



**THE UNIVERSITY OF THE WEST INDIES  
FIVE ISLANDS CAMPUS**

Summer/Semester III

**Examinations of Summer 2020/2021**

**Course Code:** ACCT1003  
**Course Title:** Introduction to Cost and Management Accounting  
**Date of Assessment:** Thursday August 5<sup>th</sup> 2021  
**Time:** 9:00 am  
**Duration:** 2 Hours

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**INSTRUCTIONS TO CANDIDATES:**

This paper has 4 pages and 6 questions.

**YOU ARE REQUIRED TO ANSWER ALL QUESTIONS.**

**THIS ASSESSMENT IS WORTH 60% OF YOUR FINAL GRADE.**

**ASSIGNMENT DETAILS FROM INSTRUCTORS:**

Please answer ALL questions.

**PLEASE TURN OVER**

**Question 1 – 10 MARKS**

Universal Bats, Inc. manufactures cricket bats that it sells to university athletic departments. Universal has developed the following per unit standard costs for 2007 for each baseball bat:

	<u>Direct Materials</u>	<u>Direct Labour</u>	<u>Manufacturing Overhead</u>
Standard Quantity	2 Pounds (Wood)	1/2 hour	1/2 hour
Standard Price	\$4.00	\$10.00	\$6.00
Unit Standard Cost	\$8.00	\$5.00	\$3.00

In 2007, the company planned to produce 40,000 cricket bats at a level of 20,000 hours of direct labour.

Actual results for 2XX7 are presented below:

- Direct materials purchased were 82,000 pounds of wood which cost \$344,400.
- Direct materials used were 73,000 pounds of wood
- Direct labour costs were \$187,200 for 19,500 direct labour hours actually worked.
- Total manufacturing overhead was \$117,000.
- Actual production was 38,000 cricket bats.

**Required:** Compute the following variances:

- i. Direct materials price.
- ii. Direct materials quantity.
- iii. Direct labour price.
- iv. Direct labour quantity.
- v. What is a standard cost?

**Question 2 – 10 MARKS**

Bobby produces rice that is used for porridge. In 2002, the first year of operations, Bobby produced 4,000 tons of rice and sold 3,000 tons. In 2003, the production and sales results were exactly reversed. In each year, selling price per ton was \$2,000. Variable manufacturing costs were 15% of the selling price of units produced. Variable selling expenses were 10% of the selling price of units sold. Fixed manufacturing costs were \$2,400,000 and fixed administrative expenses were \$600,000.

**Required:**

- i. Prepare comparative income statements for each year using variable costing. **(3 marks)**
- ii. Prepare comparative income statements for each year using absorption costing. **(3 marks)**
- iii. Reconcile the differences in income from operations for each year under the two costing approaches. **(2 marks)**
- iv. Briefly comment on the effects of production and sales on net income under the two costing approaches. **(2 marks)**

**PLEASE TURN OVER**

**Question 3 – 10 MARKS**

Voltar Company manufactures and sells a specialized cordless telephone. The company's contribution format income statement for the most recent year is given below:

	Total (\$)	Per Unit (\$)	Percent of Sales
Sales (20,000 units)	1,200,000	60	100%
Less variable expenses	900,000	45	?%
Contribution margin	300,000	\$15	?%
Less fixed expenses	240,000		
Net Operating Income	\$ 60,000		

Management is anxious to improve the company's profit performance and has asked for an analysis of a number of items.

**Required:**

- i. Compute the company's contribution margin ratio and variable expense ratio. **[2 marks]**
- ii. Compute the company's break-even point in both units and sales dollars. **[2 marks]**
- iii. Assume that sales increase by \$400,000 next year. If cost behaviour patterns remain unchanged, by how much will the company's net operating income increase? Use the contribution margin ratio to determine your answer. **[2 marks]**
- iv. Refer to the original data. Assume that next year management wants the company to earn a minimum profit of \$90,000. How many units will have to be sold to meet this target profit? **[2 marks]**
- v. Refer to the original data. Compute the company's margin of safety in both dollar and percentage form. **[2 marks]**

**Question 4 – 10 MARKS**

A Company's budgeted sales and direct materials (D.M.) purchases are as follows.

	<u>Budgeted Sales</u>	<u>Budgeted D.M. Purchases</u>
January	\$300,000	\$60,000
February	330,000	70,000
March	350,000	80,000

Sales are 40% cash and 60% credit. Credit sales are collected 10% in the month of sale, 50% in the month following sale, and 36% in the second month following sale; 4% are uncollectible. Purchases are 50% cash and 50% on account. Purchases on account are paid 40% in the month of purchase, and 60% in the month following purchase.

**Instructions:**

- i. Prepare a schedule of expected collections from customers for March. **(6 marks)**
- ii.
- iii. Prepare a schedule of expected payments for direct materials for March. **(4 marks)**

**PLEASE TURN OVER**

**Question 5 - 10 MARKS**

Consider the following account balances for the Canseco Company:

	Beginning 2009 (\$)	End of 2009 (\$)
Direct materials inventory	22,000	26,000
Work in progress inventory	21,000	20,000
Finished goods inventory	18,000	23,000
Purchases of direct materials		75,000
Direct manufacturing labour		25,000
Indirect manufacturing labour		15,000
Plant insurance		9,000
Amortization – plant building and equipment		11,000
Repairs and maintenance – plant		4,000
Marketing, distribution, and customer service costs		93,000
General and administrative costs		29,000

Required:

- i. Prepare a schedule of cost of goods manufactured for 2009. **(6 marks)**
- ii. Assuming revenues in 2009 were \$300,000 prepare the 2009 income statement. **(4 marks)**

**Question 6 - 10 MARKS**

Larkin company produces golf discs which it normally sells to retailers for \$6 each. The cost of manufacturing 25,000 golf discs is as follows:

Materials	\$10,000
Labor	30,000
Variable overhead	20,000
Fixed Overhead	40,000
Total	100,000

Larkin also incurs 5% sales commission (\$0.30) on each disc sold.

Rudd Corporation offers Larkin \$4.25 per disc for 3,000 discs. Rudd would sell the discs under its own brand name in foreign markets not yet served by Larkin. If Larkin accepts the offer, its fixed overhead will increase from \$40,000 to \$43,000 due to the purchase of a new imprinting machine. No sales commission will result from the special order.

**Required:**

- a) Prepare an incremental analysis for the special order. **[8 marks]**
- b) Should Larkin accept the special order? Why or why not? **[2 marks]**

**END OF EXAMINATION**