

[COST ACCOUNTING]

Process costing

I. Theories

Multiple Choice

Select the letter of the best answer.

1. Process costing is used to account for:
 - A. large numbers of identical products that are produced in a continuous manufacturing environment.
 - B. small numbers of products that are produced in batches.
 - C. raw materials that are converted directly to finished goods.
 - D. finished goods that are refined and processed further.
 - E. large numbers of products that are produced in a non-repetitive process.
2. Which of the following manufacturers would most likely not use a process-cost accounting system?
 - A. A producer of computer monitors.
 - B. A paint manufacturer.
 - C. A producer of frozen orange juice.
 - D. A builder of customized yachts.
 - E. A lumber mill.
3. Process costing would be used in all of the following industries except:
 - A. petroleum refining.
 - B. chemicals.
 - C. truck tire manufacturing.
 - D. wood pulp production.
 - E. automobile repair.
4. Which of the following companies would likely use a process-costing system?

	Custom Furniture <u>Manufacturer</u>	Chemical <u>Producer</u>	Soft Drink <u>Bottler</u>
A.	Yes	Yes	Yes
B.	Yes	Yes	No
C.	No	Yes	No
D.	No	Yes	Yes
E.	No	No	Yes
5. Which of the following statements regarding similarities between process costing and job-order costing are true?
 - I. Both systems assign production costs to units of output.
 - II. Both systems require extensive knowledge of financial accounting.
 - III. The flow of costs through the manufacturing accounts is essentially the same.

A. I only.

- B. I and III.
 - C. II and III.
 - D. III only.
 - E. I, II, and III.
6. Companies that use a process-cost accounting system would:
- A. establish a separate Work-in-Process Inventory account for each manufacturing department.
 - B. establish a separate Finished-Goods Inventory account for each manufacturing department.
 - C. pass completed production directly to Cost of Goods Sold.
 - D. charge goods produced with actual overhead amounts rather than applied overhead amounts.
 - E. eliminate the need for the Finished-Goods Inventory account.
7. Which of the following statements is false?
- A. In job-order costing, costs are accumulated by job order.
 - B. In process costing, costs are accumulated by department.
 - C. In process costing, the cost per unit in a department is found by spreading the period's manufacturing costs over the production activity.
 - D. In process costing, the total cost of each unit is found by dividing the total factory costs by the number of units completed.
 - E. In job-order costing, the unit cost is found by dividing the job's total cost by the job's total units.
8. In a process-costing system, manufacturing costs are accumulated by:
- A. batch.
 - B. batch and time period.
 - C. department.
 - D. department and time period.
 - E. department or process, and time period.
9. Which of the following choices correctly shows how costs are accumulated in a process-costing system?
- | | By
<u>Batch</u> | By Time
<u>Period</u> | By Process or
<u>Department</u> |
|----|--------------------|--------------------------|------------------------------------|
| A. | Yes | Yes | Yes |
| B. | Yes | Yes | No |
| C. | No | Yes | No |
| D. | No | Yes | Yes |
| E. | No | No | Yes |
10. Morrison, Inc., which uses a process-cost accounting system, passes completed production from Department A to Department B for further manufacturing. The journal entry to record completed production in Department A requires:
- A. a debit to Work-in-Process Inventory and a credit to Finished-Goods Inventory.
 - B. a debit to Finished-Goods Inventory and a credit to Work-in-Process Inventory.
 - C. a debit to Finished-Goods Inventory and a credit to Work-in-Process Inventory: Department A.
 - D. a debit to Work-in-Process Inventory: Department A and a credit to Work-in-Process

