

#### UNIVERSITY OF ESWATINI

# FACULTY OF COMMERCE DEPARTMENT OF ACCOUNTING AND FINANCE

#### **MAIN EXAMINATION**

#### OCTOBER 2021

TITLE OF PAPER

MANAGERIAL ACCOUNTING

COURSE CODE

ACF622

:

:

1

TOTAL MARKS

100 MARKS

TIME ALLOWED

THREE (3) HOURS

**INSTRUCTIONS** 

There are four (4) questions, answer all

2 Begin the solution to each question on a new page.

3 The marks awarded for a question are indicated at the end of each

question.

4 Show the necessary workings.

5 Calculations are to be made to zero decimal places of accuracy,

unless otherwise instructed.

Note: You are reminded that in assessing your work, account will be taken of accuracy of the language and general quality of expression, together with layout and presentation of your answer.

THIS PAPER IS NOT TO BE OPENED UNTIL PERMISSION HAS BEEN GRANTED BY THE INVIGILATOR OR SUPERVISOR.

SPECIAL REQUIREMENTS:

NON-PROGRAMMABLE CALCULATOR

### **QUESTION 1**

Africa Ltd is a listed company that assembles domestic electrical goods which it then sells to both wholesale and retail customers. Africa Ltd's management was disappointed in the company's results for the year ended 31 March 2020. In an attempt to improve performance the following measures were taken early in the year ended 31 March 2021:

A national advertising campaign was undertaken,

Rebates to all wholesale customers purchasing goods above set quantity levels were introduced,

The assembly of certain lines ceased and was replaced by bought in completed products. This allowed Africa Ltd to dispose of surplus plant.

Africa Ltd's summarised financial statements for the year ended 31 March 2021 are set out below:

# STATEMENT OF PROFIT OR LOSS AND OTHER COMPREHENSIVE INCOME FOR THE YEAR ENDED 31 MARCH 2021

	Em
Revenue (25% cash sales)	4,000
Cost of sales	(3,450)
Gross profit	550
Operating expenses	(370)
Operating profit	180
Profit on disposal of plant (note (i))	40
Financial charges	(20)
Profit before tax	200
Income tax expense	<u>(50)</u>
Profit for the year	<u>150</u>

# STATEMENT OF FINANCIAL POSITION AS AT 31 MARCH 2015

	Em	Em
Non-current Assets		
Property, Plant and equipment (note (ii))		550
Current Assets		
Inventory	250	
Trade receivables	360	
Bank	<u>nil</u>	<u>610</u>
Total Assets		<u>1,160</u>
Equity and Liabilities		
Stated capital (400m shares)		100
Income Surplus		<u>380</u>
		480
Non-current liabilities		
8% loan notes		200
Current liabilities		
Bank overdraft	10	
Trade payables	430	
Current tax payables	<u>40</u>	<u>480</u>
Total equity and liabilities		<u>1,160</u>

Below are ratios calculated for the year ended 31 March 2020:

Return on year end capital employed (profit before interest and tax over total assets less current liabilities)

	28.1%
Net assets (equal to capital employed) turnover	4 times
Gross profit margin	17%
Net profit (before tax) margin	6.3%
Current ratio	1.6:1
Closing inventory holding period	46 days
Trade receivables' collection period	45 days
Trade payables' payment period Dividend yield Dividend cover	55 days 3.75% 2 times

#### **Notes**

Africa Ltd received E 120m from the sale of plant that had a carrying amount of E 80m at the date of its sale.

The market price of Africa Ltd's share throughout the year averaged E3.75 each. There were no issues or redemption of shares or loans during the year.

Dividends paid during the year ended 31 March 2021 amounted to E 90m, maintaining the same dividend paid in the year ended 31 March 2020.

## Required:

(a) Calculate ratios for the year ended 31 March, 2021 (showing your workings) for Africa Ltd, equivalent to those provided above.

(20 marks)

(b) Analyse the financial performance and position of Africa Ltd for the year ended 31 March 20211 compared to the previous year.

(10 marks)

[Total = 30 marks)

#### **OUESTION 2**

Talent Company Limited produces household items for the domestic market. In the previous year, company suffered theft in its offices, losing all cash on hand in the process. On the date of the theft, the company had an overdraft balance of E125 million with its bankers. Due to the good working relationship that exists between the company and its bankers, a short-term loan of E500 million was granted to the company on 31st December, 2023, on the following terms:

Facility

Short Term Loan

Duration

One year

Interest

27.5 % per annum simple interest

Repayme

nt

Principal payment in 4 equal quarterly instalments

Interest payable monthly in arrears

## Additional information:

Production in units:

2023		2024					
Nov	Dec	Jan	Feb	March	April	May	June
5,000	6,000	5,000	8,000	6,000	5,000	5,000	6,000

Raw materials used for the production cost E10,000 per unit. 25% of this sum is paid in the same month as production and the balance of 75% in the month following production.

