## TEST BANK



## Chapter 2--Job Order Costing

## Student.

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1. Cost accounting systems are used to supply cost data information on costs incurred by a manufacturing process or department.
True False
2. A manufacturer may employ a job order cost system for some of its products and a process cost system for others.
True False
3. A job order cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory.
True False
4. A process cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory.
True False
5. A process cost accounting system accumulates costs for each of the departments or processes within the factory.
True False
6. A process cost accounting system is best used by manufacturers of like units of product that are not distinguishable from each other during a continuous production process.
True False
7. The process cost system is appropriate where few products are manufactured and each product is made to customers' specifications.
True False
8. A job order cost system would be appropriate for a crude oil refining business.

True False
9. A law firm would use a job order cost system to accumulate all of the costs associated with a particular client engagement, such as lawyer time, copying charges, filing fees, and overhead.
True False
10. The job order costing system is not used by service organizations.

True False
11. The job order costing system is used by service firms to determine revenues, expenses, and ultimately profit.
True False
12. Perpetual inventory controlling accounts and subsidiary ledgers are maintained for materials, work in process, and finished goods in cost accounting systems.
True False
13. When the goods are sold, their costs are transferred from Work in Process to Finished Goods. True False
14. The materials requisition serves as the source document for debiting the accounts in the materials ledger. True False
15. Materials are transferred from the storeroom to the factory in response to materials requisitions. True False
16. The document that serves as the basis for recording direct labor on a job cost sheet is the time card.

True False
17. The document that serves as the basis for recording direct labor on a job cost sheet is the time ticket. True False
18. Depreciation expense on factory equipment is part of factory overhead cost. True False
19. Factory overhead is applied to production using a predetermined overhead rate. True False
20. If factory overhead applied exceeds the actual costs, the factory overhead account will have a credit balance.
True False
21. If factory overhead applied exceeds the actual costs, overhead is said to be underapplied.

True False
22. If the underapplied factory overhead amount is material, it is transferred to Cost of Goods Sold at the end of the fiscal year.
True False
23. If the underapplied factory overhead amount is immaterial, it is transferred to Cost of Goods Sold at the end of the fiscal year.
True False
24. Each account in the cost ledger in a job order system is called a job cost sheet.

True False
25. In the job order system, the finished goods account is the controlling account for the factory overhead ledger.
True False
26. The inventory accounts generally maintained by a manufacturing firm are only finished goods and materials.
True False
27. Generally accepted accounting principles require companies to use only one factory overhead rate for product costing.
True False
28. Activity-based costing is a method of accumulating and allocating costs by department.

True False
29. Interim financial statements for a manufacturing business would report overapplied factory overhead as a deferred item on the balance sheet.
True False
30. The debit to factory overhead for the cost of indirect materials is obtained from the summary of the materials requisitions.
True False
31. In a factory with several processing departments, a single factory overhead rate may not provide accurate product costs and effective cost control.
True False
32. Nonmanufacturing costs are generally classified into two categories: selling and administrative. True False
33. The current year's advertising costs are normally considered period costs.

True False
34. Direct labor cost is an example of a period cost.

True False
35. A manufacturing business reports just two types of inventory on its balance sheet: work in process inventory and finished goods inventory.
True False
36. On the balance sheet for a manufacturing business, the cost of direct materials, direct labor, and factory overhead, which have entered into the manufacturing process but are associated with products that have not been finished, is reported as direct materials inventory.
True False
37. As product costs are incurred in the manufacturing process, they are accounted for as assets and reported on the balance sheet as inventory.
True False
38. A receiving report is prepared when purchased materials are first received by the manufacturing department.
True False
39. Period costs are costs that are incurred for the production requirements of a certain period. True False
40. Job order cost systems can be used to compare unit costs of similar jobs to determine if costs are staying within expected ranges.
True False
41. Job cost sheets can provide information to managers on unit cost trends, the cost impact of continuous improvement in the manufacturing process, the cost impact of materials changes, and the cost impact of direct materials price or direct labor rate changes over time.
True False
42. Job order cost accounting systems may be used to evaluate a company's efficiency.

True False
43. Information about costs developed through a job order cost system can not be used to evaluate an organization's cost performance.
True False
44. A staff department or unit is one directly involved in the basic objective of the organization. True False
45. Job order cost accounting systems may be used for planning and controlling a service business. True False
46. Job order cost accounting systems can be used only for companies that manufacture a product. True False
47. The direct labor and overhead costs of providing services to clients are accumulated in a work-in-process account.
True False
48. In a job order cost accounting system for a service business, materials costs are normally included as part of overhead.
True False
49. A service organization will not use the job order costing method because it has no direct materials.

True False
50. Using the job order cost system, service organizations are able to bill customers on a weekly or monthly basis, even when the job has not been completed.
True False
51. Match each of the following terms with the phrase that most closely describes it. Each answer may be used only once.

1. Applied overhead is less than actual overhead incurred.
2. Applied overhead is more than actual overhead incurred.
3. The stock ledger.
4. Typically used by companies that make custom products.
5. System that uses a different overhead rate for each activity.
6. Typically used by companies whose products are indistinguishable from each other.
7. Expenses of the current period.

Activity based
costing $\qquad$
Period costs $\qquad$
Overapplied
overhead $\qquad$
Job order cost
system $\qquad$
Process cost
system $\qquad$
Finished goods
ledger $\qquad$
Underapplied
overhead $\qquad$
52. Match each of the following terms with the phrase that most closely describes it. Each answer may be used only once.

1. Serves as the basis for recording materials used.
2. Service providers use this account similarly to the cost of merchandise sold account used by merchandisers.
3. Prepared when materials that have been ordered are received and inspected.
4. Subsidiary ledger for Work in Process.
5. Serves as the basis for recording direct labor on a job cost sheet.

