

# CERTIFIED PUBLIC ACCOUNTANT STAGE 2 EXAMINATIONS

# **S2.2: MANAGING COST AND CASHFLOWS**

**DATE: THURSDAY 29, FEBRUARY 2024** 

# **INSTRUCTIONS:**

- 1. Time Allowed: 2 hours and 30 Minutes.
- 2. This examination has one section only: Section A.
- 3. Section A has 50 compulsory multiple-choice questions equal to 2 marks each.
- 4. The question paper should not be taken out of the examination room.

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# **SECTION A**

#### **OUESTION ONE**

#### (Below information is relevant to 1 to 4)

Munezero Ltd is business operating in manufacturing of Intare GIN. They have been struggling on how they can separate their production costs into variable and fixed components so that they can know how to control them. Below is the information from Munezero Ltd books:

Year	Unit produced	Total cost incurred FRW "000"
2015	40,000	600,000
2016	42,000	750,000
2017	47,000	770,000
2018	55,000	820,000
2019	61,000	850,000
2020	70,000	960,000

# What is the variable cost per unit using high -low method?

- A FRW 12,000
- B FRW 13,714
- C FRW 15,000
- D FRW 14,357

(2 Marks)

#### **QUESTION TWO**

#### Which of the following is indirect cost?

- A Wood used in the construction of a table
- B Machine operators
- C Patent royalties payable to the inventor of a new product or process
- D Wages and salaries for supervisors

(2 Marks)

#### **QUESTION THREE**

#### What is total fixed cost per year using high –low method?

- A FRW 480,000,000
- B FRW 840,000,000
- C FRW 120,000,000
- D FRW 600,000,000

(2 Marks)

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#### **QUESTION FOUR**

# Which of the following expenditure is not revenue expenditure?

- A Cost incurred for improvement of the earning capability of non-current assets
- B Maintenance of the existing earning capacity of non-current assets
- C Purchase of goods for resale
- D Expenditure incurred in Redecorating offices

(2 Marks)

## **QUESTION FIVE**

Bric and Mob Manufacturing company Ltd is a company manufacturing bricks in Ruhondo sector. During the production team meeting, the production manager suggested that they can hire professional employees to help them produce a ton of bricks in 30 minutes as compared to taking one-hour normal production time per ton. The professional will be paid 50% of the normal cost per hour in additional to his/her charge per minute. Normal pay rate is FRW 6,000 per hour. During the meeting, a decision was taken to hire the professional and test their productivity for the three months. Production is done in 8 hours a day,7 days a week.

#### What is the time saved bonus for professional within three weeks?

- A FRW 504.000
- B FRW 1,008,000
- C FRW 336,000
- D FRW 144,000

(2 Marks)

#### The following information relates to questions 6 to 8

#### **QUESTION SIX**

Maraba Oil is company manufacturing cooking oil in Rutsiro district. During quarter three of the years ended 2021, the company had incurred the following overheads:

- (i) Insurance of equipment of FRW 50,000,000
- (ii) Repair of buildings of FRW 30,000,000
- (iii) Heating and lighting of FRW 15,000,000

Maraba oil have the following two production departments:

Description	Department X	Department Y
Floor area occupied M <sup>2</sup>	1,200	800
Cost of equipment	110,000,000	90,000,000
Space occupied M <sup>3</sup>	4,000	8,000

#### What is insurance cost allocated to department X?

- A FRW 27,500,000
- B FRW 22,500,000
- C FRW 18,000,000
- D FRW 50,000,000

(2 Marks)

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#### **QUESTION SEVEN**

#### What is the total overhead allocated to Department Y?

- A FRW 44,500,000
- B FRW 50,500,000
- C FRW 34,500,000
- D FRW 32,500,000

(2 Marks)

#### **QUESTION EIGHT**

#### Which of the following definition correctly describe, "allocation of overhead costs"?

- A This is a procedure whereby indirect costs (overheads) are spread between cost centers on a fair basis.
- B A method of sharing overheads between a number of different products or services on a fair basis.
- C A method designed to help you track the cost of individual projects and jobs.
- D This is the process of assigning whole items of cost-to-cost centers. It is the first stage in the absorption costing process.

