

MIDTERM BUS 212 FALL 2000

1. Department K had 2,000 units, 55% completed with respect to work-in-process at the beginning of the period, 15,000 units were completed during the period. All materials were added at the beginning of process. 1,200 units were 80% completed at the end of the period.
Required:
 - (a) Using the first-in-first-out method, determine the equivalent units of production for materials and conversion cost.
 - (b) Using the weighted average process cost method, determine the equivalent units of production for materials and conversion cost.
2. Department L had 2,500 units in work-in-process at the beginning with 45% conversion and 100% materials completed. 15,000 units were started and completed during the period. 1,200 units were 40% completed at the end of the period. All materials were added at the beginning of process.
Required:
 - a) Using the first-in-first-out method, determine the equivalent units of production for materials and conversion cost.
 - b) Using the weighted average process cost method, determine the equivalent units of production for materials and conversion cost.
3. Department M had 4,000 units in beginning work in process, which was 40% Conversion cost and 60% material completed. 20,000 units were added this period. 14,000 units were completed and transferred during the period and work in process at the end of the period was 40% conversion cost and 35% material completed.
Required:
 - (c) Using the first-in-first-out method, determine the equivalent units of production for material and conversion cost.
 - (d) Using the weighted average process cost method, determine the equivalent units of production for material and conversion cost.
4. Department N had 5,000 units in beginning work in process, which was 40% Conversion cost and 60% materials completed. 25,000 units were added this period. 13,000 units were in the work in process at the end of the period and were 30% conversion cost and 40% material completed.
Required:
 - (e) Using the first-in-first-out method, determine the equivalent units of production for material and conversion cost.
 - (f) Using the weighted average process cost method, determine the equivalent units of production for material and conversion cost.
5. Department P had the following information regarding equivalent units of production, which were determined using first-in-first-out process costing method:

Equivalent Units of Production

	Units	Materials	Conversion
Completed and Transferred (28,000 units):			
Work-in-process at the beginning	8,000	0	4,000
Started and completed this period	20,000	20,000	20,000
Work-in-process at the end of the period	14,000	14,000	8,400
Quantity Accounted for	42,000	34,000	32,400

The cost information is as follows:

	Total Cost	Material Cost	Conversion Cost
Work-in-process beginning	\$ 3,000,000	\$ 2,000,000	\$1,000,000
Cost Added	\$18,000,000	\$10,500,000	\$7,500,000

Required:

- a) What were the stages of completion of the work in process with respect to material and conversion cost at the beginning of this period? (Please show your computation)
 - b) What were the stages of completion of the work in process with respect to material and conversion cost at the end of this period? (Please show your computation).
 - c) Using the first-in-first-out process costing method, determine:(Please show your computations fully)
 - (i) The cost of the 28,000 units completed and transferred; and
 - (ii) The cost of work-in-process ending inventory.
 - d) Assuming that the weighted average costing method had been used to compute the equivalent units of production by Department P, determine:
 - (i) What the equivalent units of production would have been for materials and conversion cost (Please show all your computations completely) and
 - (ii) The cost per unit for materials and conversion.
6. Carmelita Company sells 50,000 units at \$20 per unit. Fixed costs are \$70,000 and income from operations is \$250,000. Determine:
- (a) How many units are needed to be sold before the company breaks even;
 - (b) What is the sales dollar amount that needs to be made in order for the company to earn an operating income of \$400,000.
 - (c) At that sales level you computed in item b, what is the margin of safety?
7. Given the following cost and activity observations for Smithson Company's utilities, use the high-low method to calculate Smithson's fixed costs per month. Do not round your intermediate calculations.

	Cost	Machine Hours
January	\$50,000	19,500
February	85,000	35,500
March	60,000	22,500
April	64,000	24,500

8. General Hollis has the following data about his manufacturing concern:

Ending inventory of work in process is \$200,000 while the beginning inventory of work-in-process is \$400,000. The company had ending inventory of direct materials of \$250,000 and beginning inventory of direct materials of \$800,000. Direct materials purchased during the period was \$700,000. Discount received on direct materials purchased was \$150,000 while the cost of direct materials returned was \$50,000. There were records of delivery expenses (freight-out) in the amount of \$70,000; and as a result of FOB shipping point on some of the materials purchased, the company incurred transportation-in of \$180,000. Factory overhead incurred was \$500,000 while direct labor cost was \$400,000. The beginning inventory of finished goods was \$600,000.

Required: Using the information above, present the cost of goods manufactured schedule and identify the following information in your schedule:

- A. The direct materials used
- B. The current manufacturing cost
- C. The total manufacturing cost
- D. The cost of goods manufactured
- E. The cost of goods available for sale

9. Make necessary journal entries for the following transactions in a manufacturing concern.

Jan 1, 2016	Purchased materials for \$1,000,000 on account.
Jan 4,	Requisitioned for direct materials of \$700,000 placed into production process.
Jan 7	Requisitioned for indirect materials of \$100,000 placed into production process
Jan 10	Paid for direct labor of \$300,000.
Jan 15	Paid for indirect labor of \$250,000.
Jan 20	Paid other Factory overhead expenses of \$630,000.
Jan 30	The Company applied \$800,000 of factory overhead to work in process.

Required: a) Make necessary journal entries for the transactions above.
b) Assuming the over- or under-applied overhead was immaterial, make necessary entries for disposing off that immaterial over- or under-applied overhead.

10. On January 1 of the current year, Townsend Co. commenced operations. It operated its plant at 100% of capacity during January. The following data summarized the results for January:

	<u>Units</u>
Production	50,000
Sales (\$20 per unit)	<u>42,000</u>
Inventory, January 31	<u>8,000</u>
<u>Manufacturing costs:</u>	
Variable	\$575,000
Fixed	<u>80,000</u>
Total	<u>\$655,000</u>
<u>Selling and administrative expenses:</u>	
Variable	\$ 35,000
Fixed	<u>10,500</u>
Total	<u>\$ 45,500</u>

- (a) Prepare an income statement using absorption costing.

(b) Prepare an income statement using variable costing.

11. Prepare a manufacturing schedule and an income statement using the cost data of James Jones during the month of June, 2015

Direct Labor	\$400,000
Materials purchased during the month of June, 2015	\$300,000
Material purchases returns	\$1,000
Material Purchases Discount	\$600
Materials Transportation In	\$700
Materials, June 1	\$250,000
Work-in process, June 1	\$140,000
Materials June 30, end of month	\$170,000

Work-in process, June 30	\$160,000
Finished goods inventory, June 1	\$100,000
Finished goods inventory, June 30	\$115,000
Sales Commission	\$5,000
Advertising expense	\$10,000
Administrative Expenses	\$20,000
Sales	\$3,000,000
Sales Returns and Allowances	\$150,000
Sales Discount	\$40,000
Transportation-out	\$25,000
Indirect Labor Cost	\$40,000
Factory machinery depreciation	\$30,000
Factory heat, light, and power	\$7,000
Factory supplies	\$6,000
Factory building property taxes	\$6,500
Factory miscellaneous expenses	\$11,000
Interest Income	\$2,500
Gain on Sale of Furniture	\$1,500
Loss on Sale of Equipment	\$ 500
Loss on Sale of Stock	\$ 600
Interest Expense	\$ 400
Income Tax Rate	(30% of income before taxes)