Cost of
Services $\qquad$
Job cost sheets

Time tickets $\qquad$
Receiving
report $\qquad$
Material
requisition $\qquad$
53. Which of the following are the two main types of cost accounting systems for manufacturing operations?
A. Process cost and general accounting systems
B. Job order cost and process cost systems
C. Job order and general accounting systems
D. Process cost and replacement cost systems
54. Which of the following would most likely use a job order costing system?
A. A paper mill
B. A swimming pool installer
C. A company that manufactures chlorine for swimming pools
D. An oil refinery
55. Which of the following would be most likely to use process costing?
A. A custom furniture manufacturer.
B. An auto body repair shop.
C. A law firm
D. A lawn fertilizer manufacturer.
56. Which of the following systems provides for a separate record of the cost of each particular quantity of product that passes through the factory?
A. Job order cost system
B. General cost system
C. Replacement cost system
D. Process cost system
57. For which of the following businesses would the job order cost system be appropriate?
A. Meat processor
B. Automobile manufacturer
C. Oil refinery
D. Construction contractor
58. For which of the following businesses would the process cost system be appropriate?
A. Book retailer
B. Dress designer
C. Lumber mill
D. Printing firm
59. Which of the following is not a characteristic of a job order costing system?
A. It accumulates cost for each department within the factory.
B. It provides a separate record for the cost of each quantity of product that passes through the factory.
C. It is best suited for industries that manufactures custom goods.
D. Uses only one work in process account.
60. Which of the following products probably would be manufactured using a job order costing system?
A. Number 2 pencils
B. Computer monitors.
C. Wedding invitations.
D. Paper.
61. Job order costing and process costing are
A. pricing systems.
B. cost accounting systems.
C. cost flow systems.
D. inventory tracking systems.
62. Which of the following is not true about why a service firm will use the job order costing system?
A. to help control costs
B. to determine client billing
C. to determine department costs within the firm
D. to determine profit
63. Which of the following costs are NOT included in finished goods inventory?
A. Direct labor
B. Factory overhead
C. Company president's salary
D. Direct materials
64. Which of the following is the correct flow of manufacturing costs?
A. Raw materials, work in process, finished goods, cost of goods sold
B. Raw materials, finished goods, cost of goods sold, work in process.
C. Work in process, finished goods, raw materials, cost of goods sold
D. Cost of goods sold, raw materials, work in process, finished goods.
65. Which of the following would record the labor costs to an individual job?
A. Clock card
B. In-and-out cards
C. Time tickets
D. Payroll register
66. The Thomlin Company forecasts that total overhead for the current year will be $\$ 15,000,000$ and that total machine hours will be 300,000 hours. Year to date, the actual overhead is $\$ 16,000,000$ and the actual machine hours are 330,000 hours. If the Thomlin Company uses a predetermined overhead rate based on machine hours for applying overhead, what is that overhead rate?
A. $\$ 48$ per machine hour
B. $\$ 53$ per machine hour
C. $\$ 45$ per machine hour
D. $\$ 50$ per machine hour
67. The Thomlin Company forecasts that total overhead for the current year will be $\$ 15,000,000$ and that total machine hours will be 300,000 hours. Year to date, the actual overhead is $\$ 16,000,000$ and the actual machine hours are 330,000 hours. If the Thomlin Company uses a predetermined overhead rate based on machine hours for applying overhead, as of this point in time (year to date) the overhead is over/under applied by
A. $\$ 1,000,000$ overapplied
B. $\$ 1,000,000$ underapplied
C. $\$ 500,000$ overapplied
D. $\$ 500,000$ underapplied
68. At the end of the year, overhead applied was $\$ 35,000,000$. Actual overhead was $\$ 34,300,000$. Closing over/under applied overhead into cost of goods sold would cause net income to:
A. Increase by $\$ 700,000$
B. Decrease by $\$ 700,000$
C. Remain constant
D. Decrease by $\$ 300,000$
69. Which of the following would most likely be a period cost?
A. Depreciation on factory lunchroom furniture.
B. Salary of telephone receptionist in the sales office.
C. Salary of a security guard for the factory parking lot.
D. Computer chips used by a computer manufacturer.
70. Which of the following would most likely be a product cost?
A. Salary of VP of sales.
B. Advertising for a particular product.
C. Drill bits for a drill press used in the plant assembly area.
D. Salary of the company receptionist.
71. The document authorizing the issuance of materials from the storeroom is the:
A. materials requisition
B. purchase requisition
C. receiving report
D. purchase order
72. The source of the data for debiting Work-in-Process for direct materials is the:
A. purchase order
B. purchase requisition
C. materials requisition
D. receiving report
73. In a job order cost accounting system, the entry to record the flow of direct materials into production is:
A. debit Work in Process, credit Materials
B. debit Materials, credit Work in Process
C. debit Factory Overhead, credit Materials
D. debit Work in Process, credit Supplies
74. A summary of the materials requisitions completed during a period serves as the basis for transferring the cost of the materials from the controlling account in the general ledger to the controlling accounts for:
A. work in process and cost of goods sold
B. work in process and factory overhead
C. finished goods and cost of goods sold
D. work in process and finished goods
75. In a job order cost accounting system, when goods that have been ordered are received, the receiving department personnel count, inspect the goods, and complete a:
A. purchase order
B. sales invoice
C. receiving report
D. purchase requisition
76. The amount of time spent by each employee and the labor cost incurred for each individual job or for factory overhead are recorded on:
A. pay stubs.
B. in-and-out cards.
C. time tickets.
D. employees' earnings records.
77. The amount of time spent by an employee in the factory is usually recorded on:
A. time tickets
B. job order cost sheets
C. employees' earnings records
D. statement of owners' equity
78. The basis for recording direct and indirect labor costs incurred is a summary of the period's:
A. job order cost sheets
B. time tickets
C. employees' earnings records
D. clock cards
79. The entry to record the flow of direct labor costs into production in a job order cost accounting system is:
A. debit Factory Overhead, credit Work in Process
B. debit Finished Goods, credit Wages Payable
C. debit Work in Process, credit Wages Payable
D. debit Factory Overhead, credit Wages Payable
80. At the end of July, the first month of the current fiscal year, the factory overhead account had a debit balance. Which of the following describes the nature of this balance and how it would be reported on the interim balance sheet?
A. Overapplied, deferred credit
B. Underapplied, deferred debit
C. Underapplied, deferred credit
D. Overapplied, deferred debit
81. At the end of the fiscal year, the balance in Factory Overhead is small. This balance would normally be:
A. transferred to Work in Process
B. transferred to Cost of Goods Sold
C. transferred to Finished Goods
D. allocated between Work in Process and Finished Goods
82. The details concerning the costs incurred on each job order are accumulated in a work in process account, which is supported by a:
A. stock ledger
B. materials ledger
C. cost ledger
D. creditors ledger
83. Each account in the cost ledger is called a:
A. finished goods sheet
B. stock record
C. materials requisition
D. job cost sheet
84. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aug. 1 | Balance | 275,000 | Aug. 31 | Goods finished | 1,030,000 |
| 31 | Direct materials | X |  |  |  |
| 31 | Direct labor | 450,000 |  |  |  |
| 31 | Factory overhead | X |  |  |  |
|  |  |  |  |  |  |


| Factory <br> Overhead |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1-31 | Costs incurred | 145,000 | Aug. 1 | Balance | 15,000 |  |
|  |  |  | 31 | Applied | X |  |
|  |  |  |  | $(30 \%$ of direct <br> labor cost) |  |  |
|  |  |  |  |  |  |  |

If the balance of Work in Process at August 31 is $\$ 220,000$, what was the amount debited to Work in Process for direct materials in August?
A. $\$ 390,000$
B. \$170,000
C. \$525,000
D. $\$ 580,000$

## 85. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1 | Balance | 275,000 | Aug. 31 | Goods finished | $1,030,000$ |  |
| 31 | Direct materials | X |  |  |  |  |
| 31 | Direct labor | 450,000 |  |  |  |  |
| 31 | Factory overhead | X |  |  |  |  |
|  |  |  |  |  |  |  |


| Factory <br> Overhead |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1-31 | Costs incurred | 145,000 | Aug. 1 | Balance | 15,000 |  |
|  |  |  | 31 | Applied | X |  |
|  |  |  |  |  |  |  |

If the balance of Work in Process at August 31 is $\$ 220,000$, what was the amount debited to Work in Process for factory overhead in August, assuming a factory overhead rate of $30 \%$ of direct labor costs?
A. $\$ 135,000$
B. $\$ 10,000$
C. \$120,000
D. $\$ 70,000$

## 86. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Oct. 1 | Balance | 20,000 | Oct. 31 | Goods finished | X |  |
| 31 | Direct materials | 96,700 |  |  |  |  |
| 31 | Direct labor | 201,000 |  |  |  |  |
| 31 | Factory overhead | X |  |  |  |  |
|  |  |  |  |  |  |  |


| Finished Goods | 52,000 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Oct. 1 | Balance | 360,000 |  |  |  |
| 31 | Goods finished |  |  |  |  |
|  |  |  |  |  |  |

If the balance of Work in Process at October 31 is $\$ 21,000$, what was the amount of factory overhead applied in October?
A. $\$ 63,300$
B. $\$ 21,300$
C. $\$ 42,300$
D. $\$ 11,300$
87. Selected accounts with a credit amount omitted are presented as follows:

| Work in Process |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Apr. 1 | Balance | 7,000 | Apr. 30 | Goods finished | X |  |  |  |  |  |  |  |  |
| 30 | Direct materials | 78,400 |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Direct labor | 195,000 |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Factory overhead | 136,500 |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| Finished Goods |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Apr. 1 | Balance | 42,000 | 387,000 |  |  |  |
| 30 | Goods finished |  |  |  |  |  |
|  |  |  |  |  |  |  |

What was the balance of Work in Process as of April 30?
A. $\$ 8,100$
B. $\$ 35,000$
C. $\$ 29,900$
D. $\$ 22,900$
88. If the amount of factory overhead cost incurred exceeds the amount applied, the factory overhead account will have a:
A. debit balance and be underapplied
B. credit balance and be underapplied
C. credit balance and be overapplied
D. debit balance and be overapplied
89. The recording of the factory labor incurred for general factory use would include a debit to:
A. Factory Overhead
B. Wages Payable
C. Wages Expense
D. Cost of Goods Sold
90. The recording of the application of factory overhead costs to jobs would include a credit to:
A. Factory Overhead
B. Wages Payable
C. Work in Process
D. Cost of Goods Sold
91. The recording of the jobs completed would include a debit to:
A. Factory Overhead
B. Finished Goods
C. Work in Process
D. Cost of Goods Sold
92. The recording of the jobs completed would include a credit to:
A. Factory Overhead
B. Finished Goods
C. Work in Process
D. Cost of Goods Sold
93. The recording of the jobs shipped and customers billed would include a debit to:
A. Accounts Payable
B. Cash
C. Finished Goods
D. Cost of Goods Sold
94. The recording of the jobs shipped and customers billed would include a credit to:
A. Accounts Payable
B. Cash
C. Finished Goods
D. Cost of Goods Sold
95. The finished goods account is the controlling account for the:
A. cost ledger
B. materials ledger
C. work in process ledger
D. stock ledger
96. The controlling account for the cost ledger is:
A. Finished Goods
B. Materials
C. Work in Process
D. Cost of Goods Sold
97. Poobah Manufacturers Inc. has estimated total factory overhead costs of $\$ 95,000$ and 10,000 direct labor hours for the current fiscal year. If job number 117 incurred 2,300 direct labor hours, the work in process account will be debited and factory overhead will be credited for:
A. $\$ 21,850$
B. $\$ 2,300$
C. $\$ 95,000$
D. cannot be determined
98. A widely used activity base for developing factory overhead rates in highly automated settings is:
A. direct labor hours
B. direct labor dollars
C. direct materials
D. machine hours
99. When job 711 was completed, direct materials totaled $\$ 4,000$; direct labor, $\$ 5,600$; and factory overhead, $\$ 2,400$ respectively. Units produced totaled 1,000 . Unit costs are:
A. $\$ 12,000$
B. $\$ 1,200$
C. $\$ 120$
D. $\$ 12$
100. The entries to record cost and sale of a finished good on account is:
A. debit Cost of Goods Sold, credit Finished Goods
B. debit Cost of Goods Sold, credit Finished Goods, debit Accounts Receivable, credit Sales
C. debit Sales Expense, credit Finished Goods, credit Cash, credit Accounts Receivable
D. debit Work in Process, credit Finished Goods, debit Accounts Receivable, credit Sales
101. All of the following are examples of activity bases except:
A. salaries of supervisors
B. quality inspections of products
C. number of machine setups
D. raw materials storage
102. Materials purchased on account during the month amounted to $\$ 180,000$. Materials requisitioned and placed in production totaled $\$ 165,000$. From the following, select the entry to record the transaction on the day the materials were bought.
A. Materials
165,000