(2 Marks)

#### **QUESTION NINE**

Zirarazishya movie production has budgeted to incur variable production cost of FRW 2,000 per unit and annual fixed production costs FRW 10,000,000. A customer approached Zirarazishya with requests of producing 4,000 movies including short film. This will take exactly one year to produce. The selling price will be 30% higher than full cost.

#### What is the selling price of the above request from the customer?

- A FRW 18,000,000
- B FRW 23,400,000
- C FRW 10,400,000
- D None of the above

(2 Marks)

# **QUESTION 10**

# Which of the following definition is correct about cost plus pricing?

- A This is a method of determining the sales price by calculating the full cost of a product and adding a percentage mark-up for profit
- B This is costing method used where each job is separately identifiable as a cost unit.
- C This is a form of specific order costing in which costs are attributed to batches of products.
- D This is method used by companies operating in a service industry or by companies wishing to establish the cost of services carried out by different departments.

(2 Marks)

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Nature Guide manufacturing company is company producing maize flour in Rusize district. Their finance manager was preparing management accounts for the months of March 2023 to be used in the analysis on the variance. Below were the budgeted and actual information about sales.

- (i) Actual sales value of FRW 18,500,000
- (ii) Actual sales unit 925 units
- (iii) Budgeted sales unit 900 units with selling price of FRW 19,500

#### What should be the total sales variance for the month of March 2023?

- A FRW 950,000 A
- B FRW 487,500 F
- C FRW 950,000 F
- D FRW 487,500 A

(2 Marks)

#### **QUESTION 12**

MCB Manufacturing Ltd budgeted to use 900 unit of material at cost per unit of FRW 150 each. During the month of October 2022, production manager report shows that material usage in production were 920 Unit with total cost of FRW 147,200.

# What is the material price variance?

- A FRW 9,200 F
- B FRW 9,200 A
- C FRW 3,000 A
- D FRW 3,000 F

2 Marks

# The following information relates to questions 13 to 16

## **QUESTION 13**

Marvin company Ltd is manufacturing company operating in Rwamagana city. Recently the managing director requested to have more clarity on how and why Marvin company Ltd is making losses and he requested that finance manager to start monitoring if the decisions taken on the manufacturing cost are implemented as planned through providing report on break-even point, margin of safety and how far they are achieving the targeted profit. The following information was extracted from the minutes of last board meeting.

- (i) Budgeted sales volume 80,000 Units
- (ii) Variance cost per unit of FRW 5,000
- (iii) Selling price of FRW 11,000
- (iv) Annual fixed cost of FRW 250,000,000

Th answer should be rounded to nearest whole number

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# What is the break-even point in units of Marvin company ltd?

- A 41.667 Units
- B 80,000 Units
- C 38,333 Units
- D None of the above

(2 Marks)

#### **QUESTION 14**

#### What is the break-even point in sales value?

- A FRW 421,663,000
- B FRW 880,000,000
- C FRW 458,333,333
- D FRW 480,000,000

(2 Marks)

#### **OUESTION 15**

If the activity level to achieve the targeted profit decided from board was 90,000 Units,

# What was the targeted profit?

- A FRW 250,000,000
- B FRW 540,000,000
- C FRW 290,000,000
- D FRW 990,000,000

(2 Marks)

# **QUESTION 16**

#### What is the margin of safety in units?

- A 41,667 units
- B 90,000 units
- C 38,333 units
- D None of the above

(2 Marks)

#### **QUESTION 17**

#### Which of the following statements is not true about limiting factor?

- A In order to make a decision we must determine our criterion for the decision-making process.
- B Limiting factor is a factor of production or sales that does not limits the amount of a product that can be produced or sold.
- C In business the overriding criterion will normally be to make as much profit as possible.
- D If a business has more than one product, and only one limiting factor, the technique to use in order to maximize contribution is to determine the contribution per unit of the scarce resource or limiting factor and concentrate upon the production of the product with the highest contribution per limiting factor unit.

(2 Marks)

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#### Which of the following is not true about Net present value?