- Inventory: Department B.
E. a debit to Work-in-Process Inventory: Department B and a credit to Work-in-Process Inventory: Department A.
11. Greene, Inc., which uses a process-costing system, transfers completed production from Department no. 1 to Department no. 2 for further work. Which of the following best describes the account that would be debited to record this transfer?
- A. Cost of Goods Transferred.
 - B. Finished-Goods Inventory: Department no. 1.
 - C. Finished-Goods Inventory: Department no. 2.
 - D. Work-in-Process Inventory: Department no. 1.
 - E. Work-in-Process Inventory: Department no. 2.
12. Barnes, Inc., which uses a process-costing system, transfers completed production from Department no. 1 to Department no. 2 for further work. Which of the following best describes the account that would be credited to record this transfer?
- A. Cost of Goods Transferred.
 - B. Finished-Goods Inventory: Department no. 1.
 - C. Finished-Goods Inventory: Department no. 2.
 - D. Work-in-Process Inventory: Department no. 1.
 - E. Work-in-Process Inventory: Department no. 2.
13. Unit costs in a process-costing system are derived by using:
- A. in-process units.
 - B. completed units.
 - C. physical units.
 - D. equivalent units.
 - E. a measure of activity other than those listed above.
14. Which of the following data are needed to calculate total equivalent units under the weighted-average method?
- A. Work-to-date on ending work in process, units started during the period.
 - B. Units completed during the period, work-to-date on ending work in process.
 - C. Work to complete beginning work in process, work-to-date on ending work in process.
 - D. Work to complete beginning work in process, units completed, work done on ending work in process.
 - E. Units completed, work to complete beginning work in process.
15. Kentucky Corporation uses a process-cost accounting system. The company adds direct materials at the start of its production process; conversion cost, on the other hand, is incurred evenly throughout manufacturing. The firm has no beginning work-in-process inventory; its ending work in process is 40% complete. Which of the following sets of percentages would be used to calculate the correct number of equivalent units in the ending work-in-process inventory?
- A. Materials, 40%; conversion cost, 40%.
 - B. Materials, 40%; conversion cost, 100%.
 - C. Materials, 100%; conversion cost, 40%.
 - D. Materials, 100%; conversion cost, 60%.
 - E. Materials, 100%; conversion cost, 100%.

16. Corruption, Inc., overstated the percentage of work completed with respect to conversion cost on the ending work-in-process inventory. What is the effect of this overstatement on conversion-cost equivalent units and physical units manufactured, respectively?
- A. Overstated, overstated.
 - B. Overstated, understated.
 - C. Overstated, none.
 - D. None, overstated.
 - E. None, none.

17. Michael, Inc., uses a process-costing system. A newly hired accountant has identified the following procedures that must be performed by the close of business on Friday:

- 1—Calculation of equivalent units
- 2—Analysis of physical flows of units
- 3—Assignment of costs to completed units and units still in process
- 4—Calculation of unit costs

Which of the following choices correctly expresses the proper order of the preceding tasks?

- A. 1, 2, 3, 4.
 - B. 1, 2, 4, 3.
 - C. 1, 4, 3, 2.
 - D. 2, 1, 4, 3.
 - E. 2, 1, 3, 4.
18. Which formula gives weighted-average equivalent unit production? (UC = units completed, BI = equivalent units in beginning inventory, EI = equivalent units in ending inventory)
- a. $UC + BI + EI$.
 - b. $UC + BI - EI$.
 - c. $UC + EI - BI$.
 - d. $UC + EI$.
19. Which formula gives FIFO equivalent unit production? (UC = units completed, BI = equivalent units in beginning inventory, EI = equivalent units in ending inventory)
- a. $UC + BI + EI$.
 - b. $UC + BI - EI$.
 - c. $UC + EI - BI$.
 - d. $UC + EI$.
20. Which item is NOT relevant in determining FIFO unit cost?
- a. Cost of beginning inventory.
 - b. Equivalent unit production in beginning inventory.
 - c. Equivalent unit production in ending inventory.
 - d. Units completed.
21. Weighted-average equivalent production is always
- a. less than the number of units completed.
 - b. equal to the number of units completed.
 - c. equal to or greater than the number of units completed.
 - d. any of the above.

