PAN AFRICA CHRISTIAN UNIVERSITY

BACHELOR OF COMMERCE

END OF SEMESTER EXAMINATION

CAC 301: MANAGEMENT ACCOUNTING - PHYSICAL

DAY: TUESDAY

TIME: 8AM -10AM

Instructions:

- Answer question ONE and ANY other three Questions.
- Show all your workings
- Read all questions carefully before attempting.
- Write your **student number** on the answer booklet provided.

Question One

a. Magic Ltd produces and sells the following three products:

Product	X	Y	Z
Selling price per unit **(Shs)**	16	20	10
Variable cost per unit **(Shs)**	5	15	7
Budgeted sales volume **(units)**	50,000	10,000	100,000

The company expects the fixed costs to be **Shs 450,000** for the coming year. Assume that sales arise throughout the year in a constant mix.

Required

Compute the target profit units for each product, that will, enable the company to attain a profit of **Shs. 675,000** **(8 Marks)**

b. Explain **THREE** types of information systems that can adopted in an organization **(8 Marks)**

c. For each of the following variances, explain **TWO** causes of a favourable variation and **TWO** causes of adverse variation:

i) Material price **(4 Marks)**

ii) Labour efficiency **(4 Marks)**

d. In a given period the production data and costs for a process were:

Production	2100 fully complete
	700 partly complete

Degree of completion of the partly complete units was:

Materials	80%
Labour	60%
Overheads	50%

The costs for the period were:

Materials	Sh.24,800
Labour	Sh.16,750
Overheads	Sh.36,200

Required

i. Calculate the total equivalent production and the cost per complete unit **(6 Marks)**

ii. Calculate the value of the work in progress. **(2 Marks)**

Question Two

Crown Co. is setting up an online business importing and selling jewellery headphones. The cost of each set of headphones varies depending on the number purchased, although they can only be purchased in batches of **1,000 units**. It also has to pay import taxes which vary according to the quantity purchased.

Number of batches imported and sold	Average cost per unit including import taxes (Sh.)	Total fixed costs per month (Sh.)	Expected selling price per unit (Sh.)
1	10.00	10,000	20
2	8.80	10,000	18
3	7.80	12,000	16
4	6.40	12,000	13
5	6.40	14,000	12

Required

Determine the output level and price at which the organisation would maximise its profits, assuming that fractions of units cannot be made **(10 Marks)**

Question Three

A company manufactures a chemical, using two compounds **Fent** and **Bash**. The standard materials usage and cost of one unit of Dynamite are as follows:

		Sh
Fent	5 kg at Sh2 per kg	10
Bash	10 kg at Sh3 per kg	30
		40

In a particular period, 80 units of Dynamite were produced from **600 kg** of Fent and **750 kg** of Bash.

Required

Calculate the following variances:

i. materials usage **(4 Marks)**

ii. Material mix **(3 Marks)**

iii. Material yield variances. **(3 Marks)**

Question Four

A company has the following production planned for the next four weeks. The figures reflect the full capacity level of operations. Planned output is equal to the maximum demand per product.

Product	**A**	**Q**	**W**
	Sh. per unit	**Sh. per unit**	**Sh. per unit**
Selling price	160	100	140
Raw material cost	24	22	40
Direct labour cost	66	33	22
Variable overhead cost	24	24	18

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Product	**A**	**Q**	**W**
Planned output **(Units)**	300	240	400
Direct labour **hours per unit**	6	3	2
Fixed costs **(Sh.)**	4,800	1,920	4,800

The direct labour force is threatening to go on strike for two weeks out of the coming four. This means that the labour hours will be limited to **2,000 hours.**

Required

If the strike goes ahead, determine the optimal production mix given the limited labour hours available that will maximize the profit.

Question Five

a. Traditional accounting systems have had a number of perceived failings that negatively impact the decision processes of management accountants. Explain **FIVE** of these failings **(5 Marks)**

b. Discuss **FIVE** benefits of management accounting to a manufacturing entity **(5 Marks)**