

**PAPUA NEW GUINEA UNIVERSITY OF TECHNOLOGY**  
**DEPARTMENT OF BUSINESS STUDIES**

**2022 Second Semester Final Examination**

**AC222 – Cost Accounting II (BCAC 2)**

**TIME: 12:50 27<sup>TH</sup> Thursday October, 2022, TIME ALLOWED: 3 HOURS**

**INSTRUCTIONS TO STUDENTS**

1. You have 10 minutes to read the examination paper. You must not begin writing during this time.
2. You **MUST** answer all Questions even if you are not sure of an answer.
3. Make sure that you read each question carefully before you answer them. The mark awarded for the questions are shown beside each question.
4. Penalties will apply for not following instructions.
5. All answers must be written on the answer booklets provided. No other written material may be accepted. Please hand in every answer booklet provided to you after the examination.
6. Note Books, Textbooks, Notes, Mobile Phones are not permitted in the examination hall.
7. PRINT your name and student number on the answer booklet provided.  
PLEASE DO IT NOW.

**This Final Examination is worth 100 Marks towards your Final Grade.**

**Name of Examiner: Ms. Mali**

**Part A: Multiple Choice Questions. Select only one choice as your best correct answer. (20 marks)**

1. The following are product costs except:
  - a. Direct material, direct labour and manufacturing overhead
  - b. Manufacturing overhead, marketing costs and research & development costs
  - c. Direct material, direct labour and variable overhead
  - d. Direct material, direct labour and fixed overhead
2. One of the accounting principles that satisfies under absorption costing:
  - a. Going concern concept
  - b. Accrual basis concept
  - c. Matching concept
  - d. Cash basic concept
3. The term that is used as a result of the difference between budgeted amount and the actual amount is called:
  - a. Remaining balance
  - b. Variances
  - c. Unfavorable balance
  - d. Favorable balance
4. If standard direct manufacturing labor cost per unit: 0.90 manufacturing labor-hour of input allowed per output unit manufactured, at K47 standard price per hour. What is the standard direct manufacturing labor per unit.
  - a. K42
  - b. K52.22
  - c. K43.20
  - d. K42.30
5. What is the equation for Direct Materials price variance?
  - a.  $SP \times (AQ - SQ)$
  - b.  $AP - (AQ \times SP)$
  - c.  $AQ \times (AP - SP)$
  - d.  $AQ - (AP \times SP)$
6. If standard direct material cost per unit: 2.5 kg of material input allowed per output unit manufactured, at K50 standard price per kg. What is the standard direct material cost per unit?
  - a. K125
  - b. K20
  - c. K50
  - d. K100
7. The difference between total revenues and total variable costs is called;
  - a. Gross margin
  - b. Contribution margin
  - c. Contribution margin percentage
  - d. Gross margin percentage

Use the information provided below to answer question 8&9.

The Theodist Company manufactures and sells pens. Currently, 500,000 units are sold per year at K2.50 per unit. Fixed costs are K400,000 per year. Variable costs are K1.30 per unit. Consider each case separately:

8. What is the current annual operating income?
  - a. K200, 000
  - b. K333, 333
  - c. K600, 000
  - d. K850, 000

9. What is the present breakeven point in revenues?
  - a. K1, 000, 000
  - b. K500, 000
  - c. K833, 333. 33
  - d. K1, 500, 000
10. Which of the following are the cost-volume-profit (CVP) model methods?
  - a. Graph method
  - b. Contribution margin method
  - c. Gross margin method
  - d. Only a and b are correct
  - e. All the above
11. Which of the following are the reasons for management accountants to use process costing for mass production?
  - a. Evaluate the units' stages of completion
  - b. Assign costs to units produced and in inventory
  - c. Determine how many units of the product the firm has on hand at the end of an accounting reporting period.
  - d. All of the above
12. What is "sensitivity analysis" means?
  - a. To can be used to figure out how many units need to be sold to achieve the targeted operating income.
  - b. helps managers visualize the relationships between total revenues and total costs.
  - c. to study the behaviour of and relationship among these elements as changes occur in the number of units sold, the selling price, the variable cost per unit, or the fixed costs of a product.
  - d. is a "what-if" technique managers use to examine how an outcome will change if the original predicted data are not achieved or if an underlying assumption change.
13. Which costing method is used by internal management for decision making and control and not required by GAAP and other regulatory?
  - a. Variable costing
  - b. Job costing
  - c. Absorption costing
  - d. Process costing
14. Cost accumulation method required by GAAP and by other regulatory bodies;
  - a. Variable costing
  - b. Job costing
  - c. Absorption costing
  - d. Process costing
15. Products of a joint production process that have low total sales value relative to the total sales value of the main product or of joint products are called;
  - a. Main product
  - b. Joint product
  - c. End product
  - d. Byproduct
16. All of these methods are used to allocate joint costs using market-based data such as revenues except:
  - a. Sales value at split off method
  - b. physical measures method
  - c. Net realizable value (NRV) method
  - d. Constant gross-margin percentage NRV method
17. The costing methods like variable costing are used by:
  - a. Investors
  - b. Creditors

