

## Chapter 2--Basic Cost Management Concepts

## Student:

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1. A(n) $\qquad$ is a set of interrelated parts that performs one or more processes to accomplish specific objectives.
A. cost objective
B. system
C. activity
D. cost driver
2. In a company that supplies garlic bread to pizza restaurants, which of the following would be considered an input?
A. delivered garlic bread
B. flour
C. baking
D. none of the above
3. In a company that supplies garlic bread to pizza restaurants, which of the following would NOT be considered an input?
A. delivered garlic bread
B. flour
C. garlic
D. oil
4. In a company that supplies garlic bread to pizza restaurants, which of the following would NOT be considered a transforming process?
A. delivered garlic bread
B. baking
C. packaging
D. mixing
5. In a company that supplies garlic bread to pizza restaurants, which of the following would be considered a transforming process?
A. delivered garlic bread
B. baking
C. garlic
D. oil
6. In a company that supplies garlic bread to pizza restaurants, delivered garlic bread to pizza restaurants would be a(n)
A. interrelated part.
B. input.
C. output.
D. process.
7. In an accounting information system, which of the following is NOT a transformation process?
A. collecting data
B. analyzing data
C. performance reports
D. summarizing data
8. The overall objective of accounting information systems is to
A. provide information to users.
B. manage the organization.
C. prepare financial reports.
D. report to the government.
9. In an accounting information system, the inputs are usually
A. financial statements.
B. analyzing data.
C. performance reports.
D. economic events.
10. Which of the following is a cost management subsystem designed to assign costs to individual products and services and other objects, as specified by management?
A. financial accounting information system
B. operational control information system
C. cost accounting information system
D. all of the above
11. Which of the following is a cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control of activities?
A. financial accounting information system
B. operational control information system
C. cost accounting information system
D. all of the above
12. The $\qquad$ is an accounting information subsystem that is primarily concerned with producing outputs for external users.
A. cost management information system
B. computer system
C. internal accounting system
D. financial accounting information system
13. High-quality cost management systems should have an organization-wide perspective. Which of the following would NOT be a benefit of a cost management system?
A. increases speed by ignoring non-financial information
B. reduces duplicate data storage and use of data
C. improves timeliness of reports
D. increases the efficiency of generating reliable and accurate information
14. Which of the following is a major subsystem of the cost accounting information system?
A. ERP
B. operational control information system
C. OLAP
D. EDI
15. A(n) $\qquad$ is a computerized information system that strives to input data once and make it available to people across the company for different purposes.
A. cost management information system
B. enterprise resource planning system
C. internal accounting system
D. financial accounting information system
16. The $\qquad$ is a cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control activities.
A. cost accounting information system
B. financial accounting system
C. operational control information system
D. tax reporting system
17. Which is NOT one of the features of an operational control information system?
A. to assist in continuous improvement of all aspects of the business
B. to improve the value received by customers
C. to improve profits by improving value
D. to provide product cost information needed by management
18. $\qquad$ represents the resources given up that are expected to bring a current or future benefit to the organization.
A. Cost
B. Expired cost
C. Expense
D. Loss
19. $\qquad$ is(are) the cash or cash equivalent value sacrificed for goods and services that are expected to bring a current or future benefit to the organization.
A. Expenses
B. Cost
C. An activity
D. A loss
20. A cost used up in the production of revenues is $\mathrm{a}(\mathrm{n})$
A. unexpired cost.
B. expense.
C. loss.
D. asset.
21. Which of the following is an example of a loss?
A. the cost of a product delivered to a customer
B. the cost of a delivered advertising campaign
C. the cost of the purchase of equipment
D. the write-off of an obsolete product
22. Which of the following is an example of an expense?
A. the cost of a product delivered to a customer
B. the cost of a proposed advertising campaign
C. the cost of the purchase of equipment
D. the write-off of an obsolete product
23. Which of the following is an example of a possible cost object?
A. a product
B. a customer
C. a department
D. All of these could be possible cost objects.
24. Traceability is a function of
A. an indirect relationship to the cost object.
B. distortion.
C. a causal relationship.
D. none of these.
25. Factors that cause changes in resource usage, activity usage, costs and revenues are called
A. indirect costs.
B. drivers.
C. assignments.
D. cost objects.
26. Which cost assignment method would likely assign the cost of an assembly-line supervisor when the assembly line is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
27. Which cost assignment method would likely assign the cost of heating in a plant that makes chairs and go-carts when the chair product line is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
28. Which cost assignment method would likely assign the cost of maintenance for machines in a department that does cutting when the cutting activity is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
29. Which of the following expenses incurred by a department store is a direct cost for the women's shoe department?
A. the salespersons' commissions in the women's shoe department
B. the salaries for individuals working in the accounting department
C. the advertising expense for the service department
D. the allocated rent expense for the clothing department
30. Which of the following costs incurred by a chair manufacturer would be traced to the product cost through direct tracing?
A. the depreciation on factory equipment
B. the supervisor's salary
C. the insurance on the factory building
D. the woodworker's salary
31. Direct costs
A. are incurred for the benefit of the business as a whole.
B. would continue even if a particular product were discontinued.
C. can be assigned to products only by a process of allocation.
D. are those costs that can be easily and accurately traced to a cost object.
32. The direct costs of operating a university computer center would NOT include
A. rent paid for computers.
B. a fair share of university utilities.
C. paper used by the center.
D. computer consultants' salaries.
33. Which of the following methods of assigning costs is based on convenience or some assumed linkage, and reduces the overall accuracy of the cost assignments?
A. direct tracing
B. driver tracing
C. allocation
D. all of the above
34. Which of the following costs incurred by a bus manufacturer would NOT be directly attributable to the finished product?
A. the wages paid to assembly-line production workers
B. the tires for buses
C. the windshields for buses
D. the depreciation on factory building
35. $\qquad$ refers to the assignment of indirect costs to cost objects.
A. Allocation
B. Direct tracing
C. Physical observation
D. Cost management
36. An example of a tangible product, rather than a service, would be
A. housekeeping.
B. insurance coverage.
C. paper.
D. medical exam.
37. An example of a service, rather than a tangible product, would be
A. radios.
B. cloths.
C. trucks.
D. medical exams.
38. Which of the following is a service organization?
A. grocery store
B. department store
C. cattle ranch
D. CPA firm
39. Which of the following costs would be included in value-chain product costs?
A. research and development
B. production
C. customer service
D. all of the above
40. Value-chain product costs include which of the following?
A. customer service costs
B. marketing costs
C. research and development
D. all of the above
41. Product value-chain costs assist managers in meeting which of the following objectives?
A. product mix decisions
B. tactical profitability analysis
C. external financial reporting
D. strategic design decisions
42. Which of the following costs would NOT be included in operating product costs?
A. research and development
B. production
C. marketing
D. all of the above
43. Which of the following costs would be included in traditional product costs used for external reporting?
A. research and development
B. production
C. marketing
D. all of the above
44. Which of the following costs is NOT a product cost?
A. rent on an office building
B. indirect labor
C. repairs on manufacturing equipment
D. steel used in inventory items produced
45. Which of the following costs is an example of product costs?
A. selling commissions
B. nonfactory office salaries
C. direct materials
D. advertising expense
46. Which of the following costs incurred by a furniture manufacturer would be a product cost?
A. lumber
B. office salaries
C. commissions paid to sales staff
D. controller's salary
47. Which of the following costs is a product cost?
A. lease payments on cars used by salespersons
B. president's salary
C. property taxes on factory building
D. depreciation on office equipment
48. Which of the following costs is a period cost for a manufacturing company?
A. controller's salary
B. wages of machine operators
C. insurance on factory equipment
D. fringe benefits for factory employees
49. In a traditional manufacturing company, product costs include
A. direct materials only.
B. direct materials, direct labor, and factory overhead.
C. direct materials and direct labor only.
D. direct labor only.
50. Which of the following costs is an indirect product cost?
A. property taxes on plant facilities
B. wages of assembly workers
C. materials used
D. president's salary
51. If total warehousing cost for the year amounts to $\$ 350,000$, and $40 \%$ of the warehousing activity is associated with finished goods and $60 \%$ with direct materials, how much of the cost would be charged as a product cost?
A. $\$ 70,000$
B. $\$ 140,000$
C. $\$ 210,000$
D. $\$ 350,000$
52. All of Jill Enterprise's operations are housed in one building with the costs of occupying the building accumulated in a separate account. The total costs incurred in May amounted to $\$ 24,000$. The company allocates these costs on the basis of square feet of floor space occupied. Administrative offices, sales offices, and factory operations occupy $9,000,6,000$, and 30,000 square feet, respectively. How much will be classified as a product cost for May?
A. $\$ 4,800$
B. $\$ 3,200$
C. $\$ 16,000$
D. $\$ 24,000$
53. Which of the following costs would be included as part of direct materials in the production of an automobile?
A. glue for a sticker applied to the automobile
B. steel
C. gasoline used to fuel machines in production
D. none of these
54. Which of the following costs would be considered a direct material?
A. glue in the production of automobiles
B. labor used to finish product
C. depreciation on the corporation's office building
D. paper used in the production of books
55. The difference between a supply and an indirect material is that
A. supplies are not necessary for production.
B. indirect materials are not physically part of the product.
C. supplies are not necessary for production and are not physically part of the product.
D. supplies are necessary for production and are not physically part of production.
56. Which of the following costs would be included as part of direct labor?
A. a cutter in the production of shelving
B. a materials handler
C. an assembly-line supervisor
D. a janitor
57. Which of the following costs would be included as part of factory overhead?
A. depreciation of plant equipment
B. paint used for product finish
C. depreciation on the corporation's office building
D. paper used in the production of books
58. Which of the following items would NOT be classified as part of factory overhead of a firm that makes sailboats?
A. factory supplies used
B. canvas used in sail
C. depreciation of factory buildings
D. indirect materials
59. Wages paid to a janitor in the factory would be classified as
A. direct labor.
B. direct janitor salaries.
C. supervisor salaries.
D. factory overhead.
60. All of the following costs are included in factory overhead EXCEPT
A. factory supplies.
B. indirect labor.
C. plant foreman's salary.
D. direct labor.
61. Selling and administrative costs are classified as
A. product costs.
B. conversion costs.
C. period costs.
D. factory overhead.
62. Which of the following costs is NOT a period cost?
A. steel used in steel railings
B. receptionist's salary
C. depreciation on sales staffs' cars
D. sales commission
63. Which of the following costs is a period cost?
A. depreciation of factory equipment
B. transportation-in for material shipments
C. amortization of a patent for the company's product
D. depreciation of office computers
64. An example of a period cost is
A. insurance on factory equipment.
B. president's salary.
C. property taxes on factory building.
D. wages of factory custodians.
65. An example of a nonproduction cost is
A. wages paid to assembly-line employees.
B. manufacturing supplies.
C. insurance on manufacturing facilities.
D. the treasurer's salary.
66. $\qquad$ are expensed in the period in which they are incurred.
A. Direct materials
B. Product costs
C. Factory overhead
D. Nonproduction costs
67. Order-getting costs would NOT include
A. marketing costs.
B. customer service costs.
C. advertising.
D. salaries of sales personnel.
68. Period costs do NOT include
A. order-getting costs.
B. order-making costs.
C. order-filling costs.
D. All of these are period costs.
69. Prime product costs include
A. only factory overhead.
B. only direct labor.
C. direct labor and factory overhead.
D. direct materials and direct labor.
70. The sum of direct labor and factory overhead is referred to as
A. period costs
B. conversion costs
C. prime costs
D. direct product costs
71. Conversion costs do NOT include
A. direct materials.
B. direct labor.
C. factory overhead.
D. any of these costs
72. $\qquad$ are expensed in the period in which they are incurred.
A. Direct materials
B. Product costs
C. Noninventoriable costs
D. Inventoriable costs
73. Product costs are converted from cost to expense when
A. units are completed.
B. materials are purchased.
C. units are sold.
D. materials are requisitioned.
74. A company has purchased some steel to use in the production of steel railings. If this steel has NOT been put into production, it would be classified as
A. direct materials inventory.
B. factory supplies.
C. work-in-process inventory.
D. finished goods inventory.
75. The income statement prepared for external reporting is
A. based on a functional classification.
B. referred to as absorption-costing income.
C. called full-costing income.
D. all of the above.
76. Which of the following costs would NOT be included in calculating inventory values under the absorption-costing basis?
A. direct materials
B. fixed overhead
C. selling and administrative expenses
D. direct labor
77. When calculating the absorption-costing income for external reporting
A. all manufacturing costs ultimately become nonmanufacturing costs.
B. all manufacturing costs are product costs and product costs are never expensed.
C. the costs of selling manufactured products are classified as product costs.
D. all selling and administrative costs are classified as nonmanufacturing costs.
78. Which of the following accounts would appear on the financial statements of ONLY a manufacturing firm?
A. bonds payable
B. materials inventory
C. prepaid insurance
D. retained earnings
79. Which type of inventory is normally sold to other organizations?
A. direct materials
B. factory supplies
C. work in process
D. finished goods
80. The merchandise inventory in a merchandising business corresponds most closely to which of the following items in a manufacturing firm?
A. materials inventory
B. cost of goods available for sale
C. cost of goods manufactured
D. finished goods inventory
81. Information from the records of Place, Inc., for December 2006 was as follows:

