



(Knowledge for Development)

**KIBABII UNIVERSITY**

**UNIVERSITY EXAMINATIONS**

**2015/2016 ACADEMIC YEAR**

**SECOND YEAR FIRST SEMESTER**

**MAIN EXAMINATION**

**FOR THE MASTER OF BUSINESS ADMINISTRATION**

**COURSE CODE: MBA 836**

**COURSE TITLE: ADVANCED MANAGEMENT ACCOUNTING**

**DATE:** 13/05/16. **TIME:** 3:00 P.m - 6:00 P.m

**INSTRUCTIONS TO CANDIDATES**

Answer Question One in Section A and Any other THREE (3) Questions in Section B

TIME: 3 Hours

KIBUCO observes ZERO tolerance to examination cheating

This Paper Consists of 2 Printed Pages. Please Turn Over. ►

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## SECTION A

### QUESTION ONE

The production manager of XYZ Company, is concerned about the apparent fluctuation in efficiency and wants to determine how labour costs (in Sh.) are related to volume. The following data presents results of the 12 most recent weeks.

Week No.	Units Produced(X)	Labour Costs(Y)
1	34	340
2	44	346
3	24	287
4	36	262
5	30	220
6	49	416
7	39	337
8	21	180
9	41	376
10	47	295
11	34	215
12	24	275

#### **Required:**

- (a) Estimate the cost function using:
  - (i) The high low method (4 marks)
  - (ii) Regression analysis (8 marks)
- (b) Assume that the Company intends to produce 45 units; 34 units next period Estimate the labour cost to be incurred. (3 marks)

## SECTION TWO

### QUESTION TWO

Assume that ABC Ltd produces two products, product A and B and the following budget has been prepared.

	A	B	Total
	120,000	40,000	160,000
Sales in units	<u>Sh.</u>	<u>Sh.</u>	<u>Sh.</u>
Sales @5/-, 10/-	600,000	400,000	100,000
Variable cost @ 4/-, 3/-	<u>480,000</u>	<u>120,000</u>	<u>600,000</u>
Contribution @ 1/- 7/-	<u>120,000</u>	<u>280,000</u>	400,000
Total fixed cost			<u>300,000</u>
Profit			<u>100,000</u>

#### **Required:**

- a) Compute the break-even point in total and for each of the products. (5marks)
- b) The company proposes to change the sales mix in units to 1:1 for products A and B. Advice the Co. on whether this change is desirable. (6 marks)

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- c) Discuss the caveats that a manager wishing to make decisions using the tool in (a) and (b) may have. (4marks)

### QUESTION THREE

ABC Ltd manufactures 3 products in a series of process as shown below,

Raw materials

Cost	Process 1	process 2	process 3
Raw materials	\$40,000	-	-
Variable overheads	16,000	3,000	5,000
Fixed overheads	10,000	7000	10,000

Selling prices.

A ----\$3	BX -----\$12
B -----\$10	CX -----\$10
C -----\$6	

Assume all the fixed costs of process 2 \$ 3 are avoidable

#### **Required**

- Determine whether the Co. is maximising its profit by further processing product B to BX and C to CX. (7 marks)
- Calculate the break even selling price if the Co. was to receive an order for an extra 1000Kgs of product CX, which would incur extra delivery costs of \$1800
  - Assume that the extra output of A \$ B would be disposed of at scrap value which covers their disposal cost. (4 marks)
  - Assume that there would be extra demand at the current prices for product A\$B. (4 marks)

### QUESTION FOUR

For a single queue, single service point system with Poisson arrivals and exponential service time, show how the average number of people in the system could vary if an average of 12 people needed the service every hour and the average service rate took alternative values of 24, 18 and 15 per hour. What is the probability that a person entering the system would have to queue? (15 marks)

### QUESTION FIVE

Basic analysis ltd produces and sells one product only, the BBT, the standard cost for one unit being as follows:

Sh.	
Direct material A- 10 kg at Sh.20 per kg	200
Direct material B- 5 litres at Sh.6 per litre	30
Direct wages- 5hrs at Sh.6 per hour	30
Fixed production overhead	<u>50</u>
Total standard cost	<u>310</u>

The fixed overhead included in the standard cost is based on an expected monthly output of 900 units During April Year 1 the actual results were as follows.

Production	800 units
Material A	7,800 kgs used, costing Sh.159,900

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Material B	4,300 units used costing Sh.23,650
Direct wages	4,200 hrs worked for Sh.24,150
Fixed production overhead	Sh.47,000

### Required

- Calculate price and usage variances for each material (6 marks)
- Calculate labour rate and efficiency variances (4 marks)
- Calculate fixed production overhead expenditure and volume variances (2 marks)
- What are the major considerations which should be made before investigating a variance? (3 marks)

### QUESTION SIX

Assume that a company has 3 subsidiaries A, B, and C and that the company does not allocate corporate headquarters' costs or interest on long-term debt to the subsidiaries. Summary of the results are as follows.

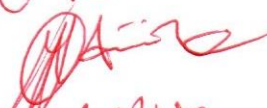
	£'000'	£'000'	£'000'	£'000'	£'000'
	A	B	C	H	Total
Operating y income	240	300	480		1020
Variable cost of H				80	
Fixed costs of H				120	
Interest on L.T debt				400	(600)
Income before taxation					420
Taxes					150
Income after taxation					270

### Average book values

Current assets	400	500	600	200	1700
Fixed assets	600	1500	2400	300	4800
					6500

### Required:

- Compute the return on investment. (5 marks)
- Compute residual income assuming that the company requires a 10% interest on total assets of each subsidiary (5 marks).
- Assume that there is an asset available to subsidiary A which costs £100,000 but which has an annual profit of £20,000. Advice the manager of A on whether to undertake the project and comment on whether this decision is in line with the overall objective of the organisation. (5 marks)

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