ELIZADE UNIVERSITY, ILARA-MOKIN, ONDO STATE.
FACULTY: HUMANITIES, SOCIAL & MANAGEMENT SCIENCES
DEPARTMENT: ACCOUNTING & FINANCE
FIRST SEMESTER EXAMINATIONS: 2020/2021 ACADEMIC SESSION
COURSE CODE: ACF 403

COURSE TITLE: ADVANCED MANAGEMEMT ACCOUNTING

DURATION: $2^{1/2}$ HOURS

INSTRUCTION: ATTEMPT QUESTION ONE (1) AND ANY THREE (3) OTHERS.

QUESTION 1

The Board of Directors of Amund Company Limited is proposing the purchase of either of two machines that have been proved adequate to produce an engineering product "Gee". The two machines are: ZIGMA 5,000 and DELPHA 7,000. Production in the first year would be affected by installation challenges and inadequate understanding of the operating instructions of the machines. Information available from the production profile of the two machines are as shown below:

ZIGMA 5000:

Production Capacity: Year	Production Capacity (%)
1	60
2	90
3	100
4	100
5	50
6	30

Cost of machine is ₦16,500,000 while the life span is 6 years.

DELPHA 7000:

Production Capacity: Year	Production Capacity (%)
1	50
2	100
3	100
4	100
5	80
6	50

Cost of plant is ₦18,300,000 while the life span is 6 years.

Other information relevant to the company's operations and administration are:

(i) Selling price per unit is ₦300.
(ii) Variable cost per unit is ₦150.
(iii) Annual fixed overhead exclusive of depreciation is ₦1,200,000.
(iv) Company depreciation policy is straight line basis.
(v) The budgeted production capacity is 100,000 units.
(vi) No opening or closing inventory is envisaged.
(vii) All sales are for cash.
(viii) All costs are for cash.

Required:

(a) What is the payback period for the two machines? **(6 Marks)**
(b) Determine the Net Present Value (NPV) of the two machines if the acceptable discount rate for the company is 15%. **(7 Marks)**
(c) Which of the two machines should the company acquire? **(3 Marks)**
(d) What is the sensitivity of the two machines to the cost of capital.? **(8 Marks)**

(Total: 24 Marks)

QUESTION 2

(a) Bolbabs International Investment Ltd can introduce one new product with its range of products next year. The extra cost will be ₦750,000 for either product x or y. The selling price of X would be ₦20 and for Y, ₦25. The variable costs would be ₦10 and ₦13, respectively.

From experience with similar products, the demand probabilities have been estimated at:

Demand in units	Probabilities	
	X	Y
50,000	0.2	0.1
75,000	0.4	0.2
100,000	0.3	0.4
125,000	0.1	0.3
	1.0	1.0

Three choices are being considered for honouring a two-year free service guarantee. Your company had an offer to obtain the sale of 2,000 communication sets to a hotel group. The choices are:

(i) Do the servicing with own staff based on experience, the costs will be:

Probability of Occurrence	Event of Servicing	Total Cost (₦)
0.30	Very little trouble (500 Calls/year)	7,000
0.50	Usual trouble (1,000 Calls/year)	12,000

0.20	A lot of trouble (1,500 calls/year)	25,000

(ii) Subcontract to firm K who has quoted a fixed cost of ₦14,000 plus ₦2 for each visit in excess of 750 visits over the two-year period.

(iii) Sub-contract to firm P who has quoted a fixed cost of ₦16,000 plus.

You are required to:

1) compute the breakeven point for each product and advise with reasons, which product should be chosen. **(4 Marks)**
2) advise the management on the choice they should adopt. Justify your recommendations. **(3 Marks)**
3) List Three (3) advantages and Two (disadvantages) of using Expected Value approach in analysing risky projects. **(5 Marks)**

(Total: 12 Marks)

QUESTION 3

a. Discuss the two types of decisions available under the replacement of an asset. **(2 Marks)**

b. Tolu Nigeria Limited bought an equipment at the cost of ₦1.5million and may be sold at the end of any year at the following prices:

Year (end)	1	2	3	4	5
Selling price (₦)	1,050,000	800,00	600,000	350,000	190,000

Studies of the machine's performance indicate the maintenance costs are:

Year (end)	1	2	3	4	5
Maintenance Costs (₦)	150,000	250,000	425,000	500,000	850,000

Required:

How often should a new equipment with identical characteristics be bought if the average total cost per annum is to be minimized? No cost of capital is given. **(10 Marks)**

(Total 12 Marks)

QUESTION 4

Adewale Limited operates a Standard Costing System. The standard cost information is presented in the standard costs cards below:

	Std. Qty.	Std. Price (₦)	Amount (₦)
Direct Material	20 kg	100	2,000
Direct Labour	10 hrs.	40	400
Variable overhead cost	10 hrs.	20	200

The actual results for the month of October 2019 are given below

(i) Direct Materials purchased and used 99,000 kg cost ₦9,702,000
(ii) Direct Labour 56,000 hrs. cost ₦2,352,000

(iii)	Variable Overhead Cost	₦1,064,000 (applied to labour hrs.)
(iv)	Actual Production	4,800 units

Required:

(a) Calculate the detailed variances for:

i.	Direct Material,	**(3 Marks)**
ii.	Direct Labour and	**(3 Marks)**
iii.	Variable Overhead cost.	**(3 Marks)**

(b) What are the possible causes for each of the variances computed **(3 Mmarks)**

(Total 12 marks)

QUESTION 5

a. State and explain Michael Porter's Five (5) forces that affect the competitive position of a company in a market. **(5 Marks)**

b. Products are categorised into four types in `. Explain each of these four types. **(4 Marks)**

c. Define benchmarking and list 2 requirements of successful benchmarking. **(3 Marks)**

(Total: 12 Marks)