The Management University of Africa

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UNDERGRADUATE UNIVERSITY EXAMINATIONS
SCHOOL OF MANAGEMENT AND LEADERSHIP
DEGREE OF BACHELOR OF COMMERCE/ DEGREE OF BACHELOR OF MANAGEMENT AND LEADERSHIP

BML 108/ BML 404/ ACC 312: **MANAGEMENT ACCOUNTING**

DATE: **30TH MARCH 2022**

DURATION: 2 HOURS

MAXIMUM MARKS: 70

INSTRUCTIONS:

1. Write your registration number on the answer booklet.
2. **DO NOT** write on this question paper.
3. This paper contains **SIX (6)** questions.
4. Question **ONE** is compulsory.
5. Answer any other **THREE** questions.
6. Question **ONE** carries **25 MARKS** and the rest carry **15 MARKS** each.
7. **Write all your answers in the Examination answer booklet provided.**

QUESTION ONE

Read the Case Study below carefully and answer the questions that follow:

BESTELLO NGO: STRATEGIC CHOICES

Bestello is a non-governmental organization (NGO) that has been operating within the country for over thirty years. It has been granting sponsorships for education to children from poor and otherwise disadvantaged communities, as well as supporting the rural poor in setting up income generating projects to help in meeting their basic needs and uplifting of their standards of living.

Due to Bestello NGO's support for the rural poor within the country, which is in congruence with the government's policy on poverty alleviation, the NGO has been enjoying a lot of government support in the form of exemption from payment of taxes, just as has been the case for all NGOs operating within the country.

Bestello NGO has been funded over the years from donor funds from a Scandinavian country. The donor has however phased out foreign aid to the country, citing hostile government policies and corruption, as well as delisting of the country from third world to middle income country.

Bestello NGO has shifted attention within the country from offering financial aid to lobbying and advocacy on governance issues, a move that has put the NGO at logger-heads with the government, due to the latter interpreting such move as meddling in the internal political affairs of the country. The government has withdrawn tax exemption from all NGOs perceived to be engaged in national politics, and Bestello has not been spared.

Bestello and similar NGOs are now required to pay tax to the government at the rate of 25% per annum of surpluses made. The directors of Bestello have however, applied to the government to continue being exempted from payment of taxes, arguing that their lobbying and advocacy on governance issues is not an act of resistance to government policies. The response to the application has not yet been received from the relevant government offices.

Bestello NGO has buildings which it is considering to use to offer a special annual training programme on governance. At the same time, due to financial constraints as a result of withdrawal of the donor, directors of Bestello NGO fear the possibility of the training programme not breaking even and posting surpluses soon. A consultant has been engaged to offer advice, and has been paid € 800 and a further € 400 has been spent on research. The consultant has come up with two alternative strategies for consideration as follows:

<u>Strategy I:</u>

Bestello NGO can offer a one-year training course in governance and charge a fee of € 600 per year per participant. The variable cost to be incurred by the NGO per participant per year is expected to be € 300. The total fixed cost to be incurred by the NGO is expected to be € 6,000 per year.

<u>Strategy II:</u>

A private investor has offered to rent the entire Bestello NGO's buildings for € 5,000 per year to operate a restaurant business. If this strategy alternative is adopted, Bestello NGO can be able to reduce its total fixed costs per annum to € 800, being in the form of contractual commitments.

<u>Required:</u>

a) Identify the irrelevant cost(s), if any, in the above case giving the reason(s) thereof. **(3 Marks)**

b) Identify the unavoidable cost(s), if any, associated with the alternative strategies in the case above giving the reason(s) thereof. **(2 Marks)**

c) Enumerate Five (5) assumptions of Cost-Volume-Profit (CVP) analysis. **(5 Marks)**

d) Compute the minimum quorum in terms of number of participants required by Bestello NGO for the governance course per annum and the minimum amount of total fees revenue required to break even. **(5 Marks)**

e) If the government agrees to continue exempting Bestello NGO from payment of taxes on its surpluses, determine the number of participants that must be enrolled for the governance course per year so as to be indifferent between offering training to participants and renting out the entire buildings to the private investor. **(5 Marks)**

f) If the government maintains that Bestello training institution has to pay the statutory tax of 25% per annum on its surpluses and it is targeting to make an after tax surplus of € 9,000, assess the number of participants that must be enrolled in order to earn this target surplus. **(5 Marks)**

QUESTION TWO

Busara Company wishes to determine the best price to set for its single product. There are three possible demand conditions facing the Company's product sales which are good, moderate or poor. Three alternative selling prices have been identified for the Company's product, which are € 16, € 18, and € 22 if the demand conditions happen to be good, moderate and poor respectively.

The following table shows the number of units of the product that can be sold within a particular period given the various demand conditions and the various alternative selling prices:

	Alternative Selling Prices		
Demand conditions	€ 16	€ 18	€ 22
Good	10,000	9,000	5,000
Moderate	8,000	6,000	3,000
Poor	6,000	3,000	1,000

The variable cost per unit of product is € 8 while the total fixed cost for the period is € 20,000.

The probabilities of the states of demand are 0.2, 0.5, and 0.3 for Good, Moderate, and Poor demand conditions respectively.