| Sales | $\$ 820,000$ |
| :--- | :--- |
| Selling and administrative expenses | 140,000 |
| Direct materials purchases | 176,000 |
| Direct labor | 200,000 |
| Factory overhead | 270,000 |


|  | $\underline{\text { Inventories }}$ |  |
| :--- | :--- | :--- |
| Direct materials | $\underline{\text { December } 1}$ | $\underline{\text { December 31 }}$ |
| Work in process | 24,000 | 28,000 |
| Finished goods | 50,000 | 56,000 |

The net income for the month of December is
A. $\$ 644,000$.
B. $\$ 36,000$.
C. $\$ 636,000$.
D. $\$ 180,000$.
82. Information from the records of the Cain Corporation for August 2006 was as follows:

| Sales | $\$ 1,230,000$ |  |
| :--- | :--- | :--- |
| Selling and administrative expenses | 210,000 |  |
| Direct materials used | 264,000 |  |
| Direct labor | 300,000 |  |
| Factory overhead | 405,000 |  |
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| Anventories |  |  |
| Direct materials | $\$ 36,000$ | August 31,2006 |
| Work in process | 75,000 | 84,000 |
| Finished goods | 69,000 | 57,000 |

The conversion costs are
A. $\$ 960,000$.
B. $\$ 1,179,000$.
C. $\$ 705,000$.
D. $\$ 564,000$.
83. Information from the records of the Scully Company for July 2006 was as follows:

| Sales | $\$ 307,500$ |
| :--- | :--- |
| Selling and administrative expenses | 52,500 |
| Direct materials used | 66,000 |
| Direct labor | 75,000 |
| Factory overhead | 101,250 |

Direct materials
Work in process
Finished goods

| Inventories |  |
| :---: | :---: |
| July 1, 2006 | July 31, 2006 |
| \$ 8,000 | \$10,500 |
| 18,750 | 21,000 |
| 17,250 | 14,250 |

Prime costs for July were
A. $\$ 240,000$.
B. $\$ 294,750$.
C. $\$ 176,250$.
D. $\$ 141,000$.
84. If beginning work-in-process inventory is $\$ 120,000$, ending work-in-process inventory is $\$ 160,000$, cost of goods manufactured is $\$ 400,000$, and direct materials used are $\$ 100,000$, what are the conversion costs?
A. $\$ 140,000$
B. $\$ 280,000$
C. $\$ 300,000$
D. $\$ 340,000$
85. The following information pertains to Fry Enterprises:

| Cost of goods manufactured | $\$ 450,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 210,000 |
| Ending work-in-process inventory | 180,000 |
| Manufacturing overhead | 150,000 |

What are the prime costs for the year?
A. $\$ 360,000$
B. $\$ 480,000$
C. $\$ 270,000$
D. $\$ 300,000$
86. Inventory balances for Ray, Inc., in March 2006 were as follows:

|  | March 1,2006 | March 31, 2006 |
| :--- | :--- | :---: |
| Raw materials | $\$ 1,125$ | $\$ 875$ |
| Work in process | 2,000 | 1,550 |
| Finished goods | 4,500 | 3,750 |

During March, purchases of direct materials were $\$ 1,500$. Direct labor and factory overhead costs were $\$ 2,500$ and $\$ 3,500$, respectively.
Conversion costs for March were
A. $\$ 6,000$.
B. $\$ 7,500$.
C. $\$ 7,750$.
D. $\$ 8,200$.
87. Inventory balances for the James Enterprises in February 2006 were as follows:

|  | February 1, 2006 | February 28, 2006 |
| :--- | :---: | :--- |
| Raw materials | $\$ 27,000$ | $\$ 21,000$ |
| Work in process | 48,000 | 37,200 |
| Finished goods | 108,000 | 90,000 |

Prime costs for February were
A. $\$ 81,000$.
B. $\$ 87,000$.
C. $\$ 96,000$.
D. $\$ 102,000$.
88. The sum of the total additions to work in process during a period is
A. total manufacturing costs added.
B. factory overhead applied.
C. material used.
D. cost of goods manufactured.
89. The ending work-in-process inventory is deducted on the
A. balance sheet.
B. statement of cost of goods manufactured.
C. income statement.
D. statement of cash flows.
90. Cost of goods sold equals cost of goods manufactured
A. when finished goods inventories remain constant.
B. when work-in-process inventories remain constant.
C. plus beginning work-in-process inventory minus ending work-in-process inventory.
D. when materials inventories remain constant.
91. The following information has been provided:

| Cost of goods manufactured | $\$ 100$ |
| :--- | :---: |
| Work in process: |  |
| $\quad$ Beginning | 20 |
| Ending | 30 |
| Direct labor | $?$ |
| Direct materials used | 45 |

What is the amount of direct materials used?
A. $\$ 25$
B. $\$ 30$
C. $\$ 35$
D. $\$ 100$
92. Inventory balances for Rude, Inc., in April 2006 were as follows:

|  | April 1, 2006 | April 30, 2006 |
| :--- | :--- | :--- |
| Materials | $\$ 9,000$ | $\$ 7,000$ |
| Work in process | 16,000 | 12,400 |
| Finished goods | 36,000 | 30,000 |

During April, purchases of direct materials were $\$ 18,000$. Direct labor and factory overhead costs were $\$ 20,000$ and $\$ 28,000$, respectively.
The cost of goods manufactured in April was
A. $\$ 68,000$.
B. $\$ 77,600$.
C. $\$ 74,000$.
D. $\$ 71,600$.
93. Selected data concerning the past year's operations of the Beach Corporation are as follows:

| Selling and administrative expenses |  | $\$ 225,000$ |
| :--- | :--- | :--- |
| Direct materials used |  | 397,500 |
| Direct labor (50,000 hours) | 450,000 |  |
| Factory overhead application rate | 8 per DLH |  |
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|  | $\underline{\text { Inventories }}$ | Ending |
| Direct material | $\underline{\text { Beginning }}$ | $\$ 75,000$ |
| Work in process | 112,500 | 135,000 |
| Finished goods | 60,000 | 37,500 |

The cost of direct materials purchased is
A. $\$ 397,500$.
B. $\$ 390,000$.
C. $\$ 367,500$.
D. $\$ 405,000$.
94. Selected data concerning the past year's operations of the Karl Enterprises are as follows:

| Selling and administrative expenses |  | $\$ 75,000$ |
| :--- | :--- | :--- |
| Direct materials used | 265,000 |  |
| Direct labor (25,000 hours) | 300,000 |  |
| Factory overhead application rate |  | 16 per DLH |
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|  | $\underline{\text { Inventories }}$ |  |
| Direct materials | $\underline{\text { Beginning }}$ | Ending <br> Work in process |
| Finished goods | 75,000 | 945,000 |

What is the cost of goods manufactured?
A. $\$ 965,000$
B. $\$ 1,115,000$
C. $\$ 950,000$
D. $\$ 955,000$
95. The cost of units completed during a period is called
A. cost of goods sold.
B. cost of goods manufactured.
C. current manufacturing costs.
D. finished goods inventory.
96. Selected data concerning the past year's operations of the Wood Corporation are as follows:

Selling and administrative expenses
Direct materials used
Direct labor (100,000 hours)
Factory overhead application rate

Work in process
Finished goods
\$300,000
530,000
600,000
5 per DLH

Inventories
Beginning
\$150,000
80,000

Ending \$160,000 50,000

The cost of goods sold is
A. $\$ 1,630,000$.
B. $\$ 1,880,000$.
C. $\$ 1,600,000$.
D. $\$ 1,650,000$.
97. The following information has been provided:

Cost of goods manufactured \$75
Work in process
Beginning 12
Ending 14
Direct labor 40
Materials placed in production $\quad 15$
Factory overhead ?