Direct labour which costs E1,000 per unit are payable in the same month as production whilst variable expenses is estimated at E6,000 per unit. 50% of the variable expenses are payable in the same month as production and the balance in the following month.

Sales at E250,000 per unit are as follows:

2023			2024					
Oct	Nov	Dec	Jan	Feb	March	April	May	June
200	600	600	768	720	640	500	500	560

(v) All sales are on credit and debtors take an average credit period of two months.

Fixed overheads are E 18 million per month and are payable each month.

A new packaging equipment costing E84 million is to be paid for equally in March and September 2024. It has a useful life of 5 years and a straight-line depreciation policy. The depreciation of this equipment has not been included in the fixed overheads above.

Rent income of E6 million per quarter is to be received at the end of each quarter

# You are required to prepare:

- (a) A schedule for cash to be received from sales. (5 marks)
- (b) A schedule for expected cash purchases. (5 marks)
- (c) A schedule for payment to be made for variable expenses (5 marks)
- (d) A cash schedule for payment to be made for direct labour. (5 marks)
- (e) A cash budget for the six months ended 30<sup>th</sup> June, 2024 for the company. (10 marks)

[Total= 30 marks]

#### **QUESTION 3**

PASS Limited is a small company which manufactures furniture to order. The company uses Job costing in determining the costs and profit of each order. At the start of the financial year, the cost accountant gathered the following information in respect of the budgeted overheads for each of the three production departments as follows:

Department	<b>Budgeted overheads</b>	Overhead absorption basis
Carving	E15,000	1,000 machine hours
Assembly	E36,000	6,000 labour hours
Decoration	E19,000	1,000 labour hours

Note: These figures are based on normal activity levels.

Selling and distribution overheads are calculated as 20% of factory cost i.e. direct costs plus production overheads.

The accountant is now calculating the total net profit or loss on a recently completed order for 100 reproduction regency wardrobes. Details of this order are as follows:

- The selling price of each wardrobe was E270
- Materials consumed E8,935
- Labour:
- Carving department 170 hours @ E10 per hour
- Assembly department 210 hours @ E12 per hour
- Decoration department 40 hours @ E8 per hour
- Machine usage in the carving department totalled 150 hours.
- A fee of E500 was paid to an expert furniture historian for consultancy services
   provided in respect of the completion of this order.

# You are required to:

- (a) Calculate the overhead absorption rates for the production departments. (3 marks)
- (b) Calculate:
  - (i) The total cost of the batch, clearly identifying Prime Cost, Factory Cost and Total Cost. (11 marks)
    - (ii) The unit cost. (3 marks)
    - (iii) The profit or loss per wardrobe. (3 marks) [Total: 20 marks]

#### **QUESTION 4**

You have been assigned the task of assessing the performance of a division within the company in which you work.

The division, which is a major production centre, uses standard absorption costing for product costing and stock valuation purposes.

The cost card for the product line where you intend to start your assessment shows the following data:

	Quantity	E
Direct materials	10 kgs	105
Direct labour -Category A	30 minutes	15
- Category B	45 minutes	9
Variable overheads	20% of material	21
Fixed overheads (note)	30 minutes @ E12 per hour	6
Standard absorption cost		156

Note: Fixed production overheads are absorbed on the basis of standard time allowed for Category A labour. The monthly budget for Category A labour was 2,500 hours.

In the most recent month, 4,977 units were made at the following costs:

				${f E}$
Direct materials	-	Purchased	55,000 kgs	555,600
	-	Used	52,350 kgs	
Direct labour	-	Category A	2,610 hours	77,648
	-	Category B	3,730 hours	45,000
Variable overhead	ds		114,925	
Fixed overheads				29,055

#### You are required to:

- (a) Calculate the following variances:
  - (i) Direct materials price and usage. (3 marks)
  - (ii) Direct labour rate and efficiency variance for both categories of labour. (3 marks)
  - (iii) Variable overheads expenditure and efficiency variance. (4 marks)
  - (iv) Fixed overheads expenditure and production volume variance. (4 marks)

# NB: Show all workings.

(b) Briefly comment on the information provided about the department's performance by the variance analysis. (6 marks) [Total = 20 marks]