22. FIFO equivalent production can be

- a. less than the number of units completed.
 - b. equal to the number of units completed.
 - c. equal to or greater than the number of units completed.
 - d. any of the above.
23. Which item is NOT relevant in determining FIFO equivalent unit production?
- a. Cost of beginning inventory.
 - b. Equivalent unit production in beginning inventory.
 - c. Equivalent unit production in ending inventory.
 - d. Units completed.
24. The FIFO method of calculating equivalent production and unit costs
- a. is less likely to be accurate than the weighted-average method.
 - b. is more useful for control purposes than the weighted-average method.
 - c. cannot be used unless a company also uses standard costing.
 - d. eliminates the need to calculate separate equivalent-production numbers for each element of manufacturing cost.
25. When calculating unit costs under the weighted-average process-costing method, the unit cost is based on:
- A. only the current period's manufacturing costs.
 - B. only costs in the period's beginning work-in-process inventory.
 - C. a summation of the costs in the beginning work-in-process inventory plus costs incurred in the current period.
 - D. only costs incurred in previous accounting periods.
 - E. a summation of the costs in the beginning work-in-process inventory plus costs to be incurred in the upcoming period.
26. When computing the conversion cost per equivalent unit under the weighted-average method of process costing, all of the following information would be needed except:
- A. the number of units completed during the current accounting period.
 - B. the conversion work performed during the current period on the ending work-in-process inventory.
 - C. the conversion work performed during the current period on the beginning work-in-process inventory.
 - D. the conversion cost in the beginning work-in-process inventory.
 - E. the conversion cost incurred during the current accounting period.
27. Equivalent-unit calculations are necessary to allocate manufacturing costs between:
- A. units completed and ending work in process.
 - B. beginning work in process and units completed.
 - C. units sold and ending work in process.
 - D. cost of goods manufactured and beginning work in process.
 - E. cost of goods manufactured and cost of goods sold.
28. Which of the following is a key document in a typical process-costing system?
- A. Departmental production report.
 - B. Master schedule.
 - C. Production budget.
 - D. Sequential product report.

- E. Materials requirement report.
29. The first processing department in a sequence of three production departments must account for which of the following costs?
- A. Direct material and transferred-in costs.
 - B. Direct material costs only.
 - C. Conversion and transferred-in costs.
 - D. Direct material and conversion costs.
 - E. Direct material, conversion, and transferred-in costs.
30. The second processing department in a sequence of three production departments would typically account for which of the following costs?
- A. Direct material and transferred-in costs.
 - B. Direct material costs only.
 - C. Transferred-in costs only.
 - D. Direct material and conversion costs.
 - E. Direct material, conversion, and transferred-in costs.
31. Equivalent units of production are equal to the
- a. units completed by a production department in the period.
 - b. number of units worked on during the period by a production department.
 - c. number of whole units that could have been completed if all work of the period had been used to produce whole units.
 - d. identifiable units existing at the end of the period in a production department.
32. In a process costing system using the weighted average method, cost per equivalent unit for a given cost component is found by dividing which of the following by EUP?
- a. only current period cost
 - b. current period cost plus the cost of beginning inventory
 - c. current period cost less the cost of beginning inventory
 - d. current period cost plus the cost of ending inventory
33. The weighted average method is thought by some accountants to be inferior to the FIFO method because it
- a. is more difficult to apply.
 - b. only considers the last units worked on.
 - c. ignores work performed in subsequent periods.
 - d. commingles costs of two periods.
34. The first step in determining the cost per EUP per cost component under the weighted average method is to
- a. add the beginning Work in Process Inventory cost to the current period's production cost.
 - b. divide the current period's production cost by the equivalent units.
 - c. subtract the beginning Work in Process Inventory cost from the current period's production cost.
 - d. divide the current period's production cost into the EUP.

35. The difference between EUP calculated using FIFO and EUP calculated using weighted average is the equivalent units
- started and completed during the period.
 - residing in beginning Work in Process Inventory.
 - residing in ending Work in Process Inventory.
 - uncompleted in Work in Process Inventory.
36. EUP calculations for standard process costing are the same as
- the EUP calculations for weighted average process costing.
 - the EUP calculations for FIFO process costing.
 - LIFO inventory costing for merchandise.
 - the EUP calculations for LIFO process costing.
37. In a FIFO process costing system, which of the following are assumed to be completed first in the current period?
- units started this period
 - units started last period
 - units transferred out
 - units still in process
38. To compute equivalent units of production using the FIFO method of process costing, work for the current period must be stated in units
- completed during the period and units in ending inventory.
 - completed from beginning inventory, units started and completed during the period, and units partially completed in ending inventory.
 - started during the period and units transferred out during the period.
 - processed during the period and units completed during the period.
39. The FIFO method of process costing will produce the same cost of goods transferred out amount as the weighted average method when
- the goods produced are homogeneous.
 - there is no beginning Work in Process Inventory.
 - there is no ending Work in Process Inventory.
 - beginning and ending Work in Process Inventories are each 50 percent complete.
40. The primary difference between the FIFO and weighted average methods of process costing is
- in the treatment of beginning Work in Process Inventory.
 - in the treatment of current period production costs.
 - in the treatment of spoiled units.
 - none of the above.
41. Material is added at the beginning of a process in a process costing system. The beginning Work in Process Inventory for the process was 30 percent complete as to conversion costs. Using the FIFO method of costing, the number of equivalent units of material for the process during this period is equal to the
- beginning inventory this period for the process.
 - units started this period in the process.
 - units started this period in the process plus the beginning Work in Process Inventory.