- A If we are appraising a project then the technique that we can use is to find the Net present value of all of the cash flows of the project.
- B The net present value is the total of the individual present values of the cash flows of a project.
- C If the net present value is a positive figure, a positive NPV, then the project should not be accepted.
- D If, however the net present value is a negative figure, a negative NPV, then the project should be rejected.

(2 Marks)

#### **OUESTION 19**

Mrs. Erica is member of Vision insurance company that provides life insurance in Rwanda. Recently her brother approached her to advise him on the amount of money he can save in the insurance for education of his unborn child so that he can get FRW 6,000,000 in three years' time. The market interest rate is 5% annually.

# What should be the amount to save now in order to get FRW 6,000,000 in three year time?

- A FRW 5,183,026
- B FRW 5,442,177
- C FRW 5,714,286
- D None of the above

(2 Marks)

#### **QUESTION 20**

Nyamagabe milk transport Ltd is considering investing in the factory of producing yogurt which will initially cost FRW 300,000,000. Annual net cash flows from the factory will be FRW 50,000,000 for a period of seven years. The finance manager suggested that they would get 10% interest if that money invested in bank deposit.

## What is the net present value from construction of their own factory?

- A FRW 50,000,000
- B FRW 243,420,941
- C FRW (56,579,059)
- D FRW (29,306,332)

(2 Marks)

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#### Which of the following is a limitation of time series analysis?

- (i) The less historic data there is available, the less reliable the results will be.
- (ii) The further into the future we forecast, the less reliable the results will be. Reliability can be increased by considering a shorter planning period or by producing an annual budget and then revising it as new information comes to light.
- (iii) When using past information to predict the future, we assume that the historic relationships are going to continue to apply. If these relationships change, then the forecast will be inaccurate. One approach to deal with such uncertainty is to consider developing forecasts for several different scenarios.
- (iv) A business will be affected by changes in general economic factors such as inflation rates, exchange rates etc which may impact on selling prices, costs, wage rates etc. Such factors are uncontrollable and therefore may be difficult to account.
- (v) It makes possible to find the true "signal" in a data set, by filtering out the noise.
- A (i), (ii) and (v) only
- B (i), (ii), (iii) and (v) only
- C (i), (ii), (iii) and (iv) only
- D All of the above

(2 Marks)

#### **QUESTION 22**

# Which of the following is correct statement describing exceptional items in pattern of cash flows?

- A Exceptional items are income or payments that are unusual and do not occur in the normal course of business.
- B Exceptional items will be those which normally occur in the course of the business.
- C Exceptional items are those items which have been incurred regularly in the past and are not expected to occur regularly in the future.
- D All of the above

(2 Marks)

#### **OUESTION 23**

#### Which of the following is not a key element in corporate governance?

- A Good governance provides a framework for an organisation to pursue its strategy in an ethical and effective way from the perspective of all stakeholder groups affected, and offers safeguards against misuse of resources, physical or intellectual.
- B The notion that overall performance is enhanced by good supervision and management within set best practice guidelines underpins most definitions.
- C Good governance is not just about externally established codes; it also requires a willingness to apply the spirit as well as the letter of the law.
- D The management and reduction of risk is not a fundamental issue in all definitions of good governance; whether explicitly stated or merely implied.

(2 Marks)

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#### Which of the following statement is/are correct about monetary policy?

- (i) It is responsibility of commercial banks to formulate and implementing monetary policy.
- (ii) Consumer Price Index is the main measure of inflation used by commercial banks
- (iii) Movements in interest rates affect the overall level of demand in the economy and so can have a powerful influence on the inflation rate.
- (iv) Higher interest rates make investment more attractive but reduce the demand for borrowing.
- A (i) and (iii) only
- B (ii) and (iv) only
- C (iii) and (iv) only
- D All of the above

(2 Marks)

#### **QUESTION 25**

#### Which of the following best describe "Bailor/Bailee relationship"?

- A The relationship whereby bank asks the customer to secure a loan with a charge over its assets.
- B The relationship whereby bank is expected to act with the utmost good faith in its relationship with the customer.
- C The relationship between customer and bank concerns the bank accepting the customer's property for storage in its safe deposit.
- D This relationship exists where, for example, the customer pays a cheque into the bank. The bank acts as an agent when, as the receiving bank, it presents the cheque for payment to the paying bank, and then pays the proceeds into the customer's account.