What is the amount of factory overhead?
A. $\$ 20$
B. $\$ 22$
C. $\$ 14$
D. $\$ 55$
98. Information from the records of the Tyler Enterprises for March 2006 was as follows:

| Sales | $\$ 41,000$ |  |
| :--- | :--- | :--- |
| Direct labor |  | 10,000 |
| Selling and administrative expenses |  | 7,000 |
| Direct materials purchases | 6,000 |  |
| Factory overhead | 13,500 |  |
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| Dinventories | $\$ 1,400$ |  |
| Work in process | $\underline{\text { March 1,2006 }}$ | 2,800 |
| Finished goods | 2,200 | 1,900 |

Tyler Enterprises' cost of goods manufactured in March is
A. $\$ 29,300$.
B. $\$ 29,700$.
C. $\$ 29,200$.
D. $\$ 29,000$.
99. Assume the following information:

Net direct materials purchase cost
\$225,000
Total direct materials used
275,000
Beginning direct materials inventory
125,000

The ending direct materials inventory is
A. $\$ 175,000$.
B. $\$ 75,000$.
C. $\$ 50,000$.
D. $\$ 100,000$.
100. Newton Company recently had a fire in its accounting office, destroying most of its records. Only the following information could be salvaged for 2006:

| Direct labor | $\$ 400,000$ |
| :--- | :--- |
| Factory overhead | 200,000 |
| Cost of goods sold | 800,000 |
| Work in process, January 1 | 80,000 |
| Finished goods, January 1 | 160,000 |
| Work in process, December 31 | 100,000 |
| Finished goods, December 31 | 120,000 |

The cost of direct materials used in production during 2006 is
A. $\$ 140,000$.
B. $\$ 180,000$.
C. $\$ 200,000$.
D. $\$ 260,000$.
101. The cost of goods sold for a manufacturing firm for the month of January was $\$ 90,000$. The finished goods inventory was $\$ 15,000$ on January 1 and $\$ 17,500$ on January 31 . Beginning and ending work-in-process
inventories were $\$ 20,000$ and $\$ 25,000$, respectively. What was the cost of goods manufactured during January?
A. $\$ 92,500$
B. $\$ 90,000$
C. $\$ 87,500$
D. $\$ 97,500$
102. Assume the following information for Knight Corporation for the year ended December 31, 2006:

| Sales | $\$ 2,250$ |
| :--- | :--- |
| Cost of goods manufactured for the year | 1,350 |
| Beginning finished goods inventory | 450 |
| Ending finished goods inventory | 495 |
| Selling and administrative expenses | 300 |

What is the cost of goods sold for the year ended December 31, 2006?
A. $\$ 1,305$
B. $\$ 1,605$
C. $\$ 1,350$
D. $\$ 1,650$
103. Assume the following data for Gross, Inc., for February:

| Beginning finished goods inventory | $\$ 60,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 40,000 |
| Ending work-in-process inventory | 80,000 |
| Ending finished goods inventory | 50,000 |
| Factory overhead costs | 200,000 |
| Direct materials used | 160,000 |
| Direct labor | 100,000 |

What is the cost of goods manufactured for February?
A. $\$ 470,000$
B. $\$ 420,000$
C. $\$ 460,000$
D. $\$ 430,000$
104. Assume the following information:

| Direct materials used | $\$ 90,000$ |
| :--- | :--- |
| Direct labor | 130,000 |
| Factory overhead | 150,000 |
| Beginning work-in-process inventory | 15,000 |
| Beginning finished goods inventory | 20,000 |
| Ending work-in-process inventory | 42,000 |
| Selling and administrative expenses | 37,500 |

What was the cost of goods manufactured during the year?
A. $\$ 370,000$
B. $\$ 365,000$
C. $\$ 343,000$
D. $\$ 333,000$
105. Which of the following items would NOT appear on an income statement of a service organization?
A. selling expenses
B. cost of goods sold
C. administrative expenses
D. gross margin
106. Which of the following items is NEVER relevant to the cost flows of a service organization?
A. finished goods inventory
B. materials inventory
C. work-in-process inventory
D. All of these are always relevant.
107. Assume the following data for Graham Services, an architecture firm, for February:

| Beginning materials inventory | $\$ 20,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 40,000 |
| Ending work-in-process inventory | 50,000 |
| Ending materials inventory | 10,000 |
| Actual overhead costs | 100,000 |
| Direct materials used | 60,000 |
| Direct labor | 200,000 |

What is the cost of services sold for February?
A. $\$ 370,000$
B. $\$ 350,000$
C. $\$ 360,000$
D. $\$ 330,000$

## 108. Exhibit 2-1

An appliance repair shop purchased materials costing $\$ 9,000$ in May. The beginning inventory of material parts was $\$ 4,500$ and the ending inventory of material parts was $\$ 4,000$. Payments for direct labor for May totaled $\$ 27,000$, secretarial costs were $\$ 2,000$, and overhead of $\$ 5,000$ was incurred. In addition, $\$ 5,000$ was spent on advertising and $\$ 2,000$ for the franchise name. Revenue for May was $\$ 50,000$.

Refer to Exhibit 2-1. What is the cost of services sold for May?
A. $\$ 41,500$
B. $\$ 43,500$
C. $\$ 50,500$
D. $\$ 40,500$

## 109. Exhibit 2-1

An appliance repair shop purchased materials costing $\$ 9,000$ in May. The beginning inventory of material parts was $\$ 4,500$ and the ending inventory of material parts was $\$ 4,000$. Payments for direct labor for May totaled $\$ 27,000$, secretarial costs were $\$ 2,000$, and overhead of $\$ 5,000$ was incurred. In addition, $\$ 5,000$ was spent on advertising and $\$ 2,000$ for the franchise name. Revenue for May was $\$ 50,000$.

Refer to Exhibit 2-1. What is the gross margin for May?
A. $\$ 41,500$
B. $\$ 43,500$
C. $\$ 1,500$
D. $\$ 8,500$
110. $\qquad$ is (are) a cost accounting system that uses only unit-based activity drivers to assign costs to cost objects.
A. Activity-based management
B. Activity-based costing system
C. Functional-based cost management system
D. Both $a$ and $b$
111. Which of the following would be associated with a functional-based cost accounting information system?
A. setup costs assigned to products using the number of setups as the driver
B. purchasing costs assigned to products using number of direct labor hours as the activity driver
C. customer service costs assigned to products using the number of complaints as the activity driver
D. materials handling costs assigned to products using the number of moves as the activity driver
112. In a functional-based management system, one is NOT likely to find
A. unit- and non-unit-based cost drivers.
B. maximization of individual unit performance.
C. narrow and rigid product costing.
D. allocation intensive cost assignment.
113. Which of the following items would be associated with both a functional-based cost accounting information system and an activity based cost information system?
A. Overhead is assigned on a plant-wide rate based on direct labor hours.
B. Customer service costs are assigned to products using number of complaints as the activity driver.
C. Direct labor cost is assigned to products using direct tracing.
D. None of these.
114. $\qquad$ focuses on the management of activities with the objective of improving the value received by the customer and the profit received by providing this value.
A. Activity-based management
B. Contemporary cost control
C. Functional-based cost management system
D. JIT
115. In a cost management system, the process view does NOT include
A. resources.
B. activities.
C. driver analysis.
D. performance analysis.
116. In a cost management system, the cost view does NOT include
A. resources.
B. activities.
C. driver analysis.
D. products and customers.
117. Which is NOT a benefit of an activity-based cost management system?
A. greater product costing accuracy
B. increased cost of implementing the system
C. improved decision making
D. enhanced strategic planning
118. In an activity-based management system, one is NOT likely to find
A. tracing of costs to activities.
B. only unit-based drivers.
C. broad flexible product costing.
D. systemwide performance maximization.
119. Which of the following is NOT a trait of a functional-based cost management system?
A. unit-based drivers
B. focus on managing activities
C. allocation-intensive
D. narrow and rigid product costing
120. Which of the following is a trait of a functional-based cost management system?
A. unit-based drivers
B. tracing intensive
C. use of both financial and nonfinancial measures of performance
D. detailed activity information
121. Which of the following is a trait of an activity-based cost management system?
A. allocation-intensive
B. narrow and rigid product costing
C. non-unit-based drivers
D. focus on managing costs
122. The optimal level in the trade-off between measurement and error costs is when A. measurement costs are greater than error costs.
B. measurement costs are less than error costs.
C. measurement costs equal error costs.
D. the total of measurement costs and error costs are maximized.
123. Describe a cost management information system, its objectives, and major subsystems.
124. The following items (partial list) are associated with a functional-based cost accounting information system, an activity-based cost accounting information system, or both:

| a. | materials purchasing cost incurrence |
| :--- | :--- |
| b. | assignment of purchasing cost to products using direct labor hours |
| c. | assignment of purchasing cost using number of purchase orders |
| d. | usage of direct materials |
| e. | direct materials cost assigned to products using direct tracing |
| f. | materials handling cost incurrence |
| g. | materials handling cost assigned using direct labor hours |
| h. | materials handling cost assigned using the number of moves as the driver |
| i. | computer |
| j. | materials handling equipment |
| k. | decision to make a part or buy it from a supplier |
| l. | costing out of products |
| m. | report detailing individual product costs |

## Required:

| 1. | For an <br> activity <br> -based <br> cost <br> system, <br> classify <br> the <br> items <br> into <br> one of <br> the <br> followi <br> ng <br> categor <br> ies: <br> a. interrelated parts <br> b. processes <br> c. objectives <br> d. inputs <br> e. outputs <br> f. user actions |
| :---: | :---: |
| 2. | How <br> would <br> the <br> choices <br> differ <br> betwee <br> n the <br> two <br> system <br> s? <br> What <br> are the <br> costs <br> and <br> benefit <br> s of <br> each? |

125. Explain the differences between direct tracing, driver tracing, and allocation.
126. Classify the following costs incurred by a step railing manufacturing company as direct materials, direct labor, factory overhead, or period costs:

| a. | Wages paid to production workers |
| :--- | :--- |
| b. | Utilities in the office |
| c. | Depreciation on machinery in plant |
| d. | Steel |
| e. | Accountant's salary |
| f. | Rent on factory building |
| g. | Rent on office equipment |
| h. | Maintenance workers' wages |
| i. | Utilities in the plant |
| j. | Maintenance on office equipment |

127. Big Foot Athletics designs and manufactures running shoes. A new model of shoes, Fast Track, has been developed and is ready for production.

## Required:

Which costs will the production manager collect from the value chain, and how would these costs be used in different decisions?

```
a. traditional product costs
b. operating product costs
c. value-chain product costs
```

128. Information from the records of the Fisher Enterprises for the month of March 2006 was as follows:

| Purchases of direct materials | $\$ 54,000$ |
| :--- | :--- |
| Indirect labor | 15,000 |
| Direct labor | 31,200 |
| Depreciation on machinery | 9,000 |
| Sales | 165,900 |
| Selling and administrative expenses | 18,900 |
| Rent on factory building | 21,000 |


|  | Inventories |  |
| :--- | :---: | :---: |
|  | $\underline{\text { March 1,2006 }}$ | $\underline{\text { March 31, 2006 }}$ |
| Direct materials | $\$ 24,000$ | $\$ 26,100$ |
| Work in process | 6,300 | 9,600 |
| Finished goods | 15,000 | 17,100 |

Required:
a. Prepare a statement of cost of goods manufactured for the month of March.
b. Prepare an income statement for the month of March.
c. Determine prime and conversion costs.
129. The following information pertains to Davis, Inc.:

| Direct materials purchases | $\$ 62,400$ |
| :--- | :--- |
| Beginning direct materials | 10,400 |
| Factory overhead | 58,400 |
| Beginning work in process | 10,600 |
| Cost of goods manufactured | 164,000 |
| Ending finished goods | 20,000 |
| Gross margin | 21,000 |
| Selling and administrative expenses | 7,000 |
| Beginning finished goods | 16,000 |
| Ending work in process | 8,000 |
| Ending direct materials | 12,400 |
| Direct labor | $?$ |
| Direct materials used | $?$ |
| Net income (loss) | $?$ |
| Total manufacturing costs added | $?$ |
| Cost of goods sold | $?$ |
| Sales | $?$ |

## Required:

Determine the following values:
a. Net income
b. Total manufacturing costs added
c. Cost of goods sold
d. Sales
e. Direct materials used
f. Direct labor
130. Information about Carter Company for the year ending December 31, 2006, was as follows:

| Sales | $\$ 300,000$ |
| :--- | :--- |
| Selling and administrative expenses | 18,000 |
| Net income | 8,000 |
|  |  |
| Beginning inventories: | 20,000 |
| Direct materials | 18,000 |
| Work in process | 62,000 |

Ending direct materials is 20 percent larger than beginning direct materials. Ending work in process is half of the beginning work in process. Ending finished goods increased by $\$ 8,000$ during the year. Prime costs and conversion costs are 70 percent and 60 percent of total manufacturing costs added, respectively. Materials purchases are $\$ 133,200$.

