

NATIONAL UNIVERSITY OF LESOTHO
INSTITUTE OF EXTRA MURAL STUDIES
DEPARTMENT OF BUSINESS AND MANAGEMENT DEVELOPMENT
BBE 2304 MANAGEMENT ACCOUNTING

January 2023

Marks: 100

Time: 3 Hours

Instructions:

1. This paper is divided into three Sections (A, B & C)
2. Answer **ALL** questions.
3. Questions carry the allocated marks as indicated at each question.
4. All workings must be **clearly shown** where applicable.

REGRESSION ANALYSIS FORMULA:

For the line $y = a + bx$

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

$$a = \bar{y} - b\bar{x}$$

Where \bar{x} and \bar{y} are the arithmetic means of x and y

Section A: (40 Marks)

This information is to be used for the following THREE questions.

The Board of Directors of Henderson Ltd, which operates solely in the UK, has recently made the following decisions:

- 1 To move the company's operations within five years from the manufacture of goods to the manufacture and distribution of goods.
- 2 To carry out repairs to the car park surrounding the head office following a recent flood.
- 3 To begin a sales drive in France, following the success of a recent sales drive in the north of the UK.

1. Which of the decisions would you classify as a strategic objective?

- A Decision 1 only
- B Decision 1 and 2
- C Decision 2 and 3
- D Decision 3 only

2. Which of the decisions would you classify as an operational matter?

- A Decision 1 and 3
- B Decision 2 only
- C Decision 3 only
- D Decision 2 and 3

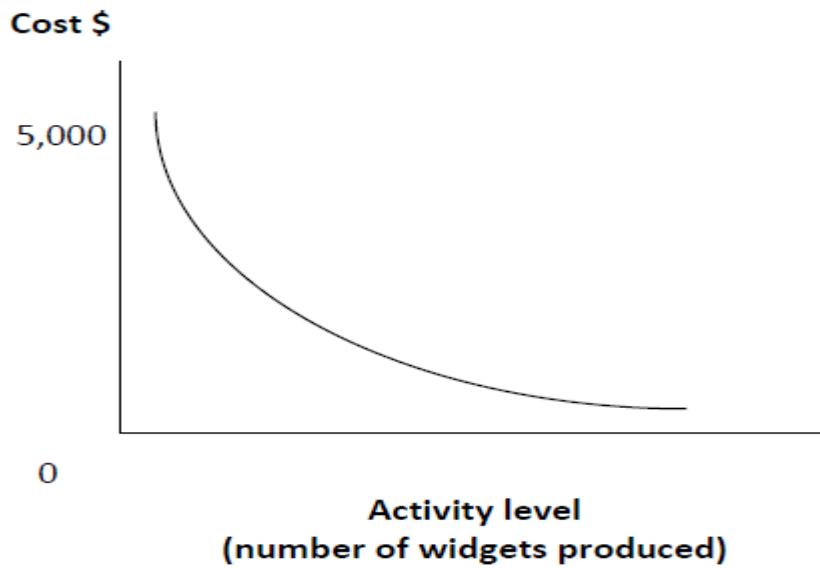
3. Which of the decisions would you classify as being a tactical plan?

- A Decision 1 and 2
- B Decision 2 and 3
- C Decision 3 only
- D Decision 1 and 3

4. Which of the following is NOT purpose of management information in a company?

- A To provide records of current and actual performance
- B To compare actual performance with planned performance
- C To help management with decision making
- D To inform customers about the company's products

5. Which of the descriptions best suits the graph?



- A Total fixed costs
- B Total variable costs
- C Variable costs/unit
- D Fixed costs/unit

6. Tan Products Ltd makes one highly desirable fashion item, the Croissant handbag. The following cost information is available.

	<i>Per handbag</i>
	\$
Direct materials (leather, thread, fastenings, linings)	100
Direct labour	75
Direct expenses	40
Workroom expenses – fixed	10
Workroom expenses – variable	15
Administration costs – fixed	20
Administration costs – variable	30
	———
	290
	———

What is the prime cost for each handbag?

- A \$290
- B \$260
- C \$240
- D \$215

7. Direct costs are:

- A costs which can be identified with a cost centre but not identified to a single cost unit
- B costs which can be economically identified with a single cost unit
- C costs which can be identified with a single cost unit, but it is not economic to do so
- D costs incurred as a direct result of a particular decision

8. What does a prime cost comprise of?

- A all variable costs
- B direct labour and material only
- C direct labour, direct material and direct expense
- D direct labour, direct material and production overhead

9. What is the definition of a semi-variable cost?

- A It increases in direct proportion to output
- B It remains constant irrespective of the level of output
- C It contains an element of both fixed and variable cost
- D It increases throughout the year

10. Which of the costs listed below is NOT a fixed cost?

- A Insurance
- B Business rates
- C Depreciation – based on straight-line method
- D Materials used in production

11. The following data relate to two output levels of a department:

Machine hours	17,000	18,500
Overheads	\$246,500	\$251,750

The variable overhead rate per hour is \$3.50.