Accounts Payable
165,000
B. Materials

180,000
Accounts Payable
180,000
C. Materials

180,000
Cash
180,000
D. Accounts Payable

180,000
Materials
180,000
103. Materials purchased on account during the month amounted to $\$ 180,000$. Materials requisitioned and placed in production totaled $\$ 165,000$. From the following, select the entry to record the transaction on the day the materials were requisitioned by the production department.

| A. Materials | 165,000 |  |
| :--- | :--- | :--- |
| Work in Process <br> B. Work in Process <br> Materials | 180,000 |  |
| C. Work in Process <br> Materials | 165,000 | 180,000 |
| D. Work in Process <br> Cash | 165,000 | 165,000 |
|  |  | 165,000 |

104. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead charged to production was $\$ 32,000$. From the following, select the entry to record the direct labor costs.

| A. Work in Process <br> Wages Payable | 200,000 |  |
| :--- | :--- | :--- |
| B. Work in Process | 275,000 | 200,000 |
| Wages Payable <br> C. Wages Payable <br> Work in Process | 275,000 | 275,000 |
| D. Wages Payable <br> Work in Process | 200,000 | 275,000 |
|  |  | 200,000 |

105. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead applied to production was $\$ 32,000$. From the following, select the entry to record the actual factory overhead costs incurred.

| A. Accounts Payable <br> Factory Overhead | 75,000 |  |
| :--- | :--- | :--- |
| B. Factory Overhead <br> Accounts Payable | 32,000 | 75,000 |
| C. Work in Process <br> Wages Payable | 75,000 | 32,000 |
| D. Factory Overhead <br> Wages Payable | 75,000 | 75,000 |
|  |  | 75,000 |

106. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead applied to production was $\$ 32,000$. From the following, select the entry to record the factory overhead applied to production.

| A. Work in Process <br> Factory Overhead | 75,000 |  |
| :--- | :--- | :--- |
| B. Factory Overhead |  |  |
| Work in Process |  |  |$\quad 32,000$ 75,000

107. The cost of production of completed and finished goods during the period amounted to $\$ 450,000$, and the finished products shipped to customers had total production costs of $\$ 357,000$. From the following, select the entry to record the transfer of costs from work in process to finished goods.
A. Finished Goods
357,000
Work in Process
357,000
B. Finished Goods
Work in Process
450,000
450,000
C. Work in Process
450,000
Finished Goods
450,000
D. Work in Process
357,000
Finished Goods
108. The cost of production of completed and finished goods during the period amounted to $\$ 450,000$, and the finished products shipped to customers had total production costs of $\$ 357,000$. From the following, select the entry to record the transfer of costs from finished goods to cost of goods sold.
A. Finished Goods
450,000
Cost of Goods Sold
450,000
B. Finished Goods 357,000
Cost of Goods Sold
357,000
C. Cost of Goods Sold
357,000
Finished Goods
D. Cost of Goods Sold $\quad 450,000$
Finished Goods
450,000
109. Costs that are used in generating revenues during the current period, but are not involved in the manufacturing process are often referred to as:
A. period costs
B. conversion costs
C. factory overhead costs
D. product costs
110. Costs that are treated as assets until the product is sold are called:
A. product costs
B. period costs
C. conversion costs
D. selling expenses
111. The period costs of a textbook publisher would include:
A. wages of a press operator
B. factory utility costs
C. advertising expenses
D. paper costs
112. Which types of inventories does a manufacturing business report on the balance sheet?
A. Finished goods inventory and work in process inventory
B. Direct materials inventory and work in process inventory
C. Direct materials inventory, work in process inventory, and finished goods inventory
D. Direct materials inventory and finished goods inventory
113. For the manufacturing business, inventory which is in the process of being manufactured is referred to as:
A. supplies inventory
B. work in process inventory
C. finished goods inventory
D. direct materials inventory
114. The proper journal entry to record the purchase of $\$ 30,000$ of raw materials on account would be:

| A. Raw Material Inventory | 30,000 |  |
| :--- | :---: | :---: |
| Accounts Receivable | 30,000 |  |
| B. Raw Material Inventory | 30,000 |  |
| Accounts Payable | 30,000 |  |
| C. Inventory $\quad 30,000$ |  |  |
| Accounts Receivable | 30,000 |  |
| D. Inventory <br> Cash | 30,000 |  |

115. Select the proper journal entry to record the movement of 1,700 units of part number 116B to work in process when each unit of 116B has a value of $\$ 2.00$.
A. Raw Material Inventory 3,400

Work in Process 3,400
B. Work in Process 3,400

Factory Overhead $\quad 3,400$
C. Work in Process 3,400

Raw Material Inventory 3,400
D. Work in Process 3,400

Cash 3,400
116. Which of the following represents the factory overhead applied to a product?
A. Predetermined factory overhead rate times estimated activity base.
B. Actual factory overhead rate times estimated activity base.
C. Predetermined factory overhead rate times actual activity base.
D. Actual factory overhead rate times actual activity base.
117. Which of the following is the correct formula to calculate the predetermined factory overhead rate?
A. Estimated total factory overhead costs divided by estimated activity base.
B. Actual total factory overhead costs divided by estimated activity base.
C. Estimated total factory overhead costs divided by actual activity base.
D. Actual total factory overhead costs divided by actual activity base.
118. The following budget data are available for Oldest Company:

Estimated direct labor hours
Estimated direct labor dollars
Estimated factory overhead costs

12,000
$\$ 90,000$
\$198,000

If factory overhead is to be applied based on direct labor hours, the predetermined overhead rate is
A. $\$ 7.50$
B. $\$ .13$
C. $\$ .061$
D. $\$ 16.50$
119. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000. Actual factory overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . What is the amount of overapplied or underapplied manufacturing overhead at the end of the year?
A. $\$ 6,000$ overapplied.
B. $\$ 6,000$ underapplied.
C. $\$ 54,800$ overapplied.
D. $\$ 54,800$ underapplied.
120. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000. Actual manufacturing overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . What is the predetermined overhead rate per direct labor hour?
A. $\$ 12.00$
B. $\$ 10.00$
C. $\$ 12.57$
D. $\$ 10.48$
121. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000 . Actual manufacturing overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . The entry to apply the factory overhead costs for the year would include a
A. debit to factory overhead for $\$ 360,000$.
B. credit to factory overhead for $\$ 432,000$.
C. debit to factory overhead for $\$ 377,200$.
D. credit to factory overhead for $\$ 360,000$.
122. Bar code scanners are now being used to track incoming materials and to electronically transmit this data. Scanners have replaced which of the following:
A. receiving report
B. materials requisition
C. materials ledger
D. job cost sheet
123. A separate account for each material is found in a
A. general ledger
B. materials ledger
C. receiving report
D. job cost sheet
124. The materials requisition is used to
A. release materials from the storeroom to the factory
B. release finished goods to the shipping department
C. record the acquisition of materials from a vendor
D. record and electronically transmit materials data in place of a receiving report