- d. units started and completed this period plus the units in ending Work in Process Inventory.
42. In a cost of production report using process costing, transferred-in costs are similar to the
- a. cost of material added at the beginning of production.
 - b. conversion cost added during the period.
 - c. cost transferred out to the next department.
 - d. cost included in beginning inventory.
43. Which of the following is subtracted from weighted average EUP to derive FIFO EUP?
- a. beginning WIP EUP completed in current period
 - b. beginning WIP EUP produced in prior period
 - c. ending WIP EUP not completed
 - d. ending WIP EUP completed
44. The cost of abnormal continuous losses is
- a. considered a product cost.
 - b. absorbed by all units in ending inventory and transferred out on an equivalent unit basis.
 - c. written off as a loss on an equivalent unit basis.
 - d. absorbed by all units past the inspection point.
45. Abnormal spoilage can be
continuous discrete
- a. yes no
 - b. no no
 - c. yes yes
 - d. no yes
46. When the cost of lost units must be assigned, and those same units must be included in an equivalent unit schedule, these units are considered
- a. normal and discrete.
 - b. normal and continuous.
 - c. abnormal and discrete.
 - d. abnormal and continuous.
47. A continuous loss
- a. occurs unevenly throughout a process.
 - b. never occurs during the production process.
 - c. always occurs at the same place in a production process.
 - d. occurs evenly throughout the production process.
48. Which of the following would be considered a discrete loss in a production process?
- a. adding the correct ingredients to make a bottle of ketchup
 - b. putting the appropriate components together for a stereo
 - c. adding the wrong components when assembling a stereo
 - d. putting the appropriate pieces for a bike in the box
49. The method of neglect handles spoilage that is

- a. discrete and abnormal.
 - b. discrete and normal.
 - c. continuous and abnormal.
 - d. continuous and normal.
50. The cost of normal discrete losses is
- a. absorbed by all units past the inspection point on an equivalent unit basis.
 - b. absorbed by all units in ending inventory.
 - c. considered a period cost.
 - d. written off as a loss on an equivalent unit basis.
51. The cost of abnormal continuous losses is
- a. considered a product cost.
 - b. absorbed by all units in ending inventory and transferred out on an equivalent unit basis.
 - c. written off as a loss on an equivalent unit basis.
 - d. absorbed by all units past the inspection point.
52. Normal spoilage units resulting from a continuous process
- a. are extended to the EUP schedule.
 - b. result in a higher unit cost for the good units produced.
 - c. result in a loss being incurred.
 - d. cause estimated overhead to increase.
53. When the cost of lost units must be assigned, and those same units must be included in an equivalent unit schedule, these units are considered
- a. normal and discrete.
 - b. normal and continuous.
 - c. abnormal and discrete.
 - d. abnormal and continuous.
54. Which of the following accounts is credited when abnormal spoilage is written off in an actual cost system?
- a. Miscellaneous Revenue
 - b. Loss from Spoilage
 - c. Finished Goods
 - d. Work in Process
55. The cost of abnormal discrete units must be assigned to good units lost units
- a. yes yes
 - b. no no
 - c. yes no
 - d. no yes
56. Which of the following statements is false? The cost of rework on defective units, if
- a. abnormal, should be assigned to a loss account.
 - b. normal and if actual costs are used, should be assigned to material, labor and overhead costs of the good production.