(2 Marks)

#### **QUESTION 26**

Banki corporation Ltd had FRW 500,000,000 cash in its account at the end of the year 2022. In one of the senior management meetings, the managing director suggested that since they have enough money in the bank account to operate for the next financial period, they should increase credit days from 30 days to 45 days so as to increase their revenue by 15% from 700,000,000. This will increase defaulted amount by FRW 14,000,000. The finance manager disagreed with this and suggested that instead of changing their credit policy, they can invest that money in a fixed bank deposit which will earn 10% interest per year before deducting a withholding tax of 15%. From past experience Banki Corporation Ltd earn contribution of 60%

#### What is net income for the best choice from above suggestions?

- A FRW 42,500,000
- B FRW 63,000,000
- C FRW 50,000,000
- D FRW 49,000,000

(2 Marks)

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DT company ltd is an importer of the powdered milk from USA to Rwanda. Recently it imported 5 tonnes of the milk at \$10,000 each from a US supplier on credit that shall be paid within 6 months from the delivery time. The treasury accountant suggested to the finance manager that they should pay immediately to avoid effects of currency depreciation which will make them lose because they sold the milk in Rwandan francs. The finance manager denied that and instead of paying the supplier, he suggested that they can invest that money in treasury bond with coupon net interest rate of 20% annually. Currency is expected to depreciate by 7%. Currently 1 US dollar = FRW 1,252.

#### Which of the following is the best decision and outcome?

- A Paying the supplier immediately with FRW 4,382,000
- B Invest in Treasury bills with FRW 4,382,000
- C Paying the supplier immediately with FRW 6,260,000
- D Invest in Treasury bills with income FRW 6,260,000

(2 Marks)

#### **QUESTION 28**

#### Which of the following is not benefit of forecasting in business?

- A Forecasting provides essential information about future customer demand.
- B It assists companies in making more intelligent decisions about production planning.
- C When using past information to predict the future, we assume that the historic relationships are going to continue to apply. If these relationships change, then the forecast will be inaccurate.
- D Forecasts can involve external data such as macro economy, industry trends, projection of the market sector, etc. Calculating these factors can help to be more agile and adaptive to future conditions to grow a business.

(2 Marks)

#### **QUESTION 29**

Any business dealing in cash must have basic security procedures in place to deal with the following aspects "except"?

- A Physical safeguards
- B Reconciliation of cash received
- C Banking procedures
- D Inventory safeguards

(2 Marks)

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# The following information relates to questions 30 to 33

# **QUESTION 30**

Mutuma is a CFO of Mauritius mineral Ltd. Recently he presented the following summary to the board of directors.

Description	2022
Inventory	FRW 170,000,000
Trade Receivable	FRW 230,000,000
Cash and Cash equivalent	FRW 65,000,000
Trade Payable	FRW 185,000,000
Revenue	FRW 1,300,000,000
Gross profit	FRW 950,000,000
Net Profit	FRW 370,000,000

In 2022 credit was 80% of all revenue generated. Assume 2022 had 360 days. Round up your answer to a whole number.

## What is the receivable collection period in 2022?

- A 80 Days
- B 64 Days
- C 81 Days
- D 13 Days

(2 Marks)

## **QUESTION 31**

#### What is Acid test ratio?

- A 2.5:1
- B 1.6:1
- C 0.4:1
- D 0.6:1

(2 Marks)

# **QUESTION 32**

#### What is Trade payables' payment period?

- A 190 Days
- B 193 Days
- C 73 Days
- D None of the above

(2 Marks)

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#### Which of the following ratio is correct inventory holding period?