## 125. Period costs are

A. found on the balance sheet.
B. not involved in the production process.
C. classified as direct labor, direct material, or factory overhead.
D. found on the job order cost sheets.
126. Generally, period costs are classified as either
A. selling expenses or production expenses.
B. administrative expense or production expenses.
C. selling expenses or administrative expenses.
D. general expenses or selling expenses.
127. The following are true regarding product costs except
A. product costs are found on the balance sheet until they are sold.
B. product costs consist of direct labor, direct materials, and factory overhead.
C. product costs can be found in three accounts in the balance sheet.
D. product costs include sales and administrative expenses.
128. Job cost sheets can provide information to managers for all but the following:
A. cost impact of materials changes
B. cost impact of continuous improvement in the manufacturing process
C. cost impact of materials price or direct labor rate changes over time
D. utilities, managerial salaries, and depreciation of computers in the corporate office
129. A difference in quantity of materials used on two comparable jobs may be caused by:
A. inadequately trained employees
B. poor quality materials
C. employee carelessness
D. all of the above
130. Which of the following would probably not be found in the accounting system of a service provider?
A. Cost ledger
B. Finished jobs ledger
C. Deferred revenue account
D. Job cost sheets
131. Which of the following entries would probably not be found on the books of a service provider?
A. Debit Work in Process; credit Materials
B. Debit Work in Process; credit Wages Payable
C. Debit Work in Process; credit Overhead
D. Debit Cost of Services; credit Work in Process
132. In a job order cost accounting system used by a service business, which of the following items would normally not be included as part of overhead?
A. Materials
B. Direct labor
C. Rent
D. Supplies
133. The direct labor and overhead costs of providing services to clients are accumulated in:
A. finished services expense
B. work in process
C. administrative salaries expense
D. overhead
134. When a job is completed in a service organization, the job costs are transferred to the
A. work in process account.
B. cost of services account.
C. finished goods account.
D. cost of goods sold account.
135. The following budget data are available for Happy Company:

| Estimated direct labor hours | 12,000 |
| :--- | :--- |
| Estimated direct labor dollars | $\$ 90,000$ |
| Estimated factory overhead costs | $\$ 179,000$ |
| Actual direct labor hours | 11,500 |
| Actual direct labor dollars | $\$ 92,000$ |
| Actual factory overhead costs | $\$ 180,000$ |

If factory overhead is to be applied based on direct labor dollars, the predetermined overhead rate is
A. $199 \%$
B. $196 \%$
C. $\$ 14.92$
D. $\$ 15.65$
136. The following budget data are available for Happy Company:

Estimated direct labor hours
Estimated direct labor dollars
Estimated factory overhead costs
Actual direct labor hours
Actual direct labor dollars
Actual factory overhead costs

12,000
$\$ 90,000$
\$180,000
11,500
\$92,000
\$181,000

If factory overhead is to be applied based on direct labor hours as the cost allocation base for the predetermined overhead rate, the amount of overhead applied into production is
A. $\$ 180,000$
B. $\$ 181,000$
C. $\$ 172,500$
D. $\$ 184,000$
137. Scooby Company has applied $\$ 567,988$ of overhead into production on Jobs in the Work in Process account. Actual overhead at the end of the year is $\$ 575,000$. What is the adjustment for over or underapplied overhead?
A. $\$ 7012$ Overapplied, increase Cost of Goods Sold
B. \$7012 Underapplied, increase Cost of Goods Sold
C. $\$ 7012$ Overapplied, decrease Cost of Goods Sold
D. \$7012 Underapplied, decrease Cost of Goods Sold
138. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Work in Process for Zeke Company as of the end of the 1st quarter?
A. $\$ 0$
B. $\$ 456$
C. $\$ 3,208$
D. $\$ 2,752$
139. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Finished Goods for Zeke Company as of the end of the 1st quarter?
A. $\$ 456$
B. $\$ 1,067$
C. $\$ 1,685$
D. $\$ 2,752$
140. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ \quad 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Cost of Goods sold for Zeke Company as of the end of the 1 st quarter?
A. $\$ 456$
B. $\$ 2,685$
C. $\$ 1,685$
D. $\$ 685$
141. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is Sales for Zeke Company as of the end of the 1st quarter?
A. $\$ 1,685$
B. $\$ 2,685$
C. $\$ 1,000$
D. $\$ 685$
142. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is Gross Margin for Zeke Company as of the end of the 1st quarter?
A. $\$ 1,685$
B. $\$ 2,685$
C. $\$ 1,000$
D. $\$ 685$
143. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . If the actual factory overhead totaled $\$ 141,800$, determine the over or under applied amount for the month.
A. $\$ 7,575$ underapplied
B. $\$ 35,220$ underapplied
C. $\$ 7,575$ overapplied
D. $\$ 35,220$ overapplied
144. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,375,000$. Determine the over or under applied amount for the year.
A. $\$ 17,500$ overapplied
B. $\$ 17,500$ underapplied
C. $\$ 118,250$ overapplied
D. $\$ 118,250$ underapplied
145. Record in good journal entry format the following transactions:
. April 10, 400 units of raw materials were purchased at $\$ 5.50$.
2. April 15, 300 units of raw materials were requisitioned at $\$ 6.00$ for production, Job 345 .
3. April 25, 200 units of raw materials were requisitioned at $\$ 5.50$ for production, Job 555.
146. The Cavy Company accumulated 560 hours of direct labor on Job 345 and 800 hours on Job 777. The direct labor was incurred at a rate of $\$ 20$ per direct labor hour for Job 345 and $\$ 21$ per direct labor for Job 777. Journalize the entry to record the flow of labor costs into production.
147. During the month of April, Cavy Company incurred factory overhead as follows:

| Indirect materials | $\$ 11,000$ |
| :--- | :--- |
| Factory Supervision Labor | $\$ 4,000$ |
| Utilities | $\$ 500$ |
| Depreciation (factory) | $\$ 700$ |
| Small tools | $\$ 300$ |
| Equipment rental | $\$ 750$ |
|  |  |

Journalize the entry to record the factory overhead incurred during April.
148. Cavy Company estimates that total factory overhead costs will be $\$ 660,000$ for the year. Direct labor hours are estimated to be 100,000 . Determine (a) the predetermined factory overhead rate, (b) the amount of factory overhead applied to Job 345 if the amount of direct labor hours is 560 and Job 777 if the amount of direct labor hours is 800, and (c) prepare the journal entry to apply factory overhead in April according to the predetermined overhead rate.
149. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,470,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. Calculate the predetermined overhead rate to apply factory overhead.
150. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . What is the amount that will be applied to all of the jobs for the month of April?
151. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,470,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780. Prepare the journal entry to apply factory overhead.
152. At the end of April, Cavy Company had completed Job 766 and 765. According to the individual job cost sheets the information is as follows:

| Iob | Direct Materials | Direct Labor | Machine Hours |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Iob 765 | $\$ 5,670$ | $\$ 3,500$ | 27 |
| Iob 766 | $\$ 8,900$ | $\$ 4,775$ | 44 |
|  |  |  |  |
|  |  |  |  |

Job 765 produced 152 units, and Job 766 consisted of 250 units.
Assuming that the predetermined overhead rate is applied by using machine hours at a rate of $\$ 200$ per hour, determine the (a) balance on the job cost sheets for each job, and (b) the cost per unit at the end of April.
153. Cavy Company completed 26,000 units during the year at a cost of $\$ 2,139,800$. The beginning finished goods inventory was 5,000 units at $\$ 405,000$. Determine the cost of goods sold for 20,000 units, assuming a FIFO cost flow.
154. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . If the actual factory overhead totaled $\$ 141,800$, determine the over or under applied amount for the month.
155. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,375,000$.
a) Determine the total factory overhead amount applied.
b) Calculate the over or under applied amount for the year.
c) Prepare the journal entry to close factory overhead into Cost of Goods Sold.
156. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,348,800$.
a) Determine the total factory overhead amount applied.
b) Calculate the over or under applied amount for the year.
c) Prepare the journal entry to close factory overhead into Cost of Goods Sold.
157. Cranston Company estimates the following overhead costs for the coming year:

| Equipment depreciation | $\$ 160,000$ |
| :--- | :--- |
| Equipment maintenance | 60,000 |
| Supervisory salaries | 40,000 |
| Factory rent | $\underline{00,000}$ |
| Total | $\underline{\$ 360,000}$ |

Cranston is also budgeting $\$ 600,000$ in direct labor costs and 15,000 machine hours for the coming year.
Required:
a. Calculate the predetermined overhead rate using direct labor costs as the allocation base.
b. Calculate the predetermined overhead rate using machine hours as the allocation base.
158. Flagler Company allocates overhead based on machine hours. They estimated overhead costs for the year to be $\$ 420,000$. Estimated machine hours were 50,000 . Actual hours and costs for the year were 46,000 machine hours and $\$ 380,000$ of overhead.