- c. normal and if standard costs are used, should be considered when developing the overhead application rate.
 - d. abnormal, should be prorated among Work In Process, Finished Goods, and Cost of Goods Sold.
57. If normal spoilage is detected at an inspection point within the process (rather than at the end), the cost of that spoilage should be
- a. included with the cost of the units sold during the period.
 - b. included with the cost of the units completed in that department during the period.
 - c. allocated to ending work in process units and units transferred out based on their relative values.
 - d. allocated to the good units that have passed the inspection point.
58. Normal spoilage units resulting from a continuous process
- a. are extended to the EUP schedule.
 - b. result in a higher unit cost for the good units produced.
 - c. result in a loss being incurred.
 - d. cause estimated overhead to increase.

True-False

Write T if the statement is true otherwise, Write F.

1. Process costing is most appropriate when manufacturing large batches of homogenous products.
2. Conversion costs include all manufacturing costs other than direct materials
3. Equivalent units are computed to assign costs to partially completed units
4. The weighted average method combines beginning inventory and current production to compute cost per unit of production.
5. The FIFO method combines beginning inventory and current production to compute cost per unit of production.
6. The weighted average method separates beginning inventory and current production to compute cost per unit of production.
7. The FIFO method separates beginning inventory and current production to compute cost per unit of production.
8. The numerator in the formula for equivalent units includes all beginning inventory costs when using the weighted average costing assumption.
9. The numerator in the formula for equivalent units includes all beginning inventory costs when using the FIFO costing assumption.
10. The weighted average costing method assumes that units in beginning inventory are the first units transferred.
11. The FIFO costing method assumes that units in beginning inventory are the first units transferred.
12. Standard costing is compatible with both FIFO and weighted average methods of costing
13. A hybrid costing system would be appropriate for a company that manufactures cake flour.
14. A hybrid costing system would be appropriate for a company that manufactures several varieties of jam.
15. Using FIFO costing, equivalent units of production (EUP) can be determined by subtracting EUP's in Beginning work in process from weighted average EUP.
16. Weighted average equivalent units of production (EUP) can be determined by adding EUP's in ending work in process to units transferred out.
17. Continuous production losses are assumed to occur uniformly throughout the process.
18. Discrete production losses are assumed to occur throughout the process.

19. Discrete production losses are assumed to occur at the end of a process.
 20. Continuous production losses are assumed to occur at the end of a process
 21. Abnormal continuous losses are absorbed by all units in ending inventory and transferred out on a EUP basis.
 22. Normal continuous losses are absorbed by all units in ending inventory and transferred out on a EUP basis.
 23. Costs of normal shrinkage and normal continuous losses in a process costing environment are handled by the method of neglect.
 24. Costs of normal shrinkage and normal continuous losses in a process costing environment are handled by the method of accretion.
 25. A continuous loss is assumed to occur at a specific point in the production process.
 26. A discrete loss is assumed to occur at a specific point in the production process.
 27. Abnormal spoilage is always accounted for on an equivalent unit basis.
28. To calculate weighted-average equivalent production you do not need to know the number of units in the beginning inventory.
 29. Equivalent production calculated using FIFO is higher than equivalent production calculated using weighted average.
 30. Departmental overhead rates can be used by both job-order and process costing firms.
 31. If a company has no inventories, the weighted-average approach and the FIFO approach will result in the same income.
 32. Although weighted average and FIFO may give different values for inventory, the resulting income will always be the same.

Problems

Problem I

Hampton Textile Co., manufactures a variety of fabrics. All materials are introduced at the beginning of production; conversion cost is incurred evenly through manufacturing. The Weaving Department had 2,000 units of work in process on April 1 that were 30% complete as to conversion costs. During April, 9,000 units were completed and on April 30, 4,000 units remained in production, 40% complete with respect to conversion costs.

1. *The equivalent units of direct materials for April?*
2. *The equivalent units of conversion for April?*

Problem II

Majestic, which uses a process-costing system, adds material at the beginning of production and incurs conversion cost evenly throughout manufacturing. The following selected information was taken from the company's accounting records:

Total equivalent units of materials: 5,000
 Total equivalent units of conversion: 4,400
 Units started and completed during the period: 3,500

3. *On the basis of this information, the ending work-in-process inventory's stage of completion is? 60%.*

Problem III

Tulsa Corporation, which adds materials at the beginning of production, uses a weighted-average process-costing system. Consider the data that follow.

