



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

Semester II

Examinations of April/May 2022

Course Code: ACCT 1003
Course Title: Introduction to Cost and Management Accounting
Date of Assessment: Monday April 25, 2022
Time: 1:00 p.m. – 3:00 p.m.
Duration: 2 hours

INSTRUCTIONS TO CANDIDATES:

This paper has 6 pages and 5 questions.

YOU ARE REQUIRED TO ANSWER 3 QUESTIONS.

THIS ASSESSMENT IS WORTH 50 % OF YOUR FINAL GRADE.

ASSIGNMENT DETAILS FROM INSTRUCTORS:

THIS PAPER HAS TWO SECTIONS.

Section A – COMPULSORY and MUST be attempted

Section B – Students are required to answer ANY Two (2) of four (4) questions.

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Section A – COMPULSORY
Answer ALL questions in this section worth 40 marks

1. The Lucerne Chocolate Company uses standard costs and a flexible budget to control its manufacture of fine chocolates. The purchasing agent is responsible for material price variances, and the production manager is responsible for all other variances. Operating data for the past week are summarized as follows:
- Finished units produced: 2,900 boxes of chocolates.
 - Direct materials: Purchased and used, 3,400 pounds of chocolate at \$17.30 per lb.
 - The standard price is \$18 per lb. The Standard allowed per box produced is 1 pound.
 - Direct labor: Actual costs, 3,925 hours at \$38.6, or \$151,505. The Standard allowed per box produced is 1.25 hours. The standard price per direct labor hour is \$38.
 - Variable manufacturing overhead: Actual costs, \$46,675. The budget formula is \$11 per standard direct-labor hour.

Requirements:

- | | |
|---|------------------|
| a. Materials purchase-price variance. | (5 marks) |
| b. Materials quantity variance | (5 marks) |
| c. Direct-labor rate variance | (5 marks) |
| d. Direct-labor efficiency variance | (5 marks) |
| e. Variable manufacturing-overhead rate variance. (Note: Keep all decimal points and round up for the final answer) | (5 marks) |
| f. Variable manufacturing-overhead efficiency variance | (5 marks) |
| g. Prepare a summary analysis of the variances calculated in a-f | (5 marks) |
| h. Highlight the two most significant variances and possible causes of these variances. | (5 marks) |

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Section B

Answer ANY two (2) of four (4) questions worth 20 marks each

1. This question has Two Parts:

A. Daniel Merrill is the manager of an airport gift shop, Merrill News and Gifts. From the following data, Mr. Merrill wants a cash budget showing expected cash receipts and disbursements for the month of April, and the cash balance expected as of April 30, 20X7.

- Planned cash balance, March 31, 20X7: \$100,000
- Customer receivables as of March 31: \$530,000 total, \$80,000 from February sales, \$450,000 from March sales
- Accounts payable, March 31: \$460,000
- Merchandise purchases for April: \$450,000, 40% paid in the month of purchase, 60% paid in the next month
- Payrolls due in April: \$90,000
- Other expenses for April, payable in April: \$45,000
- Accrued taxes for April, payable in June: \$7,500
- Banknote due April 10: \$90,000 plus \$7,200 interest
- Depreciation for April: \$2,100
- Two-year insurance policy due April 14 for renewal: \$1,500, to be paid in cash
- Sales for April: \$1,000,000, half collected in the month of sale, 40% in next month, 10% in the third month

Requirements:

- Prepare the cash budget for the month ending April 30, 20X7. **(8 marks)**

B. Suppose a lumber yard has the following data:

- Accounts receivable, May 31: $(.2 * \text{May sales of } \$360,000) = \$72,000$ •
- Monthly forecasted sales: June, \$437,000; July, \$441,000; August, \$502,000; September, \$531,000

Sales consist of 80% cash and 20% credit. All credit accounts are collected in the month following the sales. Uncollectible accounts are negligible and may be ignored.