## Required:

a. Prepare a statement of cost of goods manufactured for December.
b. Prepare an income statement for December.

## 131. Best Corporation incurred the following costs:

| Beginning direct materials inventory | $\$ 17,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 8,000 |
| Beginning finished goods inventory | 18,000 |
| Ending direct materials inventory | 15,000 |
| Ending work in process | 13,000 |
| Ending finished goods | 24,000 |
| Factory supervisor's salary | 25,000 |
| Depreciation on plant | 10,000 |
| Sales | 650,000 |
| Selling and administrative expenses | 100,000 |
| Plant maintenance | 5,000 |
| Plant utilities | 9,000 |
| Direct material purchases | 185,000 |
| Direct labor | 200,000 |

## Required:

Calculate the following values:
a. Direct materials used
b. Cost of goods manufactured
c. Cost of goods sold
d. Net income
132. Hoiberg Corporation incurred the following costs:

| Direct labor | $\$ 600,000$ |
| :--- | :--- |
| Direct material purchases | 555,000 |
| Depreciation on plant | 30,000 |
| Factory supervisor's salary | 75,000 |
| Plant maintenance | 15,000 |
| Plant utilities | 27,000 |
| Sales | $1,950,000$ |
| Selling and administrative expenses | 300,000 |
| Beginning direct materials inventory | 51,000 |
| Beginning work-in-process inventory | 24,000 |
| Beginning finished goods inventory | 54,000 |
| Ending direct materials inventory | 45,000 |
| Ending work in process | 39,000 |
| Ending finished goods | 72,000 |

## Required:

Calculate the following values:
a. Direct materials used
b. Cost of goods manufactured
c. Cost of goods sold
d. Net income
133. The cost of goods sold for the Tricky Corporation for the month of June 2007 was $\$ 450,000$. Work-in-process inventory at the end of June was 95 percent of the work-in-process inventory at the beginning of the month. Overhead is 80 percent of the direct labor cost. During the month, $\$ 110,000$ of direct materials were purchased. Revenues for Tricky were $\$ 600,000$, and the selling and administrative costs were $\$ 70,000$. Other information about Tricky's inventories and production for June was as follows:

| Ending inventories--June 30 |  |
| :--- | :--- |
| Direct materials | $\$ 19,000$ |
| Work in process | $?$ |
| Finished goods | 105,000 |
|  |  |
| Beginning inventories--June 1 | $\$ 22,200$ |
| $\quad$ Direct materials | 40,000 |
| Work in process | 208,500 |

## Required:

a. Prepare a cost of goods manufactured and cost of goods sold statements.
b. Prepare an income statement.
c. What are the prime costs, conversion costs, and period costs?
134. Home Designs Company designs decks, gazebos, and play equipment for residential homes. The following was provided for the year ended June 30, 2006:

| Direct labor | $\$ 600,000$ |
| :--- | :--- |
| Direct material purchases | 40,000 |
| Administrative | 130,000 |
| Overhead | 75,000 |
| Selling | 265,000 |
| Beginning direct materials inventory | 20,000 |
| Beginning designs in process | 14,000 |
| Ending direct materials inventory | 10,000 |
| Ending designs in process | 39,000 |

The average design fee is $\$ 700$. There were 2,000 designs processed during the year.

## Required:

a. Prepare a statement of cost of services sold.
b. Prepare an income statement.
c. Discuss three differences between services and tangible products.
135. Describe several of the major differences between a functional-based cost management system and an activity-based cost management system.
136. Define activity-based management. In your answer, present the activity-based management model in good form.
137. In choosing a cost management system, the controller must balance the total costs of implementing such systems. What costs must be balanced to determine total cost? How do functional-based and activity-based cost systems balance the trade-offs?