## Required:

a. Calculate the overhead application rate for the year.
b. What is the amount of applied overhead for the year?
c. What is the amount of under or overapplied overhead for the year? Indicate whether it is over- or underapplied.
159. The Tulsa Company allocates overhead based on a predetermined overhead rate of $\$ 9.00$ per direct labor hour. Job S35 required 8 tons of direct material at a cost of $\$ 600.00$ per ton and took employees who earn $\$ 21.00$ per hour a total of 80 hours to complete. What is the total cost of Job S35?
160. Technics Inc., a manufacturing company, utilizes job order costing. Each division establishes its own estimates regarding overhead which are as follows:

| Division A | Division B |
| :--- | :--- |
| $\$ 128,000$ | $\$ 261,000$ |
| 16,000 | 72,500 |
| $\$ 155,000$ | $\$ 290,000$ |

## Required:

If Division A allocates overhead on the basis of machine hours, and Division B allocates overhead as a percentage of direct labor costs, what would the predetermined overhead rate be for each division?
161. Crain Company budgeted 35,000 direct labor hours and incurred 40,000 direct labor hours. It incurred $\$ 780,000$ of overhead and estimated overhead was $\$ 735,000$.

What is Crain's predetermined overhead rate? Was overhead overapplied or underapplied for the year? By how much?
162. Define and discuss the two main types of cost accounting systems for manufacturing operations. What are their similarities and differences?
163. Discuss how job order cost information is used in decision making. What are some possible reasons that actual cost of materials would exceed expected costs for a job?
164. Discuss the use of job order costing for professional services businesses. What are the similarities and differences between service and manufacturing business job order costing?
165. ABC Printing Company uses a job order cost system.
(a) Indicate
the
source of
the data
for
debiting
Work in
Process
for each of the
followin
g:
(1) Direct materials requisitioned
(2) Direct labor used
(b) Indicate
the
source of
the data
for
crediting
Work in
Process
for jobs
complete
d.
(c) Present a
list of
the three
controlli
ng
accounts
used in
the
general
ledger to
record
the
inventori
es and,
in each
case,
indicate
the
related
subsidiar
y ledger.
166. During June, the receipts and issuances of Material No. A2FO are as follows:

| June 3 | Balance | $\frac{\text { Received }}{1,100 \text { units at } \$ 15}$ |
| ---: | :--- | :--- |
| 16 | 1,700 units at $\$ 17$ |  |
| 29 | 900 units at $\$ 18$ |  |
|  |  | Issued |
| June 11 |  | 700 units for Job No. 116 |
| 18 | 1,900 units for Job No. 117 |  |
| 30 | 800 units for Job No. 118 |  |

(a) Determine the cost of each of the three issues under a perpetual system, using the first-in, first-out method.
(b) Present the journal entry to record the issuance of the materials for the month, assuming that the cost of issuances is determined by the first-in, first-out method.

## 167. A summary of the time tickets for August follows:

| Description | Amount | $\underline{\text { Description }}$ | $\underline{\text { Amount }}$ |
| :--- | ---: | :--- | :---: |
|  | $\$ 11,000$ | Job No. 342 | $\$ 8,300$ |
| Job No. 321 329 | 9,200 | Job No. 346 | 5,700 |
| Job No. 336 | 5,000 | Indirect labor | 8,000 |

Present the journal entries to record (a) the labor cost incurred and (b) the application of factory overhead to production for August. The factory overhead rate is $70 \%$ of direct labor cost.
168. The following account appears in the ledger after only part of the postings have been completed for July, the first month of the current fiscal year:

| Work in Process | 60,200 |  |  |
| :--- | :--- | :--- | :--- |
| Balance, July 1 | 147,000 |  |  |
| Direct materials | 120,000 |  |  |
| Direct labor |  |  |  |

Factory overhead is applied to jobs at the rate of $60 \%$ of direct labor cost. The actual factory overhead incurred for July was $\$ 75,000$. Jobs completed during the month totaled $\$ 301,200$.
(a) Prepare the journal entries to record (1) the application of factory overhead to production during July and (2) the jobs completed during July.
(b) What is the balance of the factory overhead account on July 31?
(c) Was factory overhead overapplied or underapplied on July 31?
(d) Determine the cost of the unfinished jobs on July 31.
169. Present entries to record the following summarized operations related to production for a company using a job order cost system:

| (a) | Materials purchased on account | \$167,000 |
| :---: | :---: | :---: |
| (b) | Prepaid expenses incurred on account | 12,200 |
| (c) | Materials requisitioned: |  |
|  | For production orders | 153,700 |
|  | For general factory use | 2,700 |
| (d) | Factory labor used: |  |
|  | On production orders | 141,300 |
|  | For general factory purposes | 12,000 |
| (e) | Depreciation on factory equipment | 37,000 |
| (f) | Expiration of prepaid expenses, chargeable to factory | 6,100 |
| (g) | Factory overhead costs incurred on account | 67,000 |
| (h) | Factory overhead applied, based on machine hours | 105,300 |
| (i) | Jobs finished | 415,300 |
| (j) | Jobs shipped to customers: cost, $\$ 412,000$; selling price | 638,000 |

170. The balance of Material Q on May 1 and the receipts and issuances during May are as follows:

| Balance May 1 | 8 at $\$ 32$ |
| :--- | ---: |
| Received May 11 | 23 at $\$ 33$ |
| Received May 25 | 15 at $\$ 35$ |
|  |  |
| Issued May 17 | 14 |
| Issued May 27 | 18 |

Determine the cost of each of the issuances under a perpetual system, using the first-in, first-out method.
171. Prepare the journal entry for materials and labor, based on the following:

| Raw materials issued: | $\$ 850$ <br> 600 | for Job 609 <br> for general use in the factory |
| :--- | :--- | :--- |
| Labor time tickets: | $\$ 1,600$ | for Job 609 <br> for supervision |

172. Six selected transactions for the current month are indicated by letters in the following T accounts in a job order cost accounting system:

| Materials | Work in <br> Process |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | (a) |  | (a) | (d) |
|  |  |  | (b) |  |
|  |  | (f) |  |  |
| Wages Payable |  |  |  |  |
|  | (b) |  |  |  |
|  |  | Finished <br> Goods |  | (e) |
| Factory Overhead |  |  | (d) |  |
| (a) | (c) |  | (f) |  |
| (b) | f) |  |  |  |
|  |  |  |  |  |
| Cost of Goods Sold |  |  |  |  |
| (e) |  |  |  |  |
| (f) |  |  |  |  |

Describe each of the six transactions.
173. On January 2nd, Newsprint Manufacturing purchases 5 rolls of paper on account at $\$ 125.00$ per roll for use within the production process. On January 5th 4 rolls of this paper are issued to Job 010507A in the Printing Department. The Printing Department records $\$ 675.00$ in direct labor and $\$ 1,150.00$ of factory overhead to Job 010507A. On January 8th Printing transfers Job 010507A to the Folding Department. The folding department applies $\$ 450.00$ in direct labor and $\$ 655.00$ in factory overhead to Job 010507A. Job 010507A is transferred to Finished Goods Inventory on January 9th.
(a) Journalize the purchasing of the paper to Raw Materials Inventory.
(b) Journalize the transfer of raw materials to work in process, the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Printing Department.
(c) Journalize the transfer of Job 010507A to the Folding Department at actual cost.
(d) Journalize the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Folding Department.
(e) Journalize the transfer of Job 010507A to Finished Goods Inventory at actual cost.
174. The Stamping Department accepted Job 051507A on May 15th to make 1,000 funnels.

To complete the job they requisitioned 1,100 sheets at $\$ 1.20$ per sheet and 1,150 grommets at $\$ 0.15$ per set.
The cost driver that the Stamping Department uses is drop-forge strokes which are counted on a machine mounted counter. $\$ 2.25$ is applied as overhead for each drop-forge stroke. Additionally $\$ 375.00$ of overhead is applied to each job due to setup and teardown.

Direct labor is applied at $\$ 22.50$ per hour for the machine operator and $\$ 11.10$ for the machine loader. The job required $61 / 2$ hours of labor by the team.

When the job was complete Job 051507A was transferred to Semi-finished Goods Inventory (SFGI). When the job was transferred, 20 sheets were returned unused to raw material inventory, 75 grommet sets were returned, and there were 1,115 strokes on the counter.

