

**Subject: ACCY211: Management Accounting II**  
**Type of assessment task: Assignment 2**  
**Due date: Week 8 in your enrolled tutorial class.**

**QUESTION 1**

**40 marks**

Agrava Ltd. provides the costs for its single product using process costing. Direct material is added at the beginning of the production process, and conversion activity occurs uniformly throughout the process.

		Percent Complete	
	<i>Physical units</i>	<i>Materials</i>	<i>Conversion</i>
Work in process, August 1	50,000	100%	80%
Units started during August	80,000		
Units completed and transferred out during August	100,000		
Work in process, August 31	30,000	100%	30%
	<i>Total</i>	<i>Direct Materials</i>	<i>Conversion</i>
Work in process, August 1	\$490,000	\$130,000	\$360,000
Costs incurred during August	\$990,000	\$260,000	\$730,000
Total costs to account for	\$1,480,000	\$390,000	\$1,090,000

**Required:**

Using weighted-average process costing to complete the following requirements:

- Determine the equivalent units for August. (10 marks)
- Compute the costs per equivalent unit. (10 marks)
- Compute the cost of goods completed and transferred out during August ( 5 marks)
- Compute the cost remaining in the work in process inventory on August 31. (10 marks)
- Prepare a journal entry to record the transfer of the cost of goods completed and transferred out. ( 5 marks)

## QUESTION 2

40 marks

Quintric Ltd. produces two types of fine wool coats that are classified as *Executive* and *Elite coat*. Quintric's currently using a simple job-costing system that has two direct-cost categories (direct materials and direct labour) and a single indirect-cost pool with indirect cost allocation based on machine-hours. For 2016, Quintric's budget includes estimated manufacturing overhead costs of \$200,000 and 8,000 machine hours. Quintric collected the following information for 2016.

	<i>Executive coat</i>	<i>Elite coat</i>
Number of coats	400 coats	200 coats
Machine hours per coat	10	10
Price per coat	\$700	\$1,200
Cost of materials per coat	\$200	\$ 300
<b>Direct labour costs per coat</b>	<b>\$180</b>	<b>\$ 410</b>

### Required:

- (a) Using the simple costing system, calculate the product cost per unit for the *Executive* and *Elite coat*. (10 marks)
- (b) Quintric Ltd. incurred actual total manufacturing costs of \$202,000 and 8,000 total machine hours during the year. Determine the amount of under applied or over applied manufacturing overhead for the period and prepare a journal entry to close any balance in the manufacturing overhead account assuming the under/over applied overhead amount is insignificant. (5 marks)
- (c) Quintric is concerned about the accuracy of the costs assigned to the *Executive* and *Elite coat* and therefore is planning to implement an activity-based costing (ABC) system. Quintric's ABC system would have the same direct-cost categories as its simple costing system. However, instead of a single indirect-cost pool there would now be three categories (design, setup and printing machine operations) for assigning indirect costs. To see how activity-based costing would affect the costs of the *Executive coat* or *Elite coat*, the following information is collected for an analysis.

<i>Activity</i>	<i>Costs</i>	<i>Cost Allocation Base</i>	<i>Quantity of Cost Allocation Base</i>	
			<i>Executive coat</i>	<i>Elite coat</i>
Design	\$80,000	Design hours	800 design hours	3,200 design hours
Setups	45,000	Number of setups	10 setups	40 setups
Machine operations	75,000	Machine hours	3,000 machine hours	2,000 machine hours
	<u>\$200,000</u>			

- Using the activity based costing system, calculate the estimated product cost per unit for the *Executive* and *Elite coat*. (15 marks)
- (d) Compare the costs of the *Executive coat* and *Elite coat* under the simple and activity based costing systems. Explain why the simple and activity based costing systems differ in the cost of the *Executive* and *Elite coat*. (10 marks)

**QUESTION 3****20 marks**

Axioma Ltd has the following budgeted sales for the next six-month period:

<i>Month</i>	<i>Unit Sales</i>
January	90,000
February	120,000
March	210,000
April	150,000
May	180,000
June	120,000

Axioma Ltd. sells a single product at a price of \$50 per unit. There were 24,000 units of finished goods in inventory at the beginning of February. Axioma Ltd.'s policy is to keep an inventory of finished goods that is equal to 20% of the unit sales for the next month.

Five kilograms of materials are required for each unit of finished goods produced. Each kilogram of material costs \$8. Inventory levels for materials are equal to 20% of the production needs for the next month. Material inventory at the beginning of February was \$1,104,000 (138,000 kilograms).

**Required:**

- (a) Prepare sales budgets in units and dollars for February and March (4 marks)
- (b) Prepare production budgets in units for February and March (8 marks)
- (c) Prepare direct materials usage budget in kilograms and dollars for February (4 marks)
- (d) Prepare direct materials purchases budgets (in kilograms and dollars) for February (4 marks)