- A 177 Days
- B 175 Days
- C 66 Days
- D None of the above

(2 Marks)

# The following information relates to questions 34 to 36

# **QUESTION 34**

The following information was extracted from the management accounts of I-tech Ltd as of end December 2019:

Description	Budgeted	Actual
Receipts from cash sales	FRW 160,000,000	FRW 175,000,000
Receipts from credit customers	FRW 750,000,000	FRW 710,000,000
Payment to Credit supplier	FRW 640,000,000	FRW 625,000,000
Purchase of Equipment	FRW 80,000,000	FRW 55,000,000
Payment to Rent	FRW 25,000,000	?

# What is the customer receipt variance as at end December 2019?

- A FRW 25,000,000 Favorable
- B FRW 40,000,000 Adverse
- C FRW 15,000,000 Favorable
- D FRW 25,000,000 Adverse

(2 Marks)

# **QUESTION 35**

If payment of rent has variance of FRW 7,000,000 Adverse, what was the actual rent paid?

- A FRW 18,000,000
- B FRW 32,000,000
- C FRW 25,000,000
- D None of the above

(2 Marks)

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# Which is the variance for supplier payment and purchase of equipment?

- A FRW 15,000,000 Favorable for Purchase of equipment and FRW 25,000,000 Favorable for supplier payment.
- B FRW 15,000,000 Adverse for Purchase of equipment and FRW 25,000,000 Adverse for supplier payment.
- C FRW 25,000,000 Adverse for Purchase of equipment and FRW 15,000,000 Favorable for supplier payment.
- D FRW 25,000,000 Favorable for Purchase of equipment and FRW 15,000,000 Favorable for supplier payment.

(2 Marks)

#### **QUESTION 37**

#### Which of the following is exceptional payments in cash budget?

- A Payment of supplier
- B Payment of salaries and wages
- C Payment of equipment
- D Payment of rent

(2 Marks)

#### The following information relates to questions 38 to 40

#### **QUESTION 38**

Apex Manufacturing Ltd is preparing its budget for quarter two ended 30<sup>th</sup> June 2023. The selling price per unit of the final product in last quarter was FRW 5,000 and it is expected to increase by 5% monthly up to end July 2023 to regularise the current market price. In end March 2023 the main material cost per unit was FRW 2,000 which increased by 10% in first month of quarter 2.

Below are the estimates from its commercial and production department:

Description	<b>Sales Units</b>	<b>Production Units</b>
April 2023	14,800	14,500
May 2023	15,700	17,000
June 2023	16,500	17,500

#### What is budgeted sales value for May 2023

- A FRW 82,425,000
- B FRW 86,546,250
- C FRW 78,500,000
- D FRW 93,712,500

(2 Marks)

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# What is the budgeted material cost for the April 2023 to be used in cash budget?

- A FRW 31,900,000
- B FRW 29,000,000
- C FRW 32,560,000
- D FRW 29,600,000

(2 Marks)

#### **QUESTION 40**

# What are the total budgeted sales and material cost for the quarter ended 30<sup>th</sup> June 2023?

- A FRW 235,000,000 for Budgeted sales and FRW 98,000,000 for Material cost
- B FRW 246,750,000 for Budgeted sales and FRW 107,800,000 for Material cost
- C FRW 259,750,313 for Budgeted sales and FRW 119,625,000 for Material cost
- D FRW 259,750,313 for Budgeted sales and FRW 107,800,000 for Material cost

(2 Marks)

## The following information relates to questions 41 to 40

#### **QUESTION 41**

The following balances was extracted from the books Sameel and Sateen Ltd as of end March 2019 and 2020.

Description	Amount in 2019	Amount in 2020
Trade Receivable	FRW 150,000,000	FRW 180,000,000
Depreciation Expenses	FRW 165,000,000	FRW 149,000,000
Credit Sales	FRW 570,000,000	FRW 620,000,000

#### What is the actual cash received from sales to be used in cash flow for 2020?

- A FRW 650,000,000
- B FRW 530,000,000
- C FRW 590,000,000
- D FRW 600,000,000

(2 Marks)

#### **QUESTION 42**

#### What amount of depreciation should be included in cash flow in 2020?

- A Cash outflow of FRW 149,000,000
- B Cash outflow of FRW 165,000,000
- C Cash outflow of FRW 16,000,000
- D No cash outflow should be included in cash flow statement related depreciation unless it is adjusting profit.