Journalize all events depicted as of May 15th.
175. On November 14th the Milling Department has accepted Job 111407A for 1,000 pounds of Cereal Mix. The bill of materials (BOM) for the Cereal Mix is:

| Material: | Standard Qty: | Standard Cost: |
| :--- | :--- | :--- |
| Oats | 525 pounds | $\$ 1.25$ per pound |
| Wheat | 450 pounds | $\$ 1.15$ per pound |
| Barley | 85 pounds | $\$ 1.45$ per pound |
| Malt | 65 pounds | $\$ 2.15$ per pound |
| Honey | 25 quarts | $\$ 1.20$ per quart |
| Water | 25 gallons | $\$ 0.45$ per gallon |
| Time: | $41 / 2$ hours |  |
| Miller | $11 / 2$ hours | $\$ 22.75$ per hour |
| Loader |  | $\$ 11.50$ per hour |

Manufacturing overhead is applied at $\$ 5.75$ per pound completed, and $\$ 75.75$ of materials are returned to Raw Materials Inventory. The recipe produced 1,025 pounds of cereal mix.
(a) Write the journal entry to transfer raw materials to Job 111407A.
(b) Write the journal entry to provide labor to Job 111407A.
(c) Write the journal entry to return 50 pounds oats, 5 pounds of barley, and 5 quarts of honey back to raw materials inventory.
(d) Write the journal entry to apply manufacturing overhead to Job 111407A.
(e) Write the journal entry to transfer Job 111407A to finished goods on November 14th.
176. Put the following in the order of the flow of manufacturing costs for a company
a. Closing under/over applied factory overhead to cost of goods sold
b. Materials purchased
c. Factory labor used and factory overhead incurred in production
d. Completed jobs moved to finished goods
e. Factory overhead applied to jobs according to the predetermined overhead rate
f. Materials requisitioned to jobs
g. Selling of finished product
h. Preparation of financial statements to determine gross profit

## 177. The following is a list of costs incurred by several business organizations:

(a) Telephone cable for a telephone company.
(b) Subscription to a health club for executives.
(c) Salary of the Director of Internal Auditing.
(d) Long-distance telephone bill for calls made by salespersons.
(e) Carrying cases for a manufacturer of video camcorders.
(f) Cotton for a textile manufacturer of blue jeans.
(g) Bandages for the emergency room of a hospital.
(h) Cost of company holiday party.
(i) Electricity used to operate factory machinery.
(j) State unemployment compensation taxes for factory workers.
(k) Gloves for factory machine operators.
(1) Fees paid for lawn service for office grounds.
(m) Salary of secretary to vice-president of finance.
(n) Salary of secretary to vice-president of marketing.
(o) Production supervisor's salary.
(p) Engine oil for manufacturer and distributor of motorcycles.
(q) Oil lubricants for factory plant and equipment.
(r) Cost of a radio commercial.
(s) Depreciation on factory equipment.
(t) Wages of check-out clerk in company-owned retail outlet.
(u) Maintenance and repair costs for factory equipment.
(v) Depreciation on office equipment.
(w) Bonuses paid to salespersons.
(x) Insurance on factory building.
(y) Training for accounting personnel on use of microcomputer.
(z) Steel for a construction contractor.

Classify each of the preceding costs as product costs or period costs. For those costs classified as product costs, indicate whether the product cost is a direct materials cost, direct labor cost, or factory overhead cost. For those costs classified as period costs, indicate whether the period cost is a selling expense or an administrative expense. Use the following tabular headings for preparing your answer. Place an X in the appropriate column.

|  | Product Cost |  | Period Cost |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost | Direct | Direct | Factory | Selling Expense | Administrative Expense |
|  | Materials | Labor | Overhead |  |  |
|  | Cost | Cost | Cost |  |  |
|  |  |  |  |  |  |

178. List the accounts used in the cost flow for (a) a manufacturer and (b) a service provider.
179. At the end of the period, Carson Company had the following balances in selected accounts:

| Raw Materials Inventory | $\$ 80,000$ |
| :--- | ---: |
| Finished Goods | 190,000 |
| Work in Process Inventory | 70,000 |
| Cost of Goods Sold | $1,000,000$ |
| Factory Overhead | 30,000 |

Required:
a. Assuming the factory overhead balance is relatively small, prepare the journal entry to close the Factory Overhead account if the balance in the account is a debit balance. What does a debit balance mean?
b. Assuming the factory overhead balance is relatively small, prepare the journal entry to close the Factory Overhead account if the balance in the account is a credit balance. What does a credit balance mean?

## Chapter 2--Job Order Costing Key

1. Cost accounting systems are used to supply cost data information on costs incurred by a manufacturing process or department.

## TRUE

2. A manufacturer may employ a job order cost system for some of its products and a process cost system for others.
TRUE
3. A job order cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory. TRUE
4. A process cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory. FALSE
5. A process cost accounting system accumulates costs for each of the departments or processes within the factory.
TRUE
6. A process cost accounting system is best used by manufacturers of like units of product that are not distinguishable from each other during a continuous production process.
TRUE
7. The process cost system is appropriate where few products are manufactured and each product is made to customers' specifications.

## FALSE

8. A job order cost system would be appropriate for a crude oil refining business.

FALSE
9. A law firm would use a job order cost system to accumulate all of the costs associated with a particular client engagement, such as lawyer time, copying charges, filing fees, and overhead.
TRUE
10. The job order costing system is not used by service organizations.

FALSE
11. The job order costing system is used by service firms to determine revenues, expenses, and ultimately profit.
TRUE
12. Perpetual inventory controlling accounts and subsidiary ledgers are maintained for materials, work in process, and finished goods in cost accounting systems.
TRUE
13. When the goods are sold, their costs are transferred from Work in Process to Finished Goods.

FALSE
14. The materials requisition serves as the source document for debiting the accounts in the materials ledger. FALSE
15. Materials are transferred from the storeroom to the factory in response to materials requisitions.

TRUE
16. The document that serves as the basis for recording direct labor on a job cost sheet is the time card. FALSE
17. The document that serves as the basis for recording direct labor on a job cost sheet is the time ticket. TRUE
18. Depreciation expense on factory equipment is part of factory overhead cost. TRUE
19. Factory overhead is applied to production using a predetermined overhead rate. TRUE
20. If factory overhead applied exceeds the actual costs, the factory overhead account will have a credit balance.
TRUE
21. If factory overhead applied exceeds the actual costs, overhead is said to be underapplied.

FALSE
22. If the underapplied factory overhead amount is material, it is transferred to Cost of Goods Sold at the end of the fiscal year.
FALSE
23. If the underapplied factory overhead amount is immaterial, it is transferred to Cost of Goods Sold at the end of the fiscal year.
TRUE
24. Each account in the cost ledger in a job order system is called a job cost sheet.

TRUE
25. In the job order system, the finished goods account is the controlling account for the factory overhead ledger.
FALSE
26. The inventory accounts generally maintained by a manufacturing firm are only finished goods and materials.

## FALSE

27. Generally accepted accounting principles require companies to use only one factory overhead rate for product costing.
FALSE
28. Activity-based costing is a method of accumulating and allocating costs by department.

FALSE
29. Interim financial statements for a manufacturing business would report overapplied factory overhead as a deferred item on the balance sheet.
TRUE
30. The debit to factory overhead for the cost of indirect materials is obtained from the summary of the materials requisitions.

## TRUE

31. In a factory with several processing departments, a single factory overhead rate may not provide accurate product costs and effective cost control.
TRUE
32. Nonmanufacturing costs are generally classified into two categories: selling and administrative. TRUE
33. The current year's advertising costs are normally considered period costs. TRUE
34. Direct labor cost is an example of a period cost.

FALSE
35. A manufacturing business reports just two types of inventory on its balance sheet: work in process inventory and finished goods inventory.

## FALSE

36. On the balance sheet for a manufacturing business, the cost of direct materials, direct labor, and factory overhead, which have entered into the manufacturing process but are associated with products that have not been finished, is reported as direct materials inventory.

## FALSE

37. As product costs are incurred in the manufacturing process, they are accounted for as assets and reported on the balance sheet as inventory.
TRUE
38. A receiving report is prepared when purchased materials are first received by the manufacturing department.
FALSE
39. Period costs are costs that are incurred for the production requirements of a certain period. FALSE
40. Job order cost systems can be used to compare unit costs of similar jobs to determine if costs are staying within expected ranges.
TRUE
41. Job cost sheets can provide information to managers on unit cost trends, the cost impact of continuous improvement in the manufacturing process, the cost impact of materials changes, and the cost impact of direct materials price or direct labor rate changes over time.
TRUE
42. Job order cost accounting systems may be used to evaluate a company's efficiency.