- c. Managers
  - d. Shareholders
18. If production volume equals sales volume, the amount of fixed costs expensed in both statements will be:
- a. Same
  - b. More
  - c. Less
  - d. Nil
19. Which of the following costs are **not considered** product costs under variable costing?
- a. Fixed manufacturing overhead
  - b. Variable research and development costs
  - c. Fixed selling and administrative costs
  - d. All of the above
20. When identical or similar units of products or services are mass-produced rather than processed as individual jobs, which costing system is used to calculate an average production cost for all units produced?
- a. Process costing
  - b. Inventory costing
  - c. Job order costing
  - d. Absorption costing

**Part B: Explanatory Questions. Each question carries 2 marks. (20 marks)**

1. What is breakeven point? Explain in your own words.
2. Differentiate centralized and decentralized organizational structure.
3. What makes variable costing different from absorption costing? Explain.
4. Differentiate between Process costing and job order costing.
5. Top management, with help from the controller and management accountants, can take several steps to reduce the undesirable effects of absorption costing. List only two (2) steps.
6. List only two (2) advantage of decentralized organizational structure.
7. List only two (2) disadvantages centralized organizational structure.
8. Explain the purpose of graph method in Cost Volume Profit?
9. What is standard costing?
10. List two (2) causes of variances.

**Part C: True/False Questions:** Write **True** if the statement is true and **False** if the statement is not true. (10 marks)

1. The contribution-margin format income statement is used by absorption costing.
2. Sales mix is the quantities (or proportion) of various products (or services) that constitute a company's total unit sales.
3. Joint costs do have a cause and effect relationship with individual products because the production process simultaneously yields multiple products.
4. Managers use cost-volume-profit (CVP) analysis to study the behaviour of and relationship among these elements as changes occur in the number of units sold, the selling price, the variable cost per unit, or the fixed costs of a product.
5. A manager is responsible for both revenues and cost incurred in generating a product or service is managing a cost center.
6. The evaluation to be meaningful, unit managers should be evaluated only on those items over which they have controlled. This type of evaluating is referred as responsibility managing.
7. Benchmarking is the continuous process of comparing your firm's performance levels against the best levels of performance in competing companies or in companies having similar processes.

8. If inventory levels change, operating income will differ between the two methods because of the difference in accounting for fixed marketing and selling costs.
9. Job order costing and process costing are used interchangeably.
10. A normal disruption could include, for example, a short delay in the receipt of materials needed to produce goods or a production delay because a piece of equipment needed a minor repair.

**Part D: Problem Solving (50 marks) – Marks are shown beside each question**

1. The following table shows annual production and sales for Laga Industry Ltd;
  - Units produced 500, 000 Units,
  - sold 460, 000 units at sales price K25/unit
  - Direct materials cost K8/unit
  - Direct labour cost K6/unit
  - Variable overhead cost K4/unit
  - Fixed manufacturing overhead cost K800 000
  - Variable selling and administrative cost K3/unit
  - Fixed selling and administrative cost K250, 000
 Laga Industry Ltd held no inventory at the beginning of the year.
 

**Required:**

  - a. Calculate operating income using absorption costing method (10 marks).
  - b. Calculate operating income using the variable costing method (10 marks).
  - c. Show the difference in operating income due to the fixed overhead cost in ending inventory (6 marks).
2. By the end of June, Lae Biscuit Ltd had completed 20, 000 units and left 7, 000 units in work in process. The 7, 000 units were 45% completed with respect to materials and 20% complete with respect to conversion. (6marks)
  - a. How many equivalent units will be used to determine the cost per equivalent unit for materials?
  - b. Conversion costs will be assigned to how many equivalent units in the ending Work in Process Inventory?
3. The Lae Biscuit Company manufactures and sells snax biscuit. Currently, 200, 000 units are sold per year at K1.50 per unit. Fixed costs are K80,000 per year. Variable costs are K0.30 per unit. Consider each case separately:
  - a. What is the current annual operating income? (4 marks)
  - b. What is the present breakeven point in revenues? (4 marks)

**4. Show your working out. (10 marks)**

Sales (K50 per unit)	K5, 000
Less: Cost of Goods Sold (K32	
Per unit)	<u>3, 200</u>
Gross Margin	<b><u>1, 800</u></b>
Less operating expenses	
Salaries	K800
Advertising	400
Shipping (K2 per unit)	200
	<u>1, 400</u>
<b>Operating income</b>	<b><u>K400</u></b>

- a. What are the variable costs? 2 marks)
- b. What is the total fixed expenses? (2 marks)
- c. What is the contribution margin per unit? (3marks)
- d. What is the breakeven point in units? (3marks)

**The End!**