Required:

Using proper evaluation, determine the best selling price to set for the Company's product under each of the following methods:

a) Maximax criterion **(3 Marks)**

b) Maximin criterion **(3 Marks)**

c) Minimax criterion **(3 Marks)**

d) Expected Monetary Value (EMV) **(3 Marks)**

e) Expected Opportunity Loss (EOL) **(3 Marks)**

QUESTION THREE

The records of a cardiac specialist clinic show that the total cost in Euros (€) incurred in conducting heart diagnosis for patients in the last six months has been as follows:

Month	1	2	3	4	5	6
Number of heart diagnosis patients	45	60	72	93	99	81
Total cost (€)	130,500	180,500	192,000	234,000	279,000	230,000

Required:

Rounding off amounts at every step to the nearest Euro (€);

a) Using High-Low method:

i) Determine the total cost estimation function. **(3 Marks)**

ii) Estimate the total cost of conducting heart diagnosis on 130 patients using High-Low method. **(2 Marks)**

b) Using Regression analysis:

i) Determine the total cost estimation function. **(5 Marks)**

ii) Estimate the number of patients expected to undergo heart diagnosis if the total cost of conducting heart diagnosis is expected to be € 300,000. **(2 Marks)**

c) Describe three (3) risk attitudes that influence managerial decision-making.

(3 Marks)

QUESTION FOUR

a) Fill in the 'variance' columns and 'kind of variance' columns in the table below:

(3 Marks)

PARUKA INCOME STATEMENT FOR THE YEAR 2020

	BUDGETED (£)	ACTUAL (£)	VARIANCE (£)	FAVOURABLE OR ADVERSE?
Revenue	410,000	560,000		
Expenses	230,000	610,000		
Profit / (Loss)	**180,000**	**(50,000)**		

b) Differentiate 'Zero-based budgeting' from 'Incremental budgeting'.

(4 Marks)

c) Vision PLC is a manufacturing company incorporated in Kenya and with a branch distribution outlet in Gabon. Full manufacturing of the final product is done in Kenya and the finished products are sold in Gabon. Corporation tax rate in Kenya is charged at 30% whereas in Gabon the Corporation tax rate for foreign companies is 55%. The costs incurred in Kenya in the year 2020 include: Processing costs Ksh 810,000 and other costs Ksh 180,000. In Gabon, selling costs incurred within the same year were Ksh 420,000.

Vision PLC transferred the finished products from Kenya to Gabon during the year at Ksh 6,000,000. Similar leather shoes available at the local Gabon market were being sold for an equivalence of Ksh 1,800,000 during the year. The total revenue generated from sales by Vision PLC in Gabon was equivalent to Ksh 9,000,000. Vision PLC justified its transfer price of Ksh

6,000,000 by citing the peculiar quality of its products.

Assume that there were no exchange rate fluctuations between Kenya shillings (Ksh) and Gabon currency, during the year and that the basic principles of computing corporation tax are the same in the two countries.

Required:

Using appropriate analysis, compute the corporation tax payable by Vision PLC in each of the two countries, and the total corporation tax liability if the leather shoes were transferred from Kenya to Gabon at a transfer price of:

i) Ksh 6,000,000 **(4 Marks)**

ii) Ksh 1,800,000 **(4 Marks)**

QUESTION FIVE

a) Describe three (3) decision making environments that face managers of private companies. **(3 Marks)**

b) Paradiso Company manufactures a single product. The standard costs for each unit of a finished product are as follows:

Direct materials	10 Kg @ sh. 20	= sh. 200
Direct labour	3 hours @ sh. 120	= sh. 360
Variable overheads	3 hours @ sh. 80	= sh. 240
Total standard variable cost per unit		= sh. 800

During the month of July, 3,000 units of finished product were produced. The costs incurred during the month were as follows:

Materials purchased 32,000 Kg @ sh. 22 per Kg

Materials used in production 28,000 Kg

Direct labour 10,000 hours @ sh. 110 per hour

Variable overhead costs incurred sh. 820,000

Required:

Compute the following variances clearly stating for each, whether it is a 'Favourable' or 'Adverse' variance.

i) Materials Price Variance **(2 Marks)**

ii) Materials Quantity Variance **(2 Marks)**

iii) Labour Rate Variance **(2 Marks)**

iv) Labour Efficiency Variance **(2 Marks)**

v) Variable Overhead Spending Variance **(2 Marks)**

vi) Variable Overhead Efficiency Variance **(2 Marks)**

QUESTION SIX

a) The Revenue function and Cost function of Ushirikiano Company which produces and sells a single product are as follows:

$R = 2{,}400Q$

$C = 20Q^2 + 400Q + 32{,}000$

Where: R = Total Revenue (in $)

C = Total Cost (in $)

Q = Quantity (units)

Required

Determine:

i) The quantity that the company should produce and sell in order to maximize profit. **(4 Marks)**

ii) The maximum profit that the company is able to make. **(4 Marks)**

b) Mamlaka Company Ltd makes four products A, B, C and D, with the following information:

	A	B	C	D
Production (units)	2,000	3,000	5,000	4,200
Variable cost per unit (in $):				
Direct material	12	15	6	12
Direct labour	24	27	12	18
Variable overheads	6	9	3	6
	42	**51**	**21**	**36**

Fixed cost is attributable to the products as follows:

Attributable Fixed Costs:			
A	**B**	C	D
$ 5,000	$ 15,000	$ 18,000	$ 24,000

An external supplier has offered to supply the company with the products at the following prices:

External supplier's prices:			
A	**B**	C	D
$ 36	$ 63	$ 30	$ 40

Committed Fixed Costs are $ 35,000.

Required:

i) Using appropriate analysis, advise the company on which products to make or buy if any, and compute the differential cost of making and buying for each product. **(6 Marks)**

ii) Comment on the treatment of attributable fixed costs and committed fixed costs in the above decision. **(1 Mark)**