TRUE
43. Information about costs developed through a job order cost system can not be used to evaluate an organization's cost performance.

## FALSE

44. A staff department or unit is one directly involved in the basic objective of the organization.

## FALSE

45. Job order cost accounting systems may be used for planning and controlling a service business. TRUE
46. Job order cost accounting systems can be used only for companies that manufacture a product. FALSE
47. The direct labor and overhead costs of providing services to clients are accumulated in a work-in-process account.
TRUE
48. In a job order cost accounting system for a service business, materials costs are normally included as part of overhead.
TRUE
49. A service organization will not use the job order costing method because it has no direct materials.

FALSE
50. Using the job order cost system, service organizations are able to bill customers on a weekly or monthly basis, even when the job has not been completed.
TRUE
51. Match each of the following terms with the phrase that most closely describes it. Each answer may be used only once.

1. Applied overhead is less than actual overhead incurred.
2. Applied overhead is more than actual overhead incurred.
3. The stock ledger.
4. Typically used by companies that make custom products.
5. System that uses a different overhead rate for each activity.
6. Typically used by companies whose products are indistinguishable from each other.

Activity based costing $\underline{\mathbf{5}}$

Period costs $\underline{7}$
Overapplied
overhead $\underline{2}$
Job order cost
system 4
Process cost
system 6
Finished goods
ledger $\underline{\mathbf{3}}$
Underapplied
overhead 1
7. Expenses of the current period.
52. Match each of the following terms with the phrase that most closely describes it. Each answer may be used only once.

1. Serves as the basis for recording materials used.
2. Service providers use this account similarly to the cost of merchandise sold account used by merchandisers.
3. Prepared when materials that have been ordered are received and inspected.
4. Subsidiary ledger for Work in Process.
5. Serves as the basis for recording direct labor on a job cost sheet.

Cost of
Services $\underline{2}$
Job cost sheets 4

Time tickets $\underline{\mathbf{5}}$
Receiving
report $\underline{\mathbf{3}}$
Material
requisition $\underline{1}$
53. Which of the following are the two main types of cost accounting systems for manufacturing operations?
A. Process cost and general accounting systems
B. Job order cost and process cost systems
C. Job order and general accounting systems
D. Process cost and replacement cost systems
54. Which of the following would most likely use a job order costing system?
A. A paper mill
B. A swimming pool installer
C. A company that manufactures chlorine for swimming pools
D. An oil refinery
55. Which of the following would be most likely to use process costing?
A. A custom furniture manufacturer.
B. An auto body repair shop.
C. A law firm
D. A lawn fertilizer manufacturer.
56. Which of the following systems provides for a separate record of the cost of each particular quantity of product that passes through the factory?
A. Job order cost system
B. General cost system
C. Replacement cost system
D. Process cost system
57. For which of the following businesses would the job order cost system be appropriate?
A. Meat processor
B. Automobile manufacturer
C. Oil refinery
D. Construction contractor
58. For which of the following businesses would the process cost system be appropriate?
A. Book retailer
B. Dress designer
C. Lumber mill
D. Printing firm
59. Which of the following is not a characteristic of a job order costing system?
A. It accumulates cost for each department within the factory.
B. It provides a separate record for the cost of each quantity of product that passes through the factory.
C. It is best suited for industries that manufactures custom goods.
D. Uses only one work in process account.
60. Which of the following products probably would be manufactured using a job order costing system?
A. Number 2 pencils
B. Computer monitors.
C. Wedding invitations.
D. Paper.
61. Job order costing and process costing are
A. pricing systems.
B. cost accounting systems.
C. cost flow systems.
D. inventory tracking systems.
62. Which of the following is not true about why a service firm will use the job order costing system?
A. to help control costs
B. to determine client billing
C. to determine department costs within the firm
D. to determine profit
63. Which of the following costs are NOT included in finished goods inventory?
A. Direct labor
B. Factory overhead
C. Company president's salary
D. Direct materials
64. Which of the following is the correct flow of manufacturing costs?
A. Raw materials, work in process, finished goods, cost of goods sold
B. Raw materials, finished goods, cost of goods sold, work in process.
C. Work in process, finished goods, raw materials, cost of goods sold
D. Cost of goods sold, raw materials, work in process, finished goods.
65. Which of the following would record the labor costs to an individual job?
A. Clock card
B. In-and-out cards
C. Time tickets
D. Payroll register
66. The Thomlin Company forecasts that total overhead for the current year will be $\$ 15,000,000$ and that total machine hours will be 300,000 hours. Year to date, the actual overhead is $\$ 16,000,000$ and the actual machine hours are 330,000 hours. If the Thomlin Company uses a predetermined overhead rate based on machine hours for applying overhead, what is that overhead rate?
A. $\$ 48$ per machine hour
B. $\$ 53$ per machine hour
C. $\$ 45$ per machine hour
D. $\$ 50$ per machine hour
67. The Thomlin Company forecasts that total overhead for the current year will be $\$ 15,000,000$ and that total machine hours will be 300,000 hours. Year to date, the actual overhead is $\$ 16,000,000$ and the actual machine hours are 330,000 hours. If the Thomlin Company uses a predetermined overhead rate based on machine hours for applying overhead, as of this point in time (year to date) the overhead is over/under applied by
A. $\$ 1,000,000$ overapplied
B. $\$ 1,000,000$ underapplied
C. $\$ 500,000$ overapplied
D. $\$ 500,000$ underapplied
68. At the end of the year, overhead applied was $\$ 35,000,000$. Actual overhead was $\$ 34,300,000$. Closing over/under applied overhead into cost of goods sold would cause net income to:
A. Increase by $\$ 700,000$
B. Decrease by $\$ 700,000$
C. Remain constant
D. Decrease by $\$ 300,000$
69. Which of the following would most likely be a period cost?
A. Depreciation on factory lunchroom furniture.
B. Salary of telephone receptionist in the sales office.
C. Salary of a security guard for the factory parking lot.
D. Computer chips used by a computer manufacturer.
70. Which of the following would most likely be a product cost?
A. Salary of VP of sales.
B. Advertising for a particular product.
C. Drill bits for a drill press used in the plant assembly area.
D. Salary of the company receptionist.
71. The document authorizing the issuance of materials from the storeroom is the:
A. materials requisition
B. purchase requisition
C. receiving report
D. purchase order
72. The source of the data for debiting Work-in-Process for direct materials is the:
A. purchase order
B. purchase requisition
C. materials requisition
D. receiving report
73. In a job order cost accounting system, the entry to record the flow of direct materials into production is:
A. debit Work in Process, credit Materials
B. debit Materials, credit Work in Process
C. debit Factory Overhead, credit Materials
D. debit Work in Process, credit Supplies
74. A summary of the materials requisitions completed during a period serves as the basis for transferring the cost of the materials from the controlling account in the general ledger to the controlling accounts for:
A. work in process and cost of goods sold
B. work in process and factory overhead
C. finished goods and cost of goods sold
D. work in process and finished goods
75. In a job order cost accounting system, when goods that have been ordered are received, the receiving department personnel count, inspect the goods, and complete a:
A. purchase order
B. sales invoice
C. receiving report
D. purchase requisition
76. The amount of time spent by each employee and the labor cost incurred for each individual job or for factory overhead are recorded on:
A. pay stubs.
B. in-and-out cards.
C. time tickets.
D. employees' earnings records.
77. The amount of time spent by an employee in the factory is usually recorded on:
A. time tickets
B. job order cost sheets
C. employees' earnings records
D. statement of owners' equity
78. The basis for recording direct and indirect labor costs incurred is a summary of the period's:
A. job order cost sheets
B. time tickets
C. employees' earnings records
D. clock cards
79. The entry to record the flow of direct labor costs into production in a job order cost accounting system is:
A. debit Factory Overhead, credit Work in Process
B. debit Finished Goods, credit Wages Payable
C. debit Work in Process, credit Wages Payable
D. debit Factory Overhead, credit Wages Payable
80. At the end of July, the first month of the current fiscal year, the factory overhead account had a debit balance. Which of the following describes the nature of this balance and how it would be reported on the interim balance sheet?
A. Overapplied, deferred credit
B. Underapplied, deferred debit
C. Underapplied, deferred credit
D. Overapplied, deferred debit
81. At the end of the fiscal year, the balance in Factory Overhead is small. This balance would normally be:
A. transferred to Work in Process
B. transferred to Cost of Goods Sold
C. transferred to Finished Goods
D. allocated between Work in Process and Finished Goods
82. The details concerning the costs incurred on each job order are accumulated in a work in process account, which is supported by a:
A. stock ledger
B. materials ledger
C. cost ledger
D. creditors ledger
83. Each account in the cost ledger is called a:
A. finished goods sheet
B. stock record
C. materials requisition
D. job cost sheet
84. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aug. 1 | Balance | 275,000 | Aug. 31 | Goods finished | 1,030,000 |
| 31 | Direct materials | X |  |  |  |
| 31 | Direct labor | 450,000 |  |  |  |
| 31 | Factory overhead | X |  |  |  |
|  |  |  |  |  |  |


| Factory <br> Overhead |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1-31 | Costs incurred | 145,000 | Aug. 1 | Balance | 15,000 |  |
|  |  |  | 31 | Applied | (30\% of direct |  |
|  |  |  |  | labor cost) |  |  |
|  |  |  |  |  |  |  |