(2 Marks)

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#### The following information relates to questions 43 to 44

#### **QUESTION 43**

B&G manufacturing incurred the following overhead costs.

Description	Production department" FRW"		Service department "FRW"	
Description	Machining	Assembling	Store	Maintenance
Allocated Overhead	80,000,000	65,000,000	15,000,000	30,000,000
Apportioned Overhead	50,000,000	20,000,000	12,000,000	6,000,000
Total	130,000,000	85,000,000	27,000,000	36,000,000

Machining department require material from store at the level of 60% and need maintained service for 750 hours out of 2,250 hours available from maintenance department.

# What is the machining overhead cost reapportioned from maintenance services?

- A FRW 12,000,000
- B FRW 24,000,000
- C FRW 16,200,000
- D FRW 10,800,000

(2 Marks)

#### **QUESTION 44**

# What is total reapportioned overhead cost to assembling department?

- A FRW 158,000,000
- B FRW 34,800,000
- C FRW 28,200,000
- D FRW 119,800,000

(2 Marks)

#### **QUESTION 45**

NTM network company Ltd estimated and incurred the following overhead cost for the year ended 2018:

Description	Production overhead cost		
Description	Hours	Overhead	
Estimated overhead	40,000	FRW 86,000,000	
Actual Overhead incurred	50,000	FRW 120,000,000	

#### What is over/Under absorption overhead for the year ended 2018?

- A Under absorption overhead of FRW 34,000,000
- B Over absorption overhead of FRW 12,500,000
- C Under absorption overhead of FRW 12,500,000
- D Over absorption overhead of FRW 34,000,000

(2 Marks)

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#### The following information relates to questions 46 to 49

#### **QUESTION 46**

Mace milk Ltd is a manufacturing company producing a product called "**kura**". At the beginning of the year 2021, Mace Ltd had an inventory of 6,000 units of Kura which was ready to be sold. The production manager and commercial manager provided the following information about the production and sales for the year ended 2021:

Details	2021
Sales	14,000 Units
Production	12,000 Units
Selling price	FRW 5,500 per Unit
Variable cost	FRW 3,000 per Unit
Fixed Cost for year	FRW 500,000

It was noted that fixed cost comprises with 40% and 60% for administration fixed cost and production fixed cost respectively.

#### What are the inventory values using marginal costing method?

- A FRW 18,000,000 Opening inventory and FRW 12,000,000 for closing inventory
- B FRW 12,000,000 Opening inventory and FRW 18,000,000 for closing inventory
- C FRW 22,000,000 Opening inventory and FRW 33,000,000 for closing inventory
- D FRW 23,000,000 Opening inventory and FRW 22,000,000 for closing inventory

(2 Marks)

#### **QUESTION 47**

# Which of the following is net profit using absorption costing method?

- A FRW 11,000,000
- B FRW 5,000,000
- C FRW 0
- D FRW 2,000,000

(2 Marks)

#### **QUESTION 48**

#### Which of the following is a contribution realized in year ended 2021?

- A FRW 2,000,000
- B FRW 63,000,000
- C FRW 35,000,000
- D FRW 5,000,000

(2 Marks)

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# Which of the following is net profit using marginal costing method?

- A FRW 11,000,000
- B FRW 5,000,000
- C FRW 2,000,000
- D FRW 0

(2 Marks)

# **QUESTION 50**

Mr. Albert is the management accountant of APT Ltd. At a meeting with auditors, he was advised to reconcile two profits he had presented to them that were prepared based on marginal and absorption costing techniques.

Description	<b>Marginal Costing</b>	<b>Absorption costing</b>
Opening inventory	FRW 60,000,000	FRW 72,000,000
Closing Inventory	FRW 40,000,000	FRW 55,000,000
Administration cost	FRW 15,000,000	FRW 15,000,000

The profit using Absorption costing was FRW 46,000,000.

From the above information, what is the net profit using marginal costing method?

- A FRW 49,000,000
- B FRW 43,000,000
- C FRW 34,000,000
- D FRW 28,000,000

(2 Marks)

# **End of question paper**

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