	<u>Number of Units</u>	<u>Cost of Materials</u>
Beginning work in process	40,000	\$ 80,600
Started in June	60,000	124,400
Production completed	75,000	
Ending work in process	25,000	

4. *The company's cost per equivalent unit for materials is?*

Problem IV

5. Garrison Company uses a weighted-average process-costing system. Company records disclosed that the firm completed 50,000 units during the month and had 10,000 units in process at month-end, 25% complete. Conversion costs associated with the beginning work-in-process inventory amounted to \$105,000, and amounts that relate to the current month totaled \$840,000. If conversion is incurred uniformly throughout manufacturing, Garrison's equivalent-unit cost is?

Problem V

South River Chemical manufactures a product called Zbek. Direct materials are added at the beginning of the process, and conversion activity occurs uniformly throughout production. The beginning work-in-process inventory is 60% complete with respect to conversion; the ending work-in-process inventory is 20% complete. The following data pertain to May:

	<u>Units</u>		
Work in process, May 1	15,000		
Units started during May	60,000		
Units completed and transferred out	68,000		
Work in process, May 31	7,000		
		<u>Total</u>	<u>Direct Materials</u>
Costs:			<u>Conversion Costs</u>
Work in process, May 1	\$	\$16,500	\$ 24,750
	41,250		
Costs incurred during May		<u>72,000</u>	<u>162,630</u>
	<u>234,630</u>		
Totals	<u>\$275,88</u>	<u>\$88,500</u>	<u>\$187,380</u>
	<u>0</u>		

Using the weighted-average method of process costing...

6. *The equivalent units of direct materials total?*
7. *The equivalent units of conversion activity total?*
8. *The cost per unit of direct materials is?*
9. *The cost per unit of conversion activity is?*
10. *The cost of goods completed and transferred during May is?*
11. *The total costs remaining in work in process on May 31?*

Problem VI

Copley uses a weighted-average process-costing system. All materials are added at the beginning of the process; conversion costs are incurred evenly throughout production. The company finished 40,000 units during the period and had 15,000 units in progress at year-end, the latter at the 40% stage of completion. Total material costs amounted to \$220,000; conversion costs were \$414,000.

12. *The cost of goods completed is?*
13. *The cost of the ending work in process is?*

Problem VII

National, Inc., uses a weighted-average process-costing system. All materials are introduced at the start of manufacturing; in contrast, conversion cost is incurred uniformly throughout production. The company had respective work-in-process inventories on May 1 and May 31 of 42,000 units and 50,000 units, the latter of which was 70% complete. The production supervisor noted that National completed 85,000 units during the month.

Costs in the May 1 work-in-process inventory were subdivided as follows: materials, \$51,000; conversion, \$148,000. During May, National charged production with \$124,500 of material and \$956,000 of conversion, resulting in a material cost per equivalent unit of \$1.30.

14. *Determine the number of units that National started during May.*
15. *Compute the number of equivalent units with respect to conversion cost.*
16. *Determine the conversion cost per equivalent unit.*
17. *Compute the cost of the May 31 work-in-process inventory.*

Problem VIII

18. Weighted-average EUP is 11,400 units. Beginning inventory was 1,000 units 60% complete, ending inventory is 2,000 units 20% complete. The number of units completed is?
19. Dewey Company had a beginning inventory of 3,000 units 35% complete, and an ending inventory of 2,500 units 20% complete. If 17,500 units were completed, FIFO EUP is?
20. Cheatem has a weighted-average EUP of 30,000 units. Beginning inventory was 4,000 units 40% complete; ending inventory was 5,000 units 60% complete. FIFO EUP is?
21. Howe has a FIFO EUP of 46,580 units. Beginning inventory of 6,500 units was 80% complete; the ending inventory of 2,800 units was 60% complete. How many units were completed during the period?
22. Howe has a FIFO EUP of 46,580 units. Beginning inventory of 6,500 units was 80% complete; the ending inventory of 2,800 units was 60% complete. Weighted-average EUP is?

Problem IX

Nikel Company uses FIFO process costing. Data are as follows:

Beginning inventory 40% complete	5,000 units
Units completed during period	100,000 units
Ending inventory 70% complete	9,000 units

The cost of the beginning inventory was \$2,900 and current period production costs were

\$166,880.

