### UNIVERSITY OF ESWATINI

### DEPARTMENT OF ACCOUNTING & FINANCE

#### MAIN EXAMINATION PAPER

#### **DECEMBER 2018**

**DEGREE/YEAR OF STUDY:** 

BACHELOR OF COMMMERCE YEAR II/ IDE LEVEL II

TITLE OF PAPER:

INTRODUCTION TO COST AND MANAGEMENT

**ACCOUNTING** 

**COURSE CODE** 

: ACF 213/ IDE ACF 213 (M) DECEMBER 2018

TOTAL MARKS

100 MARKS

:

:

1

4

TIME ALLOWED

THREE (3) HOURS

INSTRUCTIONS

There are four (4) questions. Answer all.

- 2 Begin the solution to each question on a new page.
- The marks awarded for each question are indicated at the end of the question.
  - Show all your 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 language together with the layout and presentation of your final answer.

**SPECIAL REQUIREMENTS:** 

CALCULATOR

This paper is not to be opened until permission has been granted by the invigilator

## **QUESTION 1**

Ligcabho lesive Corporation operates a job order costing system which includes the use of predetermined overhead absorption rates. The company has two service cost centres and two production cost centres. The production cost centre overheads are charged to jobs via direct labour hour rates which are currently E 3.10 per hour in cost centre Y and E 11.00 per hour in production cost centre Z. The calculations involved in determining these rates have excluded any consideration of the services that are provided by each service cost centre to the other. The bases used to charge general factory overhead and service cost centre expenses to the production cost centres are as follows:

- i) General factory overhead is apportioned on the basis of the floor area used by each production and service cost centre.
- ii) The expenses of service cost centre 1 are charged out on the basis of the number of personnel in each production cost centre.
- iii) The expenses of service cost centre 2 are charged out on the basis of the usage of its services by each production cost centre.

The company's overhead absorption rates are revised annually prior to the beginning of each year, using an analysis of the outcome of the current year and the draft plans and forecasts for the forthcoming year. The revised rates for the next year are to be based on the following data:

	General	Service cost centres		Production cost centres	
	General factory				
	overhead	1	2	X	Y
Budgeted overhead for next year ( before					
any reallocations)	210,000	93,800	38,600	182,800	124,800
% of factory floor area	-	5	10	15	70
% of factory personel	-	10	18	63	9
Estimated usage of services of service cost centre 2 in the forthcoming year (hours)	-	1,000	-	4,000	25,000
Budgeted direct labour hours for next year					
( to be used to calculate next year's					
absorption rates)	-	-		120,000	20,000
Budgeted direct labour hours for current					
year (these figures were used in the					
calculation of this year's absorption rates)	<u>-</u>	_	-	100,000	30,000

## Required:

- a) Ignoring the question of reciprocal charges between the service cost centres, you are required to calculate the revised overhead absorption rates for the two production cost centres. Use the company's established procedures [7 Marks]
- b) Comment on the extent of differences between the current overhead absorption rates and those you have calculated in your answer to (a). Set out the likely reasons for these differences. [4 Marks]
- c) Each service cost centre provides services to the other. Recalculate next year's overhead absorption rates, recognizing the existence of such reciprocal services and assuming that they can be measured on the same bases as those used to allocate costs to the production centres.

  [8 Marks]
- d) Assume that:
  - i) General factory overhead is a fixed cost
  - Service cost centre 1 is concerned with inspection and quality control, with its expenses (before any reallocations) being 10% fixed and 90% variable.
  - iii) Service cost centre 2 is the company's plant maintenance section, with its budgeted expenses (before any reallocations) being 90% fixed and 10 % variable.
  - iv) Production cost centre B is highly mechanized, with its budgeted overhead (before any reallocations) being 20% fixed and 80% variable.

Considering these assumptions, comment on the cost apportionment and absorption calculations made in parts (a) and (c) and suggest any improvements that you would consider appropriate.

[6 Marks]

Total:

## **QUESTION 2**

The marketing director of your company has expressed concern about product X, which for some time has shown a loss, and has stated that some action will have to be taken. Product X is produced from material A, which is one of two raw materials jointly produced by passing chemicals through a process. Data for the process is as follows:

Material	Output (kg)		
Material A	10,000		
Material B	30,000		

Process costs	E
Raw material	83,600
Conversion costs	58,000

Joint costs are apportioned to the two raw materials according to the weight of output.

Production costs incurred in converting material A into product X are E 1. 80 per kg of material A used. A yield of 90% is achieved. Product X is sold for E 5.60 per kg. Material B is sold without further processing for E 6.00 per kg.

# Required:

- a) Calculate the profit/loss per kilogram of product X and material B, respectively. [8 Marks]
- b) Comment upon the marketing director's concern, advising him on whether any action is required.

  [6 Marks]
- c) Demonstrate an alternative joint cost apportionment basis for product X and comment briefly upon this method of apportionment. [11Marks]

Total:

## **QUESTION 3**

- a) 'The analysis of total costs into its behavioral elements is essential for effective cost and management accounting'. Required: Comment on the statement above, illustrating your answer with examples of cost behavior patterns. [8 Marks]
- b) The total costs incurred at various output levels, for a process operation in a factory, have been measured as follows:

Output (units)	Total costs (E)
11,500	102,476
12,000	104,730
12,500	106,263
13,000	108,021
13,500	110,727
14,000	113,021

Required: Using the high-low method, analyse the costs of the process operations into fixed and variable components. [8 Marks]

c) Calculate and comment on, the breakeven output level of the process operation in (b) above, based on the fixed and variable costs identified and assuming a selling price of E 10.60 per unit. [9 Marks]

[25 Marks]

## **QUESTION 4**

### PART A

Sipholesihle enterprises makes one product in a single process. The details of the process for period 2 were as follows: There were 800 units of opening work in progress valued as follows:

	!	Е
Material		98,000
Labour		46,000
Production overheads	*	7,600

During the period 1 800 units were added to the process and the following costs were incurred:

		E
Material	:	387,800
Labour	4	276,320
Production overheads	1	149,280

There were 500 units of closing work in progress, which were 100% complete for material, 90% complete for labour and 40% complete for production overheads. A normal loss equal to 10% of new input during the period was expected. The actual loss amounted to 180 units. Each unit of loss was sold for E 10 per unit. Sipholesihle enterprises uses weighted average costing. Calculate the cost of output for the period.

[10 Marks]

### PART B

Discuss the impact of information technology, environmental & sustainability issues on the role of a management accountant in organizations. [15 Marks]

25 Marks