Requirements:

- a. Prepare a sales budget schedule **(6 marks)**
- b. And a cash collections budget scheduled for June, July, and August. **(6 marks)**

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2. Morey Company has just completed its first year of operations. The company's absorption costing income statement for the year appears below:

Morey Company

Income Statement

Sales (40,000 units at \$33.75 per unit)	\$1,350,000
Cost of goods sold (40,000 units × \$21 per unit)	840,000
Gross margin	510,000
Selling and administrative expenses	420,000
Net operating income	90,000

The company's selling and administrative expenses consist of \$300,000 per year in fixed expenses and \$3 per unit sold in variable expenses. The company's \$21 per unit product cost given above is computed as follows:

Direct materials	\$10
Direct labor	4
Variable manufacturing overhead	2
Fixed manufacturing overhead (\$250,000 ÷ 50,000 units)	5
Absorption costing unit product cost	\$21

Requirements:

- a. Redo the company's income statement in the contribution format using variable costing. **(14 marks)**

- b. Reconcile any difference between the net operating income on your variable costing income statement and the net operating income on the absorption costing income statement. **(6 marks)**

3. The Pacific Manufacturing Company operates a job-order costing system and applies overhead costs to jobs on the basis of direct labor costs. Its predetermined overhead rate was based on a cost formula that estimated \$126,000 of manufacturing overhead for an estimated allocation base of \$84,000 direct labor dollars. The company has provided the following data in the form of an Excel worksheet:

	Beginning	Ending
Raw Materials	21,000	16,000
Work In Process	44,000	40,000
Finished Goods	88,000	80,000
The following actual cost:		
Purchases of raw materials (all direct)		133,000
Direct Labor cost		80,000
Manufacturing Overhead costs:		
Insurance, factory		7,000
Depreciation of equipment		18,000
Indirect labor		42,000
Property Taxes		9,000
Maintenance		11,000
Rent, building		36,000

Requirements:

- a. Compute the predetermined overhead rate for the year. **(2 Marks)**
- b. Compute the amount of underapplied or overapplied overhead for the year. **(2 marks)**
- c. Prepare a schedule of the cost of goods manufactured for the year. Assume all raw materials are used in production as direct materials. **(12 marks)**
- d. Compute the unadjusted cost of goods sold for the year. (Do not include any underapplied or overapplied overhead in your cost of goods sold figure.) What options are available for disposing of underapplied or overapplied overhead? **(4 marks)**

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4. Bohemian Links Inc. produces sausages in three production departments—Mixing, Casing and Curing, and Packaging. In the Mixing Department, meats are prepared and ground and then mixed with spices. The spiced meat mixture is then transferred to the Casing and Curing Department, where the mixture is force-fed into casings and then hung and cured in climate-controlled smoking chambers. In the Packaging Department, the cured sausages are sorted, packed, and labeled. The company uses the weighted-average method in its process costing system. Data for April for the Casing and Curing Department follow:

	Units	Percentage Completed		
		Mixing	Materials	Conversion
WIP Inventory, April 1	1	100%	60%	50%
WIP Inventory, April 30	1	100%	20%	10%

	Mixing	Materials	Conversion
WIP Inventory, April 1	\$1,640	\$26	\$105
Cost Added during April	\$94,740	\$8,402	\$61,197

Mixing cost represents the costs of the spiced meat mixture transferred in from the Mixing Department. The spiced meat mixture is processed in the Casing and Curing Department in batches; each unit in the above table is a batch, and one batch of spiced meat mixture produces a set amount of sausages that are passed on to the Packaging Department. During April, 60 batches (i.e., units) were completed and transferred to the Packaging Department.

Requirements:

- Determine the equivalent units for April for mixing, materials, and conversion. Do not round off your computations. **(5 marks)**
- Compute the costs per equivalent unit for April for mixing, materials, and conversion. **(5 marks)**
- Determine the total cost of ending work in process inventory and the total cost of units transferred to the Packaging Department in April. **(5 marks)**
- Prepare a cost reconciliation report for the Casing and Curing Department for April. **(5 marks)**

END OF QUESTION PAPER