What is the amount of fixed overheads?

- A \$5,250
- B \$59,500
- C \$187,000
- D \$246,500

12. Which of the following best describes a period cost?

- A.** A cost that relates to a time period which is deducted as expenses for the period and is not included in the inventory valuation.
- B.** A cost that can be easily allocated to a particular period, without the need for arbitrary apportionment between periods.
- C.** A cost that is identified with a unit produced during the period, and is included in the value of inventory. The cost is treated as an expense for the period when the inventory is actually sold.
- D.** A cost that is incurred regularly every period, eg every month or quarter.
- 13.** Fixed costs are M120,000; selling price per unit = M150; total absorption costs per unit = M90; marginal cost per unit = M70.

What is the break-even point in units (to the nearest whole unit)?

- A. 1,500
- B. 2,000
- C. 800
- D. 1,333

14. A product makes a profit of M50 per unit and a contribution of M80 per unit. Fixed costs are M220,000.

How many units will need to be made and sold to make a profit of M100,000?

- A. 2,000
- B. 4,000
- C. 6,400
- D. 4,750

15. Currently a product has marginal costs of M40 and a selling price of M60. Fixed costs are M120,000 and 10,000 units are sold. Inflation will increase both marginal costs and fixed costs by 10%, but competition means that the selling price can be increased by 5% only.

What volume will have to be sold if the same profits are to be earned?

- A. 6,000
- B. 11,000
- C. 10,526
- D. 11,158

16. With which costs is absorption costing concerned?

- A Direct labour costs only

- B Direct material costs only
- C Fixed costs only
- D Variable and fixed costs

17. What distinguishes absorption costing from marginal costing?

- A Product costs include both prime cost and production overhead
- B Product costs include both production and non-production costs
- C Inventory valuation includes a share of all production costs
- D Inventory valuation includes a share of all costs

This information is to be used for the next THREE questions

Sapphire recorded the following costs for the past 5 months of activity:

<i>Month</i>	<i>Activity level (units)</i>	<i>Total cost (\$)</i>
5	220	4,500
6	400	7,000
7	360	5,500
8	380	6,000
9	290	5,000

The data has been partially analysed and the following information produced:

$$\sum x = 1,650 \quad \sum y = 28,000 \quad \sum x^2 = 566,500 \quad \sum xy = 9,500,000$$

18. What is the value of 'b' in the equation for the line of best fit?

- A \$10.00
- B \$17.00
- C \$11.80
- D \$0.60

19. What is the value of 'a' in the equation in the line of best fit?

- A \$1,699
- B \$1,724
- C \$2,589
- D \$56,400

20. What is the total cost for an activity level of 300 units?

- A \$5.25
- B \$1,678
- C \$5,245
- D \$10,896

Section B: (30 Marks)

1. The total costs of a business for differing levels of output are as follows:

Output (Units)	Total costs (M '000)
500	70
200	30
300	50
800	90
1000	110

Required

- a) What are the fixed and variable costs of the total cost using the High/Low method? **(5 Marks)**
- b) If production next year is expected to be 780 units what would the total cost be? **(3 Marks)**
- c) With the help of graphs, explain **FOUR** different behaviors of costs. **(12 Marks)**
- d) Using the following data below, and regression analysis technique, calculate a (the fixed cost) and b (the variable cost). **(10 Marks)**

	Activity Level	Cost
	X	y
Quarter 1	10	38.3
Quarter 2	12	42.7
Quarter 3	9	35.7
Quarter 4	14	47.2
	_____	_____
	45	163.9
	_____	_____

Section C: (30 Marks)

ABC Ltd produces and sells shoes. The company produced 3 000 pairs of shoes and sold 2 600 pairs during the year. Each pair is made by temporary labourers that are paid R150 per hour to make each pair of shoes. Direct material is R375 per pair. Total fixed manufacturing overheads amounted to R900 000 for the year. Audit fees and head office salaries of R550 000 each were incurred. Sales

representative are paid 10% sales commission on sales. Selling Price is R1620.00 on each of the pairs of shoes.

- a) Prepare income statement to calculate profit using absorption costing method. (10 Marks)
- b) Prepare income statement to calculate profit using marginal (variable) costing techniques. (10 Marks)
- c) Reconcile the profits calculated in (a) and (b) above. (3 Marks)
- d) What might have caused the difference in the two profits? (1 Mark)
- e) What differentiate Management Accounting from Financial Accounting? (6 Marks)