



CRAWFORD UNIVERSITY
FAITH CITY, IGBESA

COLLEGE: CBSS

DEPARTMENT: ACCOUNTING AND FINANCE

COURSE CODE: ACC 305

COURSE TITLE: MANAGEMENT ACCOUNTING

HARMATTAN SEMESTER 2019/2020 EXAMINATIONS

INSTRUCTION: ANSWER ANY FOUR QUESTIONS

TIME ALLOWED: 2½ HOURS

QUESTION 1

Odeku buys and sells a highly perishable agricultural product. The product can be sold in retail market for ₦5 per unit. Each unit costs him ₦2.50 to buy from the farm and is suitable for sale at his retail market for only 24 hours after purchase. After this, it's sold for farm animal food at ₦0.50 per unit. Odeku has kept records for the commodity's sales over the past 10 days have shown in the table below:

Table showing Odeku's 100 days Sales Record

Daily sales (units)	Days Sold
100	30
200	50
300	20

Required:

What would be the maximum units to be ordered by Odeku if: the maximax, maximin and minimax regret decision rules are applied? **(Total 15marks)**

Question 2

a. What do you understand by under or over absorption of overhead **(1 mark)**

b. A clothing manufacturer makes a specific brand of jeans which it sells at a standard price of ₦100 a pair. The manufacturer's costs are as follows.

Standard variable production cost: ₦16 per pair

Total fixed production cost: per month: ₦240,000 (10,000 pairs are planned to be produced per month)

Total fixed non- production costs: ₦300,000 per month

In month 1, when the opening inventory is 1,000 pairs, production of 10,000 pairs is planned and sales of 8,000 pairs are expected.

In month 2, sales are planned to be 9,000 pairs and production is still 10,000 pairs

Required:

c. What would be the net profit for Months 1 and 2 under:

(i) Absorption costing

- (ii) Marginal costing (10 marks)
 d. What comments could you make about the performance of this business?
 (4 marks) (Total 15marks)

Question 3

Dervish Chemical Company Ltd. operates a small plant. Operating the plants requires two types of raw materials. A and B, which costs ₦5 and ₦8 per litre respectively. The maximum available supply by week is 2,700 litres of A and 2,000 litres of B.

The plant can operate using either of two processes, which have differing contributions and raw materials requirements, as follows:

Process	Raw materials consumed (litres per processing hour)		Contribution per hour
	A	B	₦
1	20	10	70
2	30	20	60

The plant can run for 120 hours a week in total, but for safety reasons, process 2 cannot be operated for more than 80 hours a week.

Required:

Formulate the linear programming model, and then solve it, to determine how many hours process 1 should be operated each week and how many hours process 2 should be operated each week. (Total 15marks)

Question 4

Balelayo Limited produces a single product. The company's contribution format income statement for the most recent year is given below:

	₦
Sales (20,000 units)	1,200,000
Variable costs	900,000
Contribution	300,000
Fixed Costs	240,000
Profit	60,000

Management is anxious to improve the company's profit performance and asked for an analysis of a number of items.

Required:

1. Assume that sales increase by ₦400,000 next year. If cost behaviour patterns remain unchanged, by how much will the company profit increase? (2 Marks)
2. If profit of ₦120,000 is required, determine the sales in units and naira value. (2 Marks)
3. Calculate and interpret the company's margin of safety ratio (2 Marks)
4. Due to an increase in labour rates, the company estimates the variable cost will increase by ₦3 per unit next year. Holding other variables constant,

determine the revised break-even point in units and sales value.
(2 Marks)

5. Refer to (6) above. If the company wants to maintain the same CMR as last year, what selling price per unit must it charge next year to cover the increased labour costs? (2 Marks) (Total 15marks)

Question 5

- a.
- What is learning curve? (1 mark)
 - In what areas does learning curve apply? (1¹/₂ marks)
 - What are the limitations of learning curve theory? (3¹/₂ marks)
- b. Baba Esaanuwa has just produced 20 units of a new product, spending, 2,000 hours. A 90% learning curve is expected to apply. You are expected to estimate the following:
- The total time required to produce the first 40 units.
 - The incremental time of producing the additional 20 units.
 - The incremental time in increasing production from 40 to 80 units
 - The incremental time in increasing production from 80 to 150 units
 - Assuming for this part only that learning ceases after the 100th unit is produced i.e, the learning curve has reached the steady state. What is the incremental time of 101 to 160 units? (9 marks) (Total 15 marks)

Question 6

- List three advantages and three disadvantages of Marginal Costing and Absorption Costing (3 marks)
 - What is maximum Regret rule? (4 marks)
 - In what areas of management can we apply the learning curve theory? (4 marks)
 - In what areas can we apply Linear Programming? (4 marks)
- (Total 15 marks)