



CRAWFORD UNIVERSITY

FAITH CITY, IGBESA

TITLE OF EXAMINATION : B.Sc EXAMINATIONS

COLLEGE: COLLEGE OF BUSINESS AND SOCIAL SCIENCES

DEPARTMENT: ACCOUNTING AND FINANCE

SESSION : 2021/22

SEMESTER: HARMATTAN

COURSE: MANAGEMENT ACCOUNTING.

COURSE CODE: ACC 305

CREDIT: 3 UNITS

TIME ALLOWED: 2 HOURS 15 MINUTES.

INSTRUCTIONS: (i) Attempt questions 1, 2 and any other two (2).

SECTION A.

1. A company 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	<u>900,000</u>
Contribution	300,000
Fixed costs	<u>240,000</u>
	<u>60,000</u>

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

Required:

- Compute the company's CMR and variable cost ratio. 2mks
- Compute the break-even point in both units and sales value. 2mks
- Assume that sales increases by ₦400,000 next year. If cost behavior patterns remains unchanged, by how much will the company's profit increase? 2mks
- If profit of ₦120,000 is required determine the sales in units and naira value. 2mks
- Calculate and interpret the company's margin of safety ratio. 2mks
- Due to an increase in labour rates, the company estimates the variable costs will increase by ₦3 per unit next year. Holding other variables constant, determine the revised break-even point in units and sales value. 5mks
- 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? 5mks
- Refer to the original data. The company is discussing the construction of new, automated manufacturing plant. The new plant would slash variable costs per unit by 40% but it would cause fixed costs per year to double. If the new plant is built, what would be the company's new CMR and new break-even point in units? 5mks

5mks
25mks

2. Mention five purpose of management accounting

5mks.
(30 MARKS)

SECTION B.

INSTRUCTION: ATTEMPT ANY TWO (2)

3. Fake friends' plc manufactures three components A, B and C using the same machines for each. The budget for the next year calls for the production and assembly of 8,000 of each component. Production costs are as follows:

	A	B	C
	₦/Unit	₦/Unit	₦/Unit
Direct materials	20	30	16
Direct labour	12	24	18
Variable overhead	8	18	14
Fixed Overhead	<u>30</u>	<u>20</u>	<u>40</u>
	<u>70</u>	<u>92</u>	<u>88</u>

Fixed overhead is absorbed on the basis of machine hours at ₦10 per hour. Only 54,000 hours of machine time will be available during the year.

A subcontractor has quoted the following unit prices for supplying components:

A ₦58 ; B ₦80 ; C ₦68

Required:

a. Determine the requirements for brought-in components in order to satisfy the demand for components at minimum cost. (15 MARKS)

4. ZAZU limited produces bottled wine called JAD wine which is bottled and sold in cases. The normal annual level of production on which the fixed production overhead absorption is based is 80,000 cases. Data for the last financial year ended 31 December 2018 were as follows:

Production		90,000 cases
Sales		75,000 cases
	Per case	
	₦	
Sales	1,500	
Cost:		
Direct material	500	
Direct labour	400	
Variable overhead	200	
Fixed production overhead		₦1,560,000
Variable selling and distribution cost		10% of sales revenue
Fixed selling and distribution cost		₦150,000

Required:

Prepare profit statements for the year ended 31 December, 2018 based on:

- i. Marginal costing. 7mks
- ii. Absorption costing 8mks

(15 MARKS)

5. XYZ Plc manufactures three products; A, B and C, which have the following cost.

	A	B	C
	₦	₦	₦
Materials	230	12	275
Direct labour-Grade 1.	75	55	25
Direct labour – Grade 2	15	45	135
Fixed production Overheads	<u>150</u>	<u>75</u>	<u>120</u>
Total cost	<u>470</u>	<u>187</u>	<u>555</u>
Selling price(₦)	560	310	510
Budgeted Sales (Units)	16,000	28,000	15,000

Grade X labour is paid ₦50 per hour and Grade Y labour ₦30 per hour. On being informed of the draft sales budget, the production manager pointed out that:

- i. There would only be 50,000 hours of grade X labour available in the next year and overtime working was impracticable.
- ii. The available Grade Y labour was up to 120,000 hours in the coming year.

Required: What product mix would maximize the company's profit? **(15 MARKS)**

6. A company manufactures two models of a pocket calculator. The basic model sells for ₦500, has a direct material cost of ₦125 and requires 0.25hour of labour time to produce. The other model, the scientist, sells for ₦750, has a direct material cost of ₦163 and takes 0.375 hour to produce. Labour, which is paid at the rate of ₦600 per hour, is currently very scarce, while demand for the company's calculator is heavy. The company is currently producing 8,000 of the basic model and 4,000 of the scientist model per month while fixed costs are 2,400,000 per month.

An overseas customer has offered the company a contract worth ₦3,500,000 for a number of calculators made to its requirements.

The estimating department has ascertained the following facts in respect of the work:

- i. The labour time for the contract would be 1,200 hours.
- ii. The material cost would be ₦900,000 plus the cost of a particular component not normally used in the company's models.
- iii. These components could be purchased from a supplier for ₦250,000 or alternatively, they could be made internally for a material cost of ₦100,000 and an additional labour time of 150 hours.

Required:

Advise the management as to the action they should take. **(15 MARKS)**