no follow-up from their own department.

The newly appointed CEO learns that the position includes certain perks, including a designated parking space at the front of the building close to the entrance, and occupation of the largest office on the ground floor. The CEO has a reputation for being a transformational leader and for operating in a democratic style. One of the first actions taken by the CEO is to circulate a memo that reinforces the importance of culture, equity, diversity and inclusion in KAI and its plans, strategies, decisions and behaviours. When managers and staff receive the memo, there is a mixed reaction. Some have a feeling of "here we go again." Others are fearful that it means there will be further change, restructuring and possible job losses. There is also a sense of optimism among a smaller group who see it as an opportunity for a new beginning.

Required:

Identify FOUR elements of KAI's culture, using the cultural web as your reference framework, and for each element explain, with specific reference to evidence in the scenario, whether it is likely to help or hinder the CEO's ability to deliver the intended culture, equity, diversity and inclusion agenda. (8 Marks)

(Total: 25 Marks)

QUESTION FOUR

Muhanga Steel & Fabrication Plc (MSF) is a Rwandan manufacturer of steel gates, fencing, roofing frames and structural steel products, listed on the Rwanda Stock Exchange (RSE). MSF was founded eighteen years ago by its current Chairman, who also serves as Chief Executive Officer, a dual role the company has never separated since incorporation. The board includes two non-executive directors appointed within the last year; neither has prior experience in manufacturing or heavy industry, and board meetings are described by several

staff as largely a formality, with major decisions effectively made by the Chairman beforehand.

Three years ago, MSF's board approved an ambitious plan to expand sales into the Kenyan, Ugandan and DRC markets, aiming to double regional revenue within five years. The expansion has been funded predominantly through short-term bank borrowing and extended supplier credit terms, rather than through a rights issue or long-term borrowing, because the Chairman was reluctant to dilute his shareholding or lock the company into long-term debt covenants. Over the same period, MSF has faced intensifying competition from cheaper imported steel products entering the Rwandan and regional market, compressing margins on its core product lines.

MSF's rolling mill machinery is now fourteen years old and increasingly prone to breakdown, but the board has repeatedly deferred a planned replacement, preferring to fund incremental repairs and the continuing regional expansion from the same pool of short-term borrowing facilities. The finance department has experienced high turnover in recent years; the second Finance Director in three years resigned four months ago; and MSF's costing system does not allocate factory overheads by product line, so management cannot say with confidence which of its product lines are genuinely profitable. Cash flow forecasts, prepared manually, have not been formally updated in over a year.

Visiting analysts have noted that MSF's factory floor is visibly under-utilised on weekday visits, non-management salaries have been frozen for two years, and there have been persistent staff rumours of delayed payments to some of MSF's smaller suppliers. The Chairman has publicly maintained that the regional expansion strategy remains sound and that short-term pressures will ease once the new markets mature.

MSF's most recent three years of financial statements, together with additional information required to assess the company's financial health, are set out below.

Statement of Financial Performance for the years ended 31 December (FRW million)

	Year 1	**Year 2**	**Year 3**
Revenue	9,000	9,800	10,200
Cost of sales	(6,100)	(6,950)	(7,550)
Gross profit	2,900	2,850	2,650
Operating expenses	(1,900)	(2,250)	(2,650)
Operating profit (EBIT)	1,000	600	0
Finance costs	(220)	(380)	(520)
Profit/(loss) before tax	780	220	(520)
Income tax expense	(234)	(66)	0
Profit/(loss) for the year	546	154	(520)
Dividends paid	(250)	(150)	0
Retained earnings brought forward	1,550	1,846	1,850
Retained earnings carried forward	1,846	1,850	1,330

Statement of Financial Position as at 31 December (FRW million)

	Year 1	Year 2	Year 3
Non-current assets	4,800	6,300	7,900
Inventory	900	1,250	1,550
Trade receivables	1,050	1,500	1,850
Cash and bank balances	300	150	60
Total current assets	2,250	2,900	3,460
Total assets	7,050	9,200	11,360
Share capital	2,000	2,000	2,000
Retained earnings	1,846	1,850	1,330
Total equity	3,846	3,850	3,330
Long-term bank loans	1,800	2,100	2,400
Trade payables	900	1,150	1,400
Short-term borrowings (incl. overdraft)	504	2,100	4,230
Total current liabilities	1,404	3,250	5,630
Total liabilities	3,204	5,350	8,030
Total equity and liabilities	7,050	9,200	11,360

Additional information:

- MSF had 100 million ordinary shares in issue throughout all three years.
- MSF's share price on the Rwanda Stock Exchange at each year-end was: Year 1: FRW 58; Year 2: FRW 32; Year 3: FRW 13.
- MSF's income tax rate is 30% of taxable profit; no tax charge or credit arises in a loss-making year.

Required:

a) Evaluate the five ratios (working capital/total assets, retained earnings/total assets, EBIT/total assets, market value of equity/total liabilities, and sales/total assets) used in the Altman Z-score formula for MSF, for each of the three years. (8 Marks)

b) Assess the Altman Z-score for MSF for each of the three years, and comment on what the trend in MSF's Z-score reveals about its financial health over the period. (11 Marks)

c) Identify and explain THREE qualitative indicators of possible corporate failure evident in the scenario (other than the Z-score result itself), and advise the board on the governance changes needed to address them. (6 Marks)

(Total: 25 Marks)

End of Question Paper.

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