23. *Compute equivalent production.*
24. *Compute the unit cost.*
25. *Compute the cost of the ending inventory of work in process.*
26. *Compute the cost of goods completed and transferred to finished goods inventory.*

Problem X

The following data are available for 2014 for Scottso, which uses weighted-average process costing.

Beginning inventory (40% complete)	3,000 units
Units started during 2014	52,000 units
Units completed during 2014	50,000 units
Ending inventory (70% complete)	5,000 units
Costs of inventory at beginning of 2014	\$2,750
Production costs incurred during 2014	\$83,920

27. *Compute equivalent production for 2014.*
28. *Compute the unit cost for 2014 to the nearest cent.*
29. *Compute the cost of the ending inventory of work in process.*
30. *Compute the cost of goods completed and transferred to finished goods.*
31. *Scottso now uses FIFO. Compute ending inventory of work in process.*

Problem XI

Molitor Inc. has the following data for July:

Gallons in beginning inventory	13,000 gallons
Gallons completed in July	52,500 gallons
Gallons in ending inventory	7,500 gallons
Percentage complete:	
Materials	100 %
Conversion costs	45 %

<u>Costs</u>	<u>Materials</u>	<u>Conversion Costs</u>
Beginning Inventory	\$ 56,300	\$ 33,600
Incurred during July	\$321,700	\$256,950

Molitor uses the weighted-average method of costing.

32. *Compute the equivalent units of production for materials and for conversion costs for the month of July*
33. *Compute the unit costs for each cost factor.*
34. *Compute the cost of finished gallons for July.*
35. *Compute the cost of ending work in process.*

Problem XII

Yount Inc. has the following data for September:

Gallons in beginning inventory	8,000 gallons
Percentage complete:	
Materials	100 %
Conversion costs	60 %
Gallons completed in September	72,500 gallons

Gallons in ending inventory 10,000 gallons
 Percentage complete:
 Materials 100 %
 Conversion costs 75 %

	<u>Costs</u>	<u>Materials</u>	<u>Conversion Costs</u>
Beginning Inventory		\$109,730	\$ 38,950
Incurred during September		\$968,500	\$661,760

Yount uses the FIFO method of costing.

36. Compute the equivalent units of production for materials and for conversion costs for the month of September.
37. Compute the unit costs for each cost factor.
38. Compute the cost of finished gallons for September.
39. Compute the cost of ending work in process.

Problem XIII

Reed Company. has the following information for November:

Beginning Work in Process Inventory (70% complete as to conversion)	6,000 units
Started	24,000 units
Ending Work in Process Inventory (10% complete as to conversion)	8,500 units

Beginning WIP Inventory Costs:

Material	\$23,400
Conversion	50,607

Current Period Costs:

Material	\$31,500
Conversion	76,956

All material is added at the start of the process and all finished products are transferred out.

40. How many units were transferred out in November?
41. Assume that weighted average process costing is used. What is the cost per equivalent unit for material?
42. Assume that FIFO process costing is used. What is the cost per equivalent unit for conversion?

Problem XIV

The Holiday Company makes wreaths in two departments: Forming and Decorating. Forming began the month with 500 wreaths in process that were 100 percent complete as to material and 40 percent complete as to conversion. During the month, 6,500 wreaths were started. At month end, Forming had 2,100 wreaths that were still in process that were 100 percent complete as to material and 50 percent complete as to conversion. Assume Forming uses the weighted average method of process costing. Costs in the Forming Department are as follows:

Beginning Work in Process Costs:

Material	\$1,000
Conversion	1,500

Current Costs:

Material	\$3,200
Conversion	5,045

The Decorating Department had 600 wreaths in process at the beginning of the month that were 80 percent complete as to material and 90 percent complete as to conversion. The department had 300 units in ending Work in Process that were 50 percent complete as to material and 75 percent complete as to conversion. Decorating uses the FIFO method of process costing, and costs associated with Decorating are:

Beginning WIP Inventory:

Transferred In	\$1,170
Material	4,320
Conversion	6,210

Current Period:

Transferred In	?
Material	\$67,745
Conversion	95,820

43. How many units were transferred to Decorating during the month?
44. What was the cost transferred out of Forming during the month?
45. Assume 8,000 units were transferred to Decorating. Compute the number of equivalent units in Decorating for material.
46. Assume 8,000 units were transferred to Decorating. Compute the number of equivalent units in Decorating for conversion.
47. Assume that 8,000 units were transferred to Decorating at a total cost of \$16,000. What is the material cost per equivalent unit in Decorating?
48. Assume that 8,000 units were transferred to Decorating at a total cost of \$16,000. What is the conversion cost per equivalent unit in Decorating?

