

BOTSWANA COLLEGE OF DISTANCE

AND OPEN LEARNING

Bachelor of Business & Entrepreneurship

Business Management Accounting

MA221

Sessional Examination

Marks: 100

Instructions to candidates:

1. This examination consists of **Two** sections: A and B
2. Begin each answer to a new question on a new page.
3. Answer questions according to instructions given in each section
4. Write answers in the answer booklet provided
5. Write in grammatical English

SECTION A SHORT ANSWER QUESTIONS

[40 marks]

Answer all questions in this Section.

NB. Formulas and calculations carry marks.

1. **Read the following case and answer questions that follow. (10 marks)**

Bonno was working in a company earning P10,000 monthly. He left his job and started a small business in 2010. He bought a second hand motor van for P70,000 in 2012 to help run the business. Bonno is into dress making business and specialises in Leteisi dresses (german print). She bought fabric for her business and thread. She has employed one dress maker who gets paid P10 an hour and other assistants. Monthly salaries for the business is P12,000 including management salary. She paid electricity and telephone of P1,000 and 1,500 respectively. The above information relates to the year 2012.

a. Identify the following costs in the above paragraph:

- i. Sunk cost **(1 mark)**
- ii. Direct material **(1 mark)**
- iii. Opportunity cost **(1 mark)**
- iv. Indirect material **(1 mark)**
- v. Mixed cost **(1 mark)**
- vi. Direct labour **(1 mark)**

b. Assuming that in one month of the same year Bonno sold 300 dresses at a price of P100 per dress and the variable costs for the same month is P18,000.

- i. Calculate the unit contribution margin. **(3 marks)**
- ii. Calculate the profit or loss for the month. **(1 mark)**

2. Explain what happens in the manufacturing processes mentioned below: **(10 marks)**

a. Job order process **(2 marks)**



- b. Batch process (2 marks)
- c. Assembly line (2 marks)
- d. Continuous process (2 marks)
- e. Give an example of where an assembly line and continuous process is used. (2 marks)

3. The static budget (i.e the original budget) of the Tam-Taha Corporation showed a production cost of P10 per unit at a production level of 100 units. This P10 included P2 of fixed costs. Actual production was 200 units and actual costs were P9 per unit which included P1 of fixed costs. (6 marks)

- a. Calculate the flexible budget variance
- b. Is favourable or unfavourable.

4. The Santa Fe Candy Company expects to incur overhead of P60, 000. Also, the company expects to incur 300 direct labor hours (which is paid an average of P20 per hour) and 200 machine hours, in order to produce 30,000 pounds of candy. Calculate overhead rates using the following allocation bases:

- i. Pounds (2 marks)
- ii. Direct labour hours (2 marks)
- iii. Machine hours (2 marks)
- iv. Direct labour dollars (2 marks)

5. Kabo (pty) Ltd makes two products being X and Y and has two activities. The following information relates to the business relating to the business. (6 marks)

Activity Cost Pool	Estimated Overhead Cost	Expected Activity



		Product X	Product Y
Activity 1	P50,000	800	600
Activity 2	P40,000	300	500

Additional notes:

- Number of units produced for product X is 10,000.
- Number of units produced for product Y is 12,000.

Required:

Calculate the cost per unit if the business uses activity based costing for :

- i. Product X

SECTION B- ESSAY TYPE QUESTIONS

(60 MARKS)

Answer two questions from this Section.

QUESTION 1

(30 marks)

Read the following information and answer questions that follow.

Boago is into a brick selling business. The business started operation in the year 2013. The selling price per brick is P10, variable costs per brick is P5 and fixed costs for the year is P100,000.

- a. Assuming that Boago sold 10,000 bricks, what is the profit or loss? **(5 marks)**
- b. If Boago is to sell 15,000 bricks what will be the profit or loss? **(5 marks)**
- c. How many bricks should Boago sell to break even? **(3 marks)**
- d. What is the Break Even Point (BEP) in sales? **(2 marks)**
- e. How much units should Boago sell if he is targeting to make P30,000 profit for the year 2014? **(3 marks)**



f. Assume that Boago forecasts that sales will be 30,000, what is the margin of safety in units? (2 marks)

g. Read the following information and answer questions that follow

The following information is available in Boago's books on December 31, 2012.

PULAS

Opening inventory	5 000
Bricks made during the year	9,000
Bricks sold during the year	12,000
Closing inventory	2 000
Selling price	10
Manufacturing costs:	
Variable costs	
Direct material/brick	3
Direct Labor hour used to make one brick	2
Variable manufacturing overhead	1
Fixed manufacturing overheads per year	50 000
Selling and administrative costs:	
Commission paid for selling one brick	1
Fixed selling and administration costs per year	50 000



- i. Calculate the product cost using absorption costing. (3 marks)
- ii. Prepare an income statement using variable costing. (7 marks)

QUESTION 2 (30 marks)

a. Arden Brothers reports the following cost information for one of its products.

Product Model XJ-12	Static budget	Actual results
Units produced	900	850
Materials:		
Pounds of materials per unit	3	4
Cost per pound of materials	\$7.00	\$6.50
Labour:		
Hours per unit	1	1.2
Wage rate per hour	\$13	\$10
Fixed Costs	\$45,000	\$39,000

Actual quantity of materials purchased was 4,000 pounds.

Compute the following variances indicating whether it is favourable or not.

- i. Material price variance for direct materials assuming the company recognizes the price variance at the time the materials are purchased. (3 marks)
- ii. Materials quantity (usage) variance for direct materials. (4 marks)
- iii. Direct labour wage rate variance. (3 marks)
- iv. Direct labor efficiency variance. (3 marks)



b. The Bernalillo factory of Winrock and Associates makes two models of a portable pneumatic compressor: Model #A567 and Model #B234. Information about the year 1967 is as follows: (17 marks)

	Model #A567	Model #B234
Units produced	500	500
Direct materials costs	P40,000	P60,000
Direct labour hours	5,000	5,000

Factory overhead for the year was P180, 000. The average wage rate for workers on the Model #A567 production line is P10 per hour. The average wage rate for workers on the Model #B234 production line is P20 per hour.

Required:

- i. Assume the company allocates overhead based on direct labor hours, what is the overhead rate? (2 marks)
- ii. What is the total cost per unit for the Model #B234? (6 marks)
- iii. Assume the company changes the allocation base from direct labor hours to direct labor costs (i.e., direct labor dollars). What is the new overhead rate? (3 marks)
- iv. Using this new overhead rate, what is the new cost per unit for the Model #B234? (6 marks)



QUESTION 3

(30 marks)

Boipuso (Pty) Ltd have the following information in their books, which they want to use for planning purposes.

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Budgeted Sales in units	50000	70000	90000	120000
Desired ending inventory of finished goods	10000	14000	18000	24000
Opening inventory of finished goods	7000	10000	14000	18000
Direct labour hour used per unit	0.5	0.5	0.5	0.5
Selling Price	10	10	10	10
Direct labour cost per hour	3	3	3	3

- a. Prepare the following budgets:
- i. Sales budget **(5 marks)**
 - ii. Production budget. **(10marks)**
 - iii. Direct labour budget **(10 marks)**
- b. Give five kinds of costs that you learnt in this course. **(5 marks)**

END OF EXAMINATION