If the balance of Work in Process at August 31 is $\$ 220,000$, what was the amount debited to Work in Process for direct materials in August?
A. $\$ 390,000$
B. $\$ 170,000$
C. $\$ 525,000$
D. $\$ 580,000$

## 85. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1 | Balance | 275,000 | Aug. 31 | Goods finished | $1,030,000$ |  |
| 31 | Direct materials | X |  |  |  |  |
| 31 | Direct labor | 450,000 |  |  |  |  |
| 31 | Factory overhead | X |  |  |  |  |
|  |  |  |  |  |  |  |


| Factory <br> Overhead |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Aug. 1-31 | Costs incurred | 145,000 | Aug. 1 | Balance | 15,000 |  |
|  |  |  | 31 | Applied | X |  |
|  |  |  |  |  |  |  |

If the balance of Work in Process at August 31 is $\$ 220,000$, what was the amount debited to Work in Process for factory overhead in August, assuming a factory overhead rate of $30 \%$ of direct labor costs?
A. $\$ 135,000$
B. $\$ 10,000$
C. $\$ 120,000$
D. $\$ 70,000$

## 86. Selected accounts with some debits and credits omitted are presented as follows:

| Work in Process |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :---: |
| Oct. 1 | Balance | 20,000 | Oct. 31 | Goods finished | X |  |
| 31 | Direct materials | 96,700 |  |  |  |  |
| 31 | Direct labor | 201,000 |  |  |  |  |
| 31 | Factory overhead | X |  |  |  |  |
|  |  |  |  |  |  |  |


| Finished Goods | 52,000 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Oct. 1 | Balance | 360,000 |  |  |  |
| 31 | Goods finished |  |  |  |  |
|  |  |  |  |  |  |

If the balance of Work in Process at October 31 is $\$ 21,000$, what was the amount of factory overhead applied in October?
A. $\$ 63,300$
B. $\$ 21,300$
C. $\$ 42,300$
D. $\$ 11,300$
87. Selected accounts with a credit amount omitted are presented as follows:

| Work in Process |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Apr. 1 | Balance | 7,000 | Apr. 30 | Goods finished | X |
| 30 | Direct materials | 78,400 |  |  |  |
| 30 | Direct labor | 195,000 |  |  |  |
| 30 | Factory overhead | 136,500 |  |  |  |
|  |  |  |  |  |  |
| Finished Goods |  |  |  |  |  |
| Apr. 1 | Balance | 42,000 |  |  |  |
| 30 | Goods finished | 387,000 |  |  |  |
|  |  |  |  |  |  |

What was the balance of Work in Process as of April 30?
A. $\$ 8,100$
B. $\$ 35,000$
C. $\$ 29,900$
D. $\$ 22,900$
88. If the amount of factory overhead cost incurred exceeds the amount applied, the factory overhead account will have a:
A. debit balance and be underapplied
B. credit balance and be underapplied
C. credit balance and be overapplied
D. debit balance and be overapplied
89. The recording of the factory labor incurred for general factory use would include a debit to:
A. Factory Overhead
B. Wages Payable
C. Wages Expense
D. Cost of Goods Sold
90. The recording of the application of factory overhead costs to jobs would include a credit to:
A. Factory Overhead
B. Wages Payable
C. Work in Process
D. Cost of Goods Sold
91. The recording of the jobs completed would include a debit to:
A. Factory Overhead
B. Finished Goods
C. Work in Process
D. Cost of Goods Sold
92. The recording of the jobs completed would include a credit to:
A. Factory Overhead
B. Finished Goods
C. Work in Process
D. Cost of Goods Sold
93. The recording of the jobs shipped and customers billed would include a debit to:
A. Accounts Payable
B. Cash
C. Finished Goods
D. Cost of Goods Sold
94. The recording of the jobs shipped and customers billed would include a credit to:
A. Accounts Payable
B. Cash
C. Finished Goods
D. Cost of Goods Sold
95. The finished goods account is the controlling account for the:
A. cost ledger
B. materials ledger
C. work in process ledger
D. stock ledger
96. The controlling account for the cost ledger is:
A. Finished Goods
B. Materials
C. Work in Process
D. Cost of Goods Sold
97. Poobah Manufacturers Inc. has estimated total factory overhead costs of $\$ 95,000$ and 10,000 direct labor hours for the current fiscal year. If job number 117 incurred 2,300 direct labor hours, the work in process account will be debited and factory overhead will be credited for:
A. $\$ 21,850$
B. $\$ 2,300$
C. \$95,000
D. cannot be determined
98. A widely used activity base for developing factory overhead rates in highly automated settings is:
A. direct labor hours
B. direct labor dollars
C. direct materials
D. machine hours
99. When job 711 was completed, direct materials totaled $\$ 4,000$; direct labor, $\$ 5,600$; and factory overhead, $\$ 2,400$ respectively. Units produced totaled 1,000 . Unit costs are:
A. \$12,000
B. $\$ 1,200$
C. $\$ 120$
D. $\$ 12$
100. The entries to record cost and sale of a finished good on account is:
A. debit Cost of Goods Sold, credit Finished Goods
B. debit Cost of Goods Sold, credit Finished Goods, debit Accounts Receivable, credit Sales C. debit Sales Expense, credit Finished Goods, credit Cash, credit Accounts Receivable
D. debit Work in Process, credit Finished Goods, debit Accounts Receivable, credit Sales
101. All of the following are examples of activity bases except:
A. salaries of supervisors
B. quality inspections of products
C. number of machine setups
D. raw materials storage
102. Materials purchased on account during the month amounted to $\$ 180,000$. Materials requisitioned and placed in production totaled $\$ 165,000$. From the following, select the entry to record the transaction on the day the materials were bought.
A. Materials
165,000

Accounts Payable
165,000
B. Materials $\quad 180,000$

Accounts Payable
C. Materials

180,000
Cash
180,000
D. Accounts Payable

180,000
Materials
180,000
180,000
103. Materials purchased on account during the month amounted to $\$ 180,000$. Materials requisitioned and placed in production totaled $\$ 165,000$. From the following, select the entry to record the transaction on the day the materials were requisitioned by the production department.

| A. Materials | 165,000 |  |
| :--- | :---: | :---: |
| Work in Process <br> B. Work in Process <br> Materials | 180,000 | 165,000 |
| C. Work in Process | 165,000 | 180,000 |
| Materials | 165,000 |  |
| D. Work in Process <br> Cash | 165,000 |  |
|  |  | 165,000 |

104. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead charged to production was $\$ 32,000$. From the following, select the entry to record the direct labor costs.

| A. Work in Process | 200,000 |  |
| :--- | :--- | :--- |
| Wages Payable | 200,000 |  |
| B. Work in Process |  |  |
| Wages Payable | 275,000 |  |
| C. Wages Payable <br> Work in Process | 275,000 | 275,000 |
| D. Wages Payable <br> Work in Process | 200,000 | 275,000 |
|  |  | 200,000 |

105. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead applied to production was $\$ 32,000$. From the following, select the entry to record the actual factory overhead costs incurred.

| A. Accounts Payable <br> Factory Overhead | 75,000 |  |
| :--- | :--- | :--- |
| B. Factory Overhead <br> Accounts Payable | 32,000 | 75,000 |
| C. Work in Process <br> Wages Payable | 75,000 | 32,000 |
| D. Factory Overhead <br> Wages Payable | 75,000 | 75,000 |
|  |  | 75,000 |

106. During the period, labor costs incurred on account amounted to $\$ 275,000$ including $\$ 200,000$ for production orders and $\$ 75,000$ for general factory use. In addition, factory overhead applied to production was $\$ 32,000$. From the following, select the entry to record the factory overhead applied to production.
A. Work in Process 75,000

Factory Overhead 75,000
B. Factory Overhead 32,000

Work in Process
32