Problem XV

The following information is available for Talmidge Company for the current year:

Beginning Work in Process		Costs of Beginning Work in Process:	
(75% complete)	14,500 units	Material	\$25,100
Started	75,000 units	Conversion	50,000
Ending Work in Process		Current Costs:	
(60% complete)	16,000 units	Material	\$120,000
Abnormal spoilage	2,500 units	Conversion	300,000
Normal spoilage	5,000 units		
(continuous)			
Transferred out	66,000 units		

All materials are added at the start of production.

49. Using weighted average, what are equivalent units for material?

50. Using weighted average, what are equivalent units for conversion costs?
51. What is the cost per equivalent unit for material using weighted average?
52. Using FIFO, what are equivalent units for conversion costs?
53. Assume that the FIFO EUP cost for material and conversion are \$1.50 and \$4.75, respectively. Using FIFO what is the total cost assigned to the units transferred out?

Problem XVI

Bowman Company has the following information for July:

Units started	100,000	units
Beginning Work in Process: (35% complete)	20,000	units
Normal spoilage (discrete)	3,500	units
Abnormal spoilage	5,000	units
Ending Work in Process: (70% complete)	14,500	units
Transferred out	97,000	units
Beginning Work in Process Costs:		
Material	\$15,000	
Conversion	10,000	

All materials are added at the start of the production process. Bowman Company inspects goods at 75 percent completion as to conversion.

54. Assume that the costs per EUP for material and conversion are \$1.00 and \$1.50, respectively. What is the amount of the period cost for July using FIFO?
55. Assume that the costs per EUP for material and conversion are \$1.00 and \$1.50, respectively. Using FIFO, what is the total cost assigned to the transferred-out units (rounded to the nearest dollar)?
56. Assume that the costs per EUP for material and conversion are \$1.00 and \$1.50, respectively. What is the cost assigned to normal spoilage, using weighted average?

Multiple Choice		
1. A	21. C	41. D
2. D	22. D	42. A
3. E	23. A	43. B
4. D	24. B	44. C
5. B	25. C	45. C
6. A	26. C	46. D
7. D	27. A	47. D
8. E	28. A	48. C
9. D	29. D	49. D
10. E	30. E	50. A
11. E	31. C	51. C
12. D	32. B	52. B
13. D	33. D	53. D
14. B	34. A	54. D
15. C	35. B	55. D
16. C	36. B	56. D
17. D	37. B	57. D
18. D	38. B	58. B
19. C	39. B	
20. A	40. A	
True-False		
1. T	12. F	23. T
2. T	13. F	24. F
3. T	14. F	25. F
4. T	15. T	26. T
5. F	16. T	27. T
6. F	17. T	28. T
7. T	18. F	29. F
8. T	19. T	30. T
9. F	20. F	31. T
10. F	21. F	32. F
11. T	22. T	
Problems		
1. 13,000.	20. 28,400	39. 196,000
2. 10,600.	21. 50,100	40. 21,500
3. 60%.	22. 51,780.	41. 1.83
4. 2.05.	23. 104,300	42. 4.24
5. 18.00.	24. 1.60	43. 4,900
6. 75,000.	25. 10,080	44. 8,330
7. 69,400.	26. 159,700	45. 7,970

8. 1.18.	27. 53,500	46. 7,985
9. 2.70.	28. 1.62	47. 8.50
10. 263,840.	29. 5,670	48. 12.00
11. 12,040.	30. 81,000	49. 84,500
12. 520,000.	31. 5,616	50. 78,100
13. 114,000.	32. M- 60,000; CC-55,875	51. 1.72
14. 93,000 units	33. M-6.30; CC-5.20	52. 67,225
15. 120,000	34. 603,750	53. 414,194
16. 9.20	35. 64,800	54. 10,625
17. 387,000	36. M-74,500; CC-75,200	55. 244,438
18. 11,000.	37. M-13.00; CC-8.80	56. 7,437.50
19. 16,950.	38. 1,582,940	