## Chapter 2--Basic Cost Management Concepts Key

1. A(n) $\qquad$ is a set of interrelated parts that performs one or more processes to accomplish specific objectives.
A. cost objective
B. system
C. activity
D. cost driver
2. In a company that supplies garlic bread to pizza restaurants, which of the following would be considered an input?
A. delivered garlic bread
B. flour
C. baking
D. none of the above
3. In a company that supplies garlic bread to pizza restaurants, which of the following would NOT be considered an input?
A. delivered garlic bread
B. flour
C. garlic
D. oil
4. In a company that supplies garlic bread to pizza restaurants, which of the following would NOT be considered a transforming process?
A. delivered garlic bread
B. baking
C. packaging
D. mixing
5. In a company that supplies garlic bread to pizza restaurants, which of the following would be considered a transforming process?
A. delivered garlic bread
B. baking
C. garlic
D. oil
6. In a company that supplies garlic bread to pizza restaurants, delivered garlic bread to pizza restaurants would be a(n)
A. interrelated part.
B. input.
C. output.
D. process.
7. In an accounting information system, which of the following is NOT a transformation process?
A. collecting data
B. analyzing data
C. performance reports
D. summarizing data
8. The overall objective of accounting information systems is to
A. provide information to users.
B. manage the organization.
C. prepare financial reports.
D. report to the government.
9. In an accounting information system, the inputs are usually
A. financial statements.
B. analyzing data.
C. performance reports.
D. economic events.
10. Which of the following is a cost management subsystem designed to assign costs to individual products and services and other objects, as specified by management?
A. financial accounting information system
B. operational control information system
C. cost accounting information system
D. all of the above
11. Which of the following is a cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control of activities?
A. financial accounting information system
B. operational control information system
C. cost accounting information system
D. all of the above
12. The $\qquad$ is an accounting information subsystem that is primarily concerned with producing outputs for external users.
A. cost management information system
B. computer system
C. internal accounting system
D. financial accounting information system
13. High-quality cost management systems should have an organization-wide perspective. Which of the following would NOT be a benefit of a cost management system?
A. increases speed by ignoring non-financial information
B. reduces duplicate data storage and use of data
C. improves timeliness of reports
D. increases the efficiency of generating reliable and accurate information
14. Which of the following is a major subsystem of the cost accounting information system?
A. ERP
B. operational control information system
C. OLAP
D. EDI
15. A(n) $\qquad$ is a computerized information system that strives to input data once and make it available to people across the company for different purposes.
A. cost management information system
B. enterprise resource planning system
C. internal accounting system
D. financial accounting information system
16. The $\qquad$ is a cost management subsystem designed to provide accurate and timely feedback concerning the performance of managers and others relative to their planning and control activities.
A. cost accounting information system
B. financial accounting system
C. operational control information system
D. tax reporting system
17. Which is NOT one of the features of an operational control information system?
A. to assist in continuous improvement of all aspects of the business
B. to improve the value received by customers
C. to improve profits by improving value
D. to provide product cost information needed by management
18. $\qquad$ represents the resources given up that are expected to bring a current or future benefit to the organization.
A. Cost
B. Expired cost
C. Expense
D. Loss
19. $\qquad$ is(are) the cash or cash equivalent value sacrificed for goods and services that are expected to bring a current or future benefit to the organization.
A. Expenses
B. Cost
C. An activity
D. A loss
20. A cost used up in the production of revenues is a(n)
A. unexpired cost.
B. expense.
C. loss.
D. asset.
21. Which of the following is an example of a loss?
A. the cost of a product delivered to a customer
B. the cost of a delivered advertising campaign
C. the cost of the purchase of equipment
D. the write-off of an obsolete product
22. Which of the following is an example of an expense?
A. the cost of a product delivered to a customer
B. the cost of a proposed advertising campaign
C. the cost of the purchase of equipment
D. the write-off of an obsolete product
23. Which of the following is an example of a possible cost object?
A. a product
B. a customer
C. a department
D. All of these could be possible cost objects.
24. Traceability is a function of
A. an indirect relationship to the cost object.
B. distortion.
C. a causal relationship.
D. none of these.
25. Factors that cause changes in resource usage, activity usage, costs and revenues are called A. indirect costs.
B. drivers.
C. assignments.
D. cost objects.
26. Which cost assignment method would likely assign the cost of an assembly-line supervisor when the assembly line is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
27. Which cost assignment method would likely assign the cost of heating in a plant that makes chairs and go-carts when the chair product line is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
28. Which cost assignment method would likely assign the cost of maintenance for machines in a department that does cutting when the cutting activity is the cost object?
A. driver tracing
B. direct tracing
C. allocation
D. arbitration
29. Which of the following expenses incurred by a department store is a direct cost for the women's shoe department?
A. the salespersons' commissions in the women's shoe department
B. the salaries for individuals working in the accounting department
C. the advertising expense for the service department
D. the allocated rent expense for the clothing department
30. Which of the following costs incurred by a chair manufacturer would be traced to the product cost through direct tracing?
A. the depreciation on factory equipment
B. the supervisor's salary
C. the insurance on the factory building
D. the woodworker's salary
31. Direct costs
A. are incurred for the benefit of the business as a whole.
B. would continue even if a particular product were discontinued.
C. can be assigned to products only by a process of allocation.
D. are those costs that can be easily and accurately traced to a cost object.
32. The direct costs of operating a university computer center would NOT include
A. rent paid for computers.
B. a fair share of university utilities.
C. paper used by the center.
D. computer consultants' salaries.
33. Which of the following methods of assigning costs is based on convenience or some assumed linkage, and reduces the overall accuracy of the cost assignments?
A. direct tracing
B. driver tracing
C. allocation
D. all of the above
34. Which of the following costs incurred by a bus manufacturer would NOT be directly attributable to the finished product?
A. the wages paid to assembly-line production workers
B. the tires for buses
C. the windshields for buses
D. the depreciation on factory building
35. $\qquad$ refers to the assignment of indirect costs to cost objects.
A. Allocation
B. Direct tracing
C. Physical observation
D. Cost management
36. An example of a tangible product, rather than a service, would be
A. housekeeping.
B. insurance coverage.
C. paper.
D. medical exam.
37. An example of a service, rather than a tangible product, would be
A. radios.
B. cloths.
C. trucks.
D. medical exams.
38. Which of the following is a service organization?
A. grocery store
B. department store
C. cattle ranch
D. CPA firm
39. Which of the following costs would be included in value-chain product costs?
A. research and development
B. production
C. customer service
D. all of the above
40. Value-chain product costs include which of the following?
A. customer service costs
B. marketing costs
C. research and development
D. all of the above
41. Product value-chain costs assist managers in meeting which of the following objectives?
A. product mix decisions
B. tactical profitability analysis
C. external financial reporting
D. strategic design decisions
42. Which of the following costs would NOT be included in operating product costs?
A. research and development
B. production
C. marketing
D. all of the above
43. Which of the following costs would be included in traditional product costs used for external reporting?
A. research and development
B. production
C. marketing
D. all of the above
44. Which of the following costs is NOT a product cost?
A. rent on an office building
B. indirect labor
C. repairs on manufacturing equipment
D. steel used in inventory items produced
45. Which of the following costs is an example of product costs?
A. selling commissions
B. nonfactory office salaries
C. direct materials
D. advertising expense
46. Which of the following costs incurred by a furniture manufacturer would be a product cost?
A. lumber
B. office salaries
C. commissions paid to sales staff
D. controller's salary
47. Which of the following costs is a product cost?
A. lease payments on cars used by salespersons
B. president's salary
C. property taxes on factory building
D. depreciation on office equipment
48. Which of the following costs is a period cost for a manufacturing company?
A. controller's salary
B. wages of machine operators
C. insurance on factory equipment
D. fringe benefits for factory employees
49. In a traditional manufacturing company, product costs include
A. direct materials only.
B. direct materials, direct labor, and factory overhead.
C. direct materials and direct labor only.
D. direct labor only.
50. Which of the following costs is an indirect product cost?
A. property taxes on plant facilities
B. wages of assembly workers
C. materials used
D. president's salary
51. If total warehousing cost for the year amounts to $\$ 350,000$, and $40 \%$ of the warehousing activity is associated with finished goods and $60 \%$ with direct materials, how much of the cost would be charged as a product cost?
A. \$70,000
B. $\$ 140,000$
C. $\$ 210,000$
D. $\$ 350,000$
52. All of Jill Enterprise's operations are housed in one building with the costs of occupying the building accumulated in a separate account. The total costs incurred in May amounted to $\$ 24,000$. The company allocates these costs on the basis of square feet of floor space occupied. Administrative offices, sales offices, and factory operations occupy $9,000,6,000$, and 30,000 square feet, respectively. How much will be classified as a product cost for May?
A. $\$ 4,800$
B. $\$ 3,200$
C. $\$ 16,000$
D. $\$ 24,000$
53. Which of the following costs would be included as part of direct materials in the production of an automobile?
A. glue for a sticker applied to the automobile
B. steel
C. gasoline used to fuel machines in production
D. none of these
54. Which of the following costs would be considered a direct material?
A. glue in the production of automobiles
B. labor used to finish product
C. depreciation on the corporation's office building
D. paper used in the production of books
55. The difference between a supply and an indirect material is that
A. supplies are not necessary for production.
B. indirect materials are not physically part of the product.
C. supplies are not necessary for production and are not physically part of the product.
D. supplies are necessary for production and are not physically part of production.
56. Which of the following costs would be included as part of direct labor?
A. a cutter in the production of shelving
B. a materials handler
C. an assembly-line supervisor
D. a janitor
57. Which of the following costs would be included as part of factory overhead?
A. depreciation of plant equipment
B. paint used for product finish
C. depreciation on the corporation's office building
D. paper used in the production of books
58. Which of the following items would NOT be classified as part of factory overhead of a firm that makes sailboats?
A. factory supplies used
B. canvas used in sail
C. depreciation of factory buildings
D. indirect materials
59. Wages paid to a janitor in the factory would be classified as
A. direct labor.
B. direct janitor salaries.
C. supervisor salaries.
D. factory overhead.
60. All of the following costs are included in factory overhead EXCEPT
A. factory supplies.
B. indirect labor.
C. plant foreman's salary.
D. direct labor.
61. Selling and administrative costs are classified as
A. product costs.
B. conversion costs.
C. period costs.
D. factory overhead.
62. Which of the following costs is NOT a period cost?
A. steel used in steel railings
B. receptionist's salary
C. depreciation on sales staffs' cars
D. sales commission
63. Which of the following costs is a period cost?
A. depreciation of factory equipment
B. transportation-in for material shipments
C. amortization of a patent for the company's product
D. depreciation of office computers
64. An example of a period cost is
A. insurance on factory equipment.
B. president's salary.
C. property taxes on factory building.
D. wages of factory custodians.
65. An example of a nonproduction cost is
A. wages paid to assembly-line employees.
B. manufacturing supplies.
C. insurance on manufacturing facilities.
D. the treasurer's salary.
66. $\qquad$ are expensed in the period in which they are incurred.
A. Direct materials
B. Product costs
C. Factory overhead
D. Nonproduction costs
67. Order-getting costs would NOT include
A. marketing costs.
B. customer service costs.
C. advertising.
D. salaries of sales personnel.
68. Period costs do NOT include
A. order-getting costs.
B. order-making costs.
C. order-filling costs.
D. All of these are period costs.
69. Prime product costs include
A. only factory overhead.
B. only direct labor.
C. direct labor and factory overhead.
D. direct materials and direct labor.
70. The sum of direct labor and factory overhead is referred to as
A. period costs
B. conversion costs
C. prime costs
D. direct product costs
71. Conversion costs do NOT include
A. direct materials.
B. direct labor.
C. factory overhead.
D. any of these costs
72. $\qquad$ are expensed in the period in which they are incurred.
A. Direct materials
B. Product costs
C. Noninventoriable costs
D. Inventoriable costs
73. Product costs are converted from cost to expense when
A. units are completed.
B. materials are purchased.
C. units are sold.
D. materials are requisitioned.
74. A company has purchased some steel to use in the production of steel railings. If this steel has NOT been put into production, it would be classified as
A. direct materials inventory.
B. factory supplies.
C. work-in-process inventory.
D. finished goods inventory.
75. The income statement prepared for external reporting is
A. based on a functional classification.
B. referred to as absorption-costing income.
C. called full-costing income.
D. all of the above.
76. Which of the following costs would NOT be included in calculating inventory values under the absorption-costing basis?
A. direct materials
B. fixed overhead
C. selling and administrative expenses
D. direct labor
77. When calculating the absorption-costing income for external reporting
A. all manufacturing costs ultimately become nonmanufacturing costs.
B. all manufacturing costs are product costs and product costs are never expensed.
C. the costs of selling manufactured products are classified as product costs.
D. all selling and administrative costs are classified as nonmanufacturing costs.
78. Which of the following accounts would appear on the financial statements of ONLY a manufacturing firm?
A. bonds payable
B. materials inventory
C. prepaid insurance
D. retained earnings
79. Which type of inventory is normally sold to other organizations?
A. direct materials
B. factory supplies
C. work in process
D. finished goods
80. The merchandise inventory in a merchandising business corresponds most closely to which of the following items in a manufacturing firm?
A. materials inventory
B. cost of goods available for sale
C. cost of goods manufactured
D. finished goods inventory
81. Information from the records of Place, Inc., for December 2006 was as follows:

| Sales | $\$ 820,000$ |
| :--- | :--- |
| Selling and administrative expenses | 140,000 |
| Direct materials purchases | 176,000 |
| Direct labor | 200,000 |
| Factory overhead | 270,000 |


|  | $\underline{\text { Inventories }}$ |  |
| :--- | :--- | :--- |
| Direct materials | $\underline{\text { December } 1}$ | $\underline{\text { December 31 }}$ |
| Work in process | 24,000 | 28,000 |
| Finished goods | 50,000 | 56,000 |

The net income for the month of December is
A. $\$ 644,000$.
B. $\$ 36,000$.
C. $\$ 636,000$.
D. $\$ 180,000$.
82. Information from the records of the Cain Corporation for August 2006 was as follows:

| Sales | $\$ 1,230,000$ |  |
| :--- | :--- | :--- |
| Selling and administrative expenses | 210,000 |  |
| Direct materials used | 264,000 |  |
| Direct labor | 300,000 |  |
| Factory overhead | 405,000 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | Inventories | August 1, 2006 |

The conversion costs are
A. $\$ 960,000$.
B. $\$ 1,179,000$.
C. $\$ 705,000$.
D. $\$ 564,000$.
83. Information from the records of the Scully Company for July 2006 was as follows:

| Sales | $\$ 307,500$ |
| :--- | :--- |
| Selling and administrative expenses | 52,500 |
| Direct materials used | 66,000 |
| Direct labor | 75,000 |
| Factory overhead | 101,250 |

Direct materials
Work in process
Finished goods

| Inventories |  |
| :---: | :---: |
| July 1, 2006 | July 31, 2006 |
| \$ 8,000 | \$10,500 |
| 18,750 | 21,000 |
| 17,250 | 14,250 |

Prime costs for July were
A. $\$ 240,000$.
B. $\$ 294,750$.
C. $\$ 176,250$.
D. $\$ 141,000$.
84. If beginning work-in-process inventory is $\$ 120,000$, ending work-in-process inventory is $\$ 160,000$, cost of goods manufactured is $\$ 400,000$, and direct materials used are $\$ 100,000$, what are the conversion costs?
A. $\$ 140,000$
B. $\$ 280,000$
C. $\$ 300,000$
D. $\$ 340,000$
85. The following information pertains to Fry Enterprises:

| Cost of goods manufactured | $\$ 450,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 210,000 |
| Ending work-in-process inventory | 180,000 |
| Manufacturing overhead | 150,000 |

What are the prime costs for the year?
A. $\$ 360,000$
B. $\$ 480,000$
C. $\$ 270,000$
D. $\$ 300,000$
86. Inventory balances for Ray, Inc., in March 2006 were as follows:

|  | March 1,2006 | March 31, 2006 |
| :--- | :--- | :---: |
| Raw materials | $\$ 1,125$ | $\$ 875$ |
| Work in process | 2,000 | 1,550 |
| Finished goods | 4,500 | 3,750 |

During March, purchases of direct materials were $\$ 1,500$. Direct labor and factory overhead costs were $\$ 2,500$ and $\$ 3,500$, respectively.
Conversion costs for March were
A. $\$ 6,000$.
B. $\$ 7,500$.
C. $\$ 7,750$.
D. $\$ 8,200$.
87. Inventory balances for the James Enterprises in February 2006 were as follows:

|  | February 1, 2006 | February 28, 2006 |
| :--- | :---: | :---: |
| Raw materials | $\$ 27,000$ | $\$ 21,000$ |
| Work in process | 48,000 | 37,200 |
| Finished goods | 108,000 | 90,000 |

Prime costs for February were
A. $\$ 81,000$.
B. $\$ 87,000$.
C. $\$ 96,000$.
D. $\$ 102,000$.
88. The sum of the total additions to work in process during a period is
A. total manufacturing costs added.
B. factory overhead applied.
C. material used.
D. cost of goods manufactured.
89. The ending work-in-process inventory is deducted on the
A. balance sheet.
B. statement of cost of goods manufactured.
C. income statement.
D. statement of cash flows.

90 . Cost of goods sold equals cost of goods manufactured
A. when finished goods inventories remain constant.
B. when work-in-process inventories remain constant.
C. plus beginning work-in-process inventory minus ending work-in-process inventory.
D. when materials inventories remain constant.
91. The following information has been provided:

| Cost of goods manufactured | $\$ 100$ |
| :--- | :---: |
| Work in process: |  |
| $\quad$ Beginning | 20 |
| Ending | 30 |
| Direct labor | $?$ |
| Direct materials used | 45 |

What is the amount of direct materials used?
A. $\$ 25$
B. $\$ 30$
C. $\$ 35$
D. $\$ 100$
92. Inventory balances for Rude, Inc., in April 2006 were as follows:

|  | April 1, 2006 | April 30, 2006 |
| :--- | :--- | :--- |
| Materials | $\$ 9,000$ | $\$ 7,000$ |
| Work in process | 16,000 | 12,400 |
| Finished goods | 36,000 | 30,000 |

During April, purchases of direct materials were $\$ 18,000$. Direct labor and factory overhead costs were $\$ 20,000$ and $\$ 28,000$, respectively.
The cost of goods manufactured in April was
A. $\$ 68,000$.
B. $\$ 77,600$.
C. $\$ 74,000$.
D. $\$ 71,600$.
93. Selected data concerning the past year's operations of the Beach Corporation are as follows:

| Selling and administrative expenses |  | \$225,000 |  |
| :---: | :---: | :---: | :---: |
| Direct materials used |  | 397,500 |  |
| Direct labor ( 50,000 hours) |  | 450,000 |  |
| Factory overhead application rate |  | 8 per DLH |  |
|  | Inventories |  |  |
|  | Beginning |  | Ending |
| Direct material | \$ 75,000 |  | \$ 67,500 |
| Work in process | 112,500 |  | 135,000 |
| Finished goods | 60,000 |  | 37,500 |

The cost of direct materials purchased is
A. $\$ 397,500$.
B. $\$ 390,000$.
C. $\$ 367,500$.
D. $\$ 405,000$.
94. Selected data concerning the past year's operations of the Karl Enterprises are as follows:

| Selling and administrative expenses |  | $\$ 75,000$ |
| :--- | :--- | :--- |
| Direct materials used | 265,000 |  |
| Direct labor (25,000 hours) | 300,000 |  |
| Factory overhead application rate |  | 16 per DLH |
|  |  |  |
|  |  |  |
|  | $\underline{\text { Inventories }}$ |  |
| Direct materials | $\underline{\text { Beginning }}$ | Ending <br> Work in process |
| Finished goods | 75,000 | 945,000 |

What is the cost of goods manufactured?
A. $\$ 965,000$
B. $\$ 1,115,000$
C. \$950,000
D. $\$ 955,000$
95. The cost of units completed during a period is called
A. cost of goods sold.
B. cost of goods manufactured.
C. current manufacturing costs.
D. finished goods inventory.
96. Selected data concerning the past year's operations of the Wood Corporation are as follows:

Selling and administrative expenses
Direct materials used
Direct labor (100,000 hours)
Factory overhead application rate

Work in process
Finished goods

| Inventories <br> Beginning <br> $\$ 150,000$ | Ending <br> 80,000 |
| :---: | :---: |
| $\$ 160,000$ |  |
|  | 50,000 |

The cost of goods sold is
A. $\$ 1,630,000$.
B. $\$ 1,880,000$.
C. $\$ 1,600,000$.
D. $\$ 1,650,000$.
\$300,000
530,000
600,000
5 per DLH
$\$ 160,000$
50,000
97. The following information has been provided:

Cost of goods manufactured \$75
Work in process
Beginning 12
Ending 14
Direct labor 40
Materials placed in production 15
Factory overhead ?

What is the amount of factory overhead?
A. $\$ 20$
B. $\$ 22$
C. $\$ 14$
D. $\$ 55$
98. Information from the records of the Tyler Enterprises for March 2006 was as follows:

| Sales | $\$ 41,000$ |  |
| :--- | :--- | :--- |
| Direct labor |  | 10,000 |
| Selling and administrative expenses |  | 7,000 |
| Direct materials purchases | 6,000 |  |
| Factory overhead | 13,500 |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  | $\underline{\text { Inventories }}$ | $\$ 1,400$ |
| Direct materials | $\underline{\text { March 1,2006 }}$ | 2,800 |
| Work in process | 2,200 | 1,900 |

Tyler Enterprises' cost of goods manufactured in March is
A. \$29,300.
B. $\$ 29,700$.
C. $\$ 29,200$.
D. $\$ 29,000$.
99. Assume the following information:

Net direct materials purchase cost
\$225,000
Total direct materials used
275,000
Beginning direct materials inventory
125,000

The ending direct materials inventory is
A. $\$ 175,000$.
B. $\$ 75,000$.
C. $\$ 50,000$.
D. $\$ 100,000$.
100. Newton Company recently had a fire in its accounting office, destroying most of its records. Only the following information could be salvaged for 2006:

| Direct labor | $\$ 400,000$ |
| :--- | :--- |
| Factory overhead | 200,000 |
| Cost of goods sold | 800,000 |
| Work in process, January 1 | 80,000 |
| Finished goods, January 1 | 160,000 |
| Work in process, December 31 | 100,000 |
| Finished goods, December 31 | 120,000 |

The cost of direct materials used in production during 2006 is
A. $\$ 140,000$.
B. $\$ 180,000$.
C. $\$ 200,000$.
D. $\$ 260,000$.
101. The cost of goods sold for a manufacturing firm for the month of January was $\$ 90,000$. The finished goods inventory was $\$ 15,000$ on January 1 and $\$ 17,500$ on January 31 . Beginning and ending work-in-process
inventories were $\$ 20,000$ and $\$ 25,000$, respectively. What was the cost of goods manufactured during January?
A. $\$ 92,500$
B. $\$ 90,000$
C. $\$ 87,500$
D. $\$ 97,500$
102. Assume the following information for Knight Corporation for the year ended December 31, 2006:

| Sales | $\$ 2,250$ |
| :--- | :--- |
| Cost of goods manufactured for the year | 1,350 |
| Beginning finished goods inventory | 450 |
| Ending finished goods inventory | 495 |
| Selling and administrative expenses | 300 |

What is the cost of goods sold for the year ended December 31, 2006?
A. $\$ 1,305$
B. $\$ 1,605$
C. $\$ 1,350$
D. $\$ 1,650$
103. Assume the following data for Gross, Inc., for February:

| Beginning finished goods inventory | $\$ 60,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 40,000 |
| Ending work-in-process inventory | 80,000 |
| Ending finished goods inventory | 50,000 |
| Factory overhead costs | 200,000 |
| Direct materials used | 160,000 |
| Direct labor | 100,000 |

What is the cost of goods manufactured for February?
A. $\$ 470,000$
B. $\$ 420,000$
C. $\$ 460,000$
D. $\$ 430,000$
104. Assume the following information:

| Direct materials used | $\$ 90,000$ |
| :--- | :--- |
| Direct labor | 130,000 |
| Factory overhead | 150,000 |
| Beginning work-in-process inventory | 15,000 |
| Beginning finished goods inventory | 20,000 |
| Ending work-in-process inventory | 42,000 |
| Selling and administrative expenses | 37,500 |

What was the cost of goods manufactured during the year?
A. \$370,000
B. $\$ 365,000$
C. \$343,000
D. $\$ 333,000$
105. Which of the following items would NOT appear on an income statement of a service organization?
A. selling expenses
B. cost of goods sold
C. administrative expenses
D. gross margin
106. Which of the following items is NEVER relevant to the cost flows of a service organization?
A. finished goods inventory
B. materials inventory
C. work-in-process inventory
D. All of these are always relevant.
107. Assume the following data for Graham Services, an architecture firm, for February:

| Beginning materials inventory | $\$ 20,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 40,000 |
| Ending work-in-process inventory | 50,000 |
| Ending materials inventory | 10,000 |
| Actual overhead costs | 100,000 |
| Direct materials used | 60,000 |
| Direct labor | 200,000 |

What is the cost of services sold for February?
A. $\$ 370,000$
B. $\$ 350,000$
C. $\$ 360,000$
D. $\$ 330,000$

## 108. Exhibit 2-1

An appliance repair shop purchased materials costing $\$ 9,000$ in May. The beginning inventory of material parts was $\$ 4,500$ and the ending inventory of material parts was $\$ 4,000$. Payments for direct labor for May totaled $\$ 27,000$, secretarial costs were $\$ 2,000$, and overhead of $\$ 5,000$ was incurred. In addition, $\$ 5,000$ was spent on advertising and $\$ 2,000$ for the franchise name. Revenue for May was $\$ 50,000$.

Refer to Exhibit 2-1. What is the cost of services sold for May?
A. $\$ 41,500$
B. $\$ 43,500$
C. $\$ 50,500$
D. $\$ 40,500$

## 109. Exhibit 2-1

An appliance repair shop purchased materials costing $\$ 9,000$ in May. The beginning inventory of material parts was $\$ 4,500$ and the ending inventory of material parts was $\$ 4,000$. Payments for direct labor for May totaled $\$ 27,000$, secretarial costs were $\$ 2,000$, and overhead of $\$ 5,000$ was incurred. In addition, $\$ 5,000$ was spent on advertising and $\$ 2,000$ for the franchise name. Revenue for May was $\$ 50,000$.

Refer to Exhibit 2-1. What is the gross margin for May?
A. $\$ 41,500$
B. $\$ 43,500$
C. $\$ 1,500$
D. $\$ 8,500$
110. $\qquad$ is (are) a cost accounting system that uses only unit-based activity drivers to assign costs to cost objects.
A. Activity-based management
B. Activity-based costing system
C. Functional-based cost management system
D. Both a and b
111. Which of the following would be associated with a functional-based cost accounting information system?
A. setup costs assigned to products using the number of setups as the driver
B. purchasing costs assigned to products using number of direct labor hours as the activity driver C. customer service costs assigned to products using the number of complaints as the activity driver
D. materials handling costs assigned to products using the number of moves as the activity driver
112. In a functional-based management system, one is NOT likely to find
A. unit- and non-unit-based cost drivers.
B. maximization of individual unit performance.
C. narrow and rigid product costing.
D. allocation intensive cost assignment.
113. Which of the following items would be associated with both a functional-based cost accounting information system and an activity based cost information system?
A. Overhead is assigned on a plant-wide rate based on direct labor hours.
B. Customer service costs are assigned to products using number of complaints as the activity driver.
C. Direct labor cost is assigned to products using direct tracing.
D. None of these.
114. $\qquad$ focuses on the management of activities with the objective of improving the value received by the customer and the profit received by providing this value.
A. Activity-based management
B. Contemporary cost control
C. Functional-based cost management system
D. JIT
115. In a cost management system, the process view does NOT include
A. resources.
B. activities.
C. driver analysis.
D. performance analysis.
116. In a cost management system, the cost view does NOT include
A. resources.
B. activities.
C. driver analysis.
D. products and customers.
117. Which is NOT a benefit of an activity-based cost management system?
A. greater product costing accuracy
B. increased cost of implementing the system
C. improved decision making
D. enhanced strategic planning
118. In an activity-based management system, one is NOT likely to find
A. tracing of costs to activities.
B. only unit-based drivers.
C. broad flexible product costing.
D. systemwide performance maximization.
119. Which of the following is NOT a trait of a functional-based cost management system?
A. unit-based drivers
B. focus on managing activities
C. allocation-intensive
D. narrow and rigid product costing
120. Which of the following is a trait of a functional-based cost management system?
A. unit-based drivers
B. tracing intensive
C. use of both financial and nonfinancial measures of performance
D. detailed activity information
121. Which of the following is a trait of an activity-based cost management system?
A. allocation-intensive
B. narrow and rigid product costing
C. non-unit-based drivers
D. focus on managing costs
122. The optimal level in the trade-off between measurement and error costs is when A. measurement costs are greater than error costs.
B. measurement costs are less than error costs.
C. measurement costs equal error costs.
D. the total of measurement costs and error costs are maximized.
123. Describe a cost management information system, its objectives, and major subsystems.

The cost management information system is an accounting information subsystem that is primarily concerned with producing outputs for internal users using inputs and processes needed to satisfy management objectives.

The objectives are as follows:

[^0]The major subsystems of a cost management information system are the cost accounting information system and the operational control information system.
124. The following items (partial list) are associated with a functional-based cost accounting information system, an activity-based cost accounting information system, or both:

| a. | materials purchasing cost incurrence |
| :--- | :--- |
| b. | assignment of purchasing cost to products using direct labor hours |
| c. | assignment of purchasing cost using number of purchase orders |
| d. | usage of direct materials |
| e. | direct materials cost assigned to products using direct tracing |
| f. | materials handling cost incurrence |
| g. | materials handling cost assigned using direct labor hours |
| h. | materials handling cost assigned using the number of moves as the driver |
| i. | computer |
| j. | materials handling equipment |
| k. | decision to make a part or buy it from a supplier |
| l. | costing out of products |
| m. | report detailing individual product costs |

## Required:

| 1. | For an <br> activity <br> -based <br> cost <br> system, <br> classify <br> the <br> items <br> into <br> one of <br> the <br> followi <br> ng <br> categor <br> ies: <br> a. interrelated parts <br> b. processes <br> c. objectives <br> d. inputs <br> e. outputs <br> f. user actions |
| :---: | :---: |
| 2. | How <br> would <br> the <br> choices <br> differ <br> betwee <br> n the <br> two <br> system <br> s? <br> What <br> are the <br> costs <br> and <br> benefit <br> s of <br> each? |

1. The activity
-based
cost
account
ing
system:
a. interrelated parts: cost accounting personnel, computer
b. processes: cost assignment: direct tracing of materials, driver tracing of purchasing costs (orders), materials handling cost (moves)
c. objectives: costing out of products
d. inputs: direct materials cost, purchasing cost, materials handling cost
e. outputs: product cost report
f. user actions: make-or-buy decision
2. The difference in the costing systems is found in the processes. A functional-based cost system would not use nonunit drivers such as moves and orders to assign overhead but would use a unit driver like direct labor hours. There is increased accuracy of the cost assignments in an activity-based system, and a more comprehensive idea of costs may be used for decision making.

The activity-based cost accounting system is more expensive to develop but has the benefit of more comprehensive uses for cost information. The functional-based cost system is simpler and less expensive to implement but the information generated is less versatile.
125. Explain the differences between direct tracing, driver tracing, and allocation.

Direct tracing is the process of identifying and assigning costs to a cost object that are specifically or physically associated with the cost object.

Driver tracing is assigning costs using drivers, which are causal factors. The driver approach relies on identification of factors that allegedly capture the causal relationship.

Allocation is the assignment of indirect costs to cost objects based on convenience or assumed linkages.
126. Classify the following costs incurred by a step railing manufacturing company as direct materials, direct labor, factory overhead, or period costs:

[^1]| a. | Direct labor | f. | Factory overhead |
| :--- | :--- | :--- | :--- |
| b. | Period | g. | Period |
| c. | Factory overhead | h. | Factory overhead |
| d. | Direct materials | i. | Factory overhead |
| e. | Period | j. | Period |

127. Big Foot Athletics designs and manufactures running shoes. A new model of shoes, Fast Track, has been developed and is ready for production.

## Required:

Which costs will the production manager collect from the value chain, and how would these costs be used in different decisions?

| a. | traditional product costs |
| :--- | :--- |
| b. | operating product costs |
| c. | value-chain product costs |

Production costs would be included in all of these definitions.

| a. traditional product costs: | Direct materials, direct labor and manufacturing overhead are the traditional product costs. <br> They would be used for external reporting, budgeting, and control of costs. |
| :--- | :--- | :--- |
| b. operating product costs: | In addition to the traditional product costs, marketing and customer service costs would be <br> considered in analyzing profitability of the product. Strategic questions about the operating <br> design, i.e., materials and plant layout, would be addressed. The focus is on the revenue and <br> cost of Fast Track. |
| c. value-chain product costs: | Production costs of Fast Track must be viewed in relation to other products. Strategic <br> pricing and product mix decisions must be made. The profitability of all the product lines is <br> at issue. |

128. Information from the records of the Fisher Enterprises for the month of March 2006 was as follows:

| Purchases of direct materials | $\$ 54,000$ |
| :--- | :--- |
| Indirect labor | 15,000 |
| Direct labor | 31,200 |
| Depreciation on machinery | 9,000 |
| Sales | 165,900 |
| Selling and administrative expenses | 18,900 |
| Rent on factory building | 21,000 |


|  | Inventories |  |
| :--- | :---: | :---: |
|  | $\underline{\text { March 1, 2006 }}$ | $\underline{\text { March 31, 2006 }}$ |
| Direct materials | $\$ 24,000$ | $\$ 26,100$ |
| Work in process | 6,300 | 9,600 |
| Finished goods | 15,000 | 17,100 |

## Required:

a. Prepare a statement of cost of goods manufactured for the month of March.
b. Prepare an income statement for the month of March.
c. Determine prime and conversion costs.
a. Fisher Enterprises

Statement of Cost of Goods Manufactured
For the Month of March 2006
Direct materials:

| Beginning inventory | $\$ 24,000$ |  |
| :--- | :--- | :--- |
| Add: Purchases | $\underline{54,000}$ |  |
| Materials available | $\$ 78,000$ |  |
| Less: Ending inventory | $\underline{26,100}$ | $\$ 51,900$ |
| Direct materials used in production |  | 31,200 |
| Direct labor | $\$ 15,000$ |  |
| Manufacturing overhead: | 9,000 |  |
| Indirect labor | $\underline{21,000}$ | $\underline{45,000}$ |
| Depreciation on machinery |  | $\$ 128,100$ |
| Rent on factory |  | $\underline{6,300}$ |
| Total manufacturing costs added |  | $\underline{9134,400}$ |
| Add: Beginning work-in-process inventory | $\underline{\$ 124,800}$ |  |

b. Fisher Enterprises

Income Statement
For the Month of March 2006
Sales
Less: Cost of goods sold:
Add: Cost of goods manufactured
\$124,800
Beginning inventory finished goods 15,000
Cost of goods available for sale
Less: Ending inventory finished goods
\$139,800
Gross margin
Less: Selling and administrative expenses
$\underline{17,100}$
122,700
\$ 43,200

Operating income
18,900
\$ 24,300
c. $\quad$ Prime costs $=\$ 51,900+\$ 31,200=\underline{\$ 33,100}$

Conversion costs $=\$ 31,200+\$ 45,000=\$ 76,200$
129. The following information pertains to Davis, Inc.:

| Direct materials purchases | $\$ 62,400$ |
| :--- | :--- |
| Beginning direct materials | 10,400 |
| Factory overhead | 58,400 |
| Beginning work in process | 10,600 |
| Cost of goods manufactured | 164,000 |
| Ending finished goods | 20,000 |
| Gross margin | 21,000 |
| Selling and administrative expenses | 7,000 |
| Beginning finished goods | 16,000 |
| Ending work in process | 8,000 |
| Ending direct materials | 12,400 |
| Direct labor | $?$ |
| Direct materials used | $?$ |
| Net income (loss) | $?$ |
| Total manufacturing costs added | $?$ |
| Cost of goods sold | $?$ |
| Sales | $?$ |

## Required:

Determine the following values:
a. Net income
b. Total manufacturing costs added
c. Cost of goods sold
d. Sales
e. Direct materials used
f. Direct labor
a. $\quad \$ 21,000-\$ 7,000=\$ 14,000$
b. $\quad \$ 164,000+\$ 8,000-\$ 10,600=\$ 161,400$
c. $\$ 16,000+\$ 164,000-\$ 20,000=\$ 160,000$
d. $\$ 21,000+\$ 160,000^{*}=\$ 181,000$
e. $\$ 10,400+\$ 62,400-\$ 12,400=\$ 60,400$
f. $\$ 161,400 * *-\$ 60,400^{* * *}-\$ 58,400=\underline{\$ 42,600}$
*Found in c.
**Found in b.
***Found in e.
130. Information about Carter Company for the year ending December 31, 2006, was as follows:

| Sales | $\$ 300,000$ |
| :--- | :--- |
| Selling and administrative expenses | 18,000 |
| Net income | 8,000 |
| Beginning inventories: |  |
| Direct materials | 20,000 |
| Work in process | 18,000 |
| Finished goods | 62,000 |

Ending direct materials is 20 percent larger than beginning direct materials. Ending work in process is half of the beginning work in process. Ending finished goods increased by $\$ 8,000$ during the year. Prime costs and conversion costs are 70 percent and 60 percent of total manufacturing costs added, respectively. Materials purchases are $\$ 133,200$.

## Required:

a. Prepare a statement of cost of goods manufactured for December.
b. Prepare an income statement for December.
a. Carter Company

Statement of Cost of Goods Manufactured
For the Year Ended December 31, 2006
Direct materials:

| Beginning inventory* | \$ 20,000 |
| :---: | :---: |
| Add: Purchases | 113,200 |
| Materials available | \$133,200 |
| Less: Ending inventory* (\$20,000 ${ }^{\text {' 1.20 }}$ ) | 24,000 |
| Direct materials used in production | \$109,200 |
| Direct labor [(.7 ' 273,000 ) - 109,200] | 81,900 |
| Manufacturing overhead [(.6'273,000) -81,900] | 81,900 |
| Total manufacturing costs added | \$273,000 |
| Add: Beginning work-in-process inventory* | 18,000 |
| Total costs in process | \$291,000 |
| Less: Ending work-in-process inventory* (\$18,000 ${ }^{\prime} 0.50$ ) | 9,000 |
| Cost of goods manufactured | \$282,000 |

b. Carter Company

Income Statement
For the Year Ended December 31, 2006
Sales*
Less: Cost of goods sold:
Add: Cost of goods manufactured
Beginning inventory finished goods*
Cost of goods available for sale
Less: Ending inventory finished goods* (\$62,000 + \$8,000)
Gross margin
Less: Selling and administrative expenses*
274,000
$\$ 26,000$
Net income*
\$282,000
62,000
\$344,000
70,000
*These items are provided.
Note: Find the numbers for the income statement first.

## 131. Best Corporation incurred the following costs:

| Beginning direct materials inventory | $\$ 17,000$ |
| :--- | :--- |
| Beginning work-in-process inventory | 8,000 |
| Beginning finished goods inventory | 18,000 |
| Ending direct materials inventory | 15,000 |
| Ending work in process | 13,000 |
| Ending finished goods | 24,000 |
| Factory supervisor's salary | 25,000 |
| Depreciation on plant | 10,000 |
| Sales | 650,000 |
| Selling and administrative expenses | 100,000 |
| Plant maintenance | 5,000 |
| Plant utilities | 9,000 |
| Direct material purchases | 185,000 |
| Direct labor | 200,000 |

## Required:

Calculate the following values:

| a. | Direct materials used |
| :--- | :--- |
| b. | Cost of goods manufactured |
| c. | Cost of goods sold |
| d. | Net income |

a. $\quad \$ 17,000+\$ 185,000-\$ 15,000=\$ 187,000$
b. $\quad \$ 187,000+\$ 200,000+\$ 25,000+\$ 10,000+\$ 5,000+\$ 9,000+\$ 8,000-\$ 13,000=\$ 431,000$
c. $\$ 18,000+\$ 431,000-\$ 24,000=\$ 425,000$
d. $\$ 650,000-\$ 425,000-\$ 100,000=\$ 125,000$

## 132. Hoiberg Corporation incurred the following costs:

| Direct labor | $\$ 600,000$ |
| :--- | :--- |
| Direct material purchases | 555,000 |
| Depreciation on plant | 30,000 |
| Factory supervisor's salary | 75,000 |
| Plant maintenance | 15,000 |
| Plant utilities | 27,000 |
| Sales | $1,950,000$ |
| Selling and administrative expenses | 300,000 |
| Beginning direct materials inventory | 51,000 |
| Beginning work-in-process inventory | 24,000 |
| Beginning finished goods inventory | 54,000 |
| Ending direct materials inventory | 45,000 |
| Ending work in process | 39,000 |
| Ending finished goods | 72,000 |

## Required:

Calculate the following values:
a. Direct materials used
b. Cost of goods manufactured
c. Cost of goods sold
d. Net income
a. $\quad \$ 51,000+\$ 555,000-\$ 45,000=\$ 561,000$
b. $\$ 561,000+\$ 600,000+\$ 75,000+\$ 30,000+\$ 15,000+\$ 27,000+\$ 24,000-\$ 39,000=\$ 1,293,000$
c. $\quad \$ 54,000+\$ 1,293,000-\$ 72,000=\$ 1,275,000$
d. $\$ 1,950,000-\$ 1,275,000-\$ 300,000=\$ 375,000$
133. The cost of goods sold for the Tricky Corporation for the month of June 2007 was $\$ 450,000$.

Work-in-process inventory at the end of June was 95 percent of the work-in-process inventory at the beginning of the month. Overhead is 80 percent of the direct labor cost. During the month, $\$ 110,000$ of direct materials were purchased. Revenues for Tricky were $\$ 600,000$, and the selling and administrative costs were $\$ 70,000$. Other information about Tricky's inventories and production for June was as follows:

| Ending inventories--June 30 |  |
| :--- | :--- |
| Direct materials | $\$ 19,000$ |
| Work in process | $?$ |
| Finished goods | 105,000 |
| Beginning inventories--June 1 |  |
| Direct materials | $\$ 22,200$ |
| Work in process | 40,000 |
| Finished goods | 208,500 |

Required:
a. Prepare a cost of goods manufactured and cost of goods sold statements.
b. Prepare an income statement.
c. What are the prime costs, conversion costs, and period costs?
a. $\quad \mathrm{DM}$ used $=\$ 22,200+\$ 110,000-$
$\$ 19,000=\$ 113,200$
CGM $=\$ 450,000+\$ 105,000-$
$\$ 208,500=\underline{\$ 346,500}$
Tricky Corporation
Statement of Cost of Goods
Manufactured
For June
Direct materials:

| Beginning inventory* | \$ 22,200 |
| :---: | :---: |
| Add: Purchases* | 110,000 |
| Materials available | \$132,200 |
| Less: Ending inventory* | 19,000 |
| Direct materials used in production | \$113,200 |
| Direct labor below | 128,500 |
| Manufacturing overhead (\$128,500 ' | 102,800 |
| 0.80) |  |
| Total manufacturing costs added | \$344,500 |
| Add: Beginning work-in-process | 40,000 |
| inventory* |  |
| Total costs in process | \$384,500 |
| Less: Ending work-in-process | 38,000 |

inventory (\$40,000 0.95 )
Cost of goods manufactured (from $\quad \underline{346,500}$
COGS statement)
Total manufacturing costs added $=\quad \mathrm{DM}+\mathrm{DL}+\mathrm{MOH}$
$\$ 344,500=113,200+$
DL +MOH
$\$ 231,300=\mathrm{DL}+$
MOH
$\$ 231,300=\mathrm{DL}+$
$\left\{\mathrm{MOH}=0.80^{\prime} \mathrm{DL}\right\}$
$\$ 231,300=\mathrm{DL}+$
.8DL
$\$ 231,300=1.8 \mathrm{DL}$
$\$ 128,500=\mathrm{DL}$
$\mathrm{MOH}=0.80^{\prime} \mathrm{DL}$
$\mathrm{MOH}=0.80^{\prime}$
$128,500=102,800$
b. Tricky Company

Cost of Goods Sold Statement
For June
Cost of goods sold*:
Add: Cost of goods manufactured $\$ 346,500$
Beginning inventory finished goods* 208,500
Cost of goods available for sale $\$ 555,000$
Less: Ending inventory finished $\quad 105,000$
goods*
Cost of Goods Sold* $\$ 450,000$
*These items are provided.
Tricky Company
Income Statement
For June
Sales*
Less: Cost of goods sold*:
Add: Cost of goods manufactured $\$ 346,500$
Beginning inventory finished goods* 208,500
Cost of goods available for sale $\$ 555,000$
Less: Ending inventory finished $\underline{450,000}$ goods*

| Gross margin |  |
| :--- | ---: |
| Less: Selling and administrative <br> expenses* | $\$ 150,000$ <br> 70,000 <br> Net income |
| $\$ 80,000$ |  |

*These items are provided.
c. Conversion costs = direct labor and

$$
\begin{aligned}
& \text { overhead }=\$ 231,300 \\
& =\$ 128,500+ \\
& \$ 102,800=\$ 231,300
\end{aligned}
$$

Prime costs $=\mathrm{DM}+\mathrm{DL}=\$ 113,200+$
$\$ 128,500=\$ 241,700$
Period costs $=\$ 70,000$
134. Home Designs Company designs decks, gazebos, and play equipment for residential homes. The following was provided for the year ended June 30, 2006:

| Direct labor | $\$ 600,000$ |
| :--- | :--- |
| Direct material purchases | 40,000 |
| Administrative | 130,000 |
| Overhead | 75,000 |
| Selling | 265,000 |
| Beginning direct materials inventory | 20,000 |
| Beginning designs in process | 14,000 |
| Ending direct materials inventory | 10,000 |
| Ending designs in process | 39,000 |

The average design fee is $\$ 700$. There were 2,000 designs processed during the year.

## Required:

[^2]| Home Designs Company |  |
| :--- | :--- |
| Cost of Services Sold |  |
| June 30,2006 | $\$ 20,000$ |
| Beginning materials | 40,000 |
| Purchases | 60,000 |
| Materials available | $-10,000$ |
| Ending materials | 50,000 |
| Materials used | 600,000 |
| Direct labor | 75,000 |
| Overhead | 14,000 |
| Beginning design in process | 39,000 |
| Ending designs in process | $\$ 700,000$ |
| Cost of Services Sold |  |
|  |  |
| Home Designs Company |  |
| Income Statement | $\$ 1,400,000$ |
| June 2006 | 700,000 |
| Sales | 700,000 |
| Cost of services sold | 265,000 |
| Gross Margin | 130,000 |
| Selling | $\$ 305,000$ |
| Administrative |  |

c. Services have three attributes that are not possessed by tangible products: intangibility, perishability, and inseparability.
135. Describe several of the major differences between a functional-based cost management system and an activity-based cost management system.

The functional-based cost accounting system assumes that all costs can be classified as fixed or variable with respect to changes in the units or volume of product produced.

The activity-based cost management system's objective is to improve the quality, content, relevance, and timing of information.

A comparison of the two systems is shown below:

| Function al-based |  | Activity-based |  |
| :---: | :---: | :---: | :---: |
| 1. | Unit-based drivers | 1. | Unit and nonunit -based drivers |
| 2. | Allocation-intensive | 2. | Tracing -intensi ve |
| 3. | Narrow and rigid product costing | 3. | Broad, flexible product costing |
| 4. | Focus on managing costs | 4. | Focus on managi ng activiti es |
| 5. | Sparse activity information | 5. | Detaile <br> d <br> activity <br> inform <br> ation |
| 6. | Maximization of individual unit performance | 6. | System wide perfor mance maximi zation |
| 7. | Uses financial measures of performance | 7. | Uses <br> both <br> financi <br> al and <br> nonfina <br> ncial <br> measur <br> es of <br> perfor <br> mance |

136. Define activity-based management. In your answer, present the activity-based management model in good form.

Activity-based management focuses on the management of activities with the objective of improving the value received by the customer and the profit received by providing this value; it includes driver analysis, activity analysis, and performance evaluation and draws on activity-based costing as a major source of information. Exhibit 2-13 in the text presents the model.
137. In choosing a cost management system, the controller must balance the total costs of implementing such systems. What costs must be balanced to determine total cost? How do functional-based and activity-based cost systems balance the trade-offs?

Error costs and measurement costs must be considered in choosing a cost management system. Activity-based cost management has greater measurement costs due to analyzing many activities but has greater accuracy and fewer error costs. Functional-based cost systems have lower measurement costs but higher error costs. Controllers must assess the need for accuracy in costing, pricing, and managing profitability.


[^0]:    1. To provide information for costing out services, products, and other objects of interest to management.
    2. To provide information for planning and control.
    3. To provide information for decision making.
[^1]:    a. Wages paid to production workers
    b. Utilities in the office
    c. Depreciation on machinery in plant
    d. Steel
    e. Accountant's salary
    f. Rent on factory building
    g. Rent on office equipment
    h. Maintenance workers' wages
    i. Utilities in the plant
    j. Maintenance on office equipment

[^2]:    a. Prepare a statement of cost of services sold.
    b. Prepare an income statement.
    c. Discuss three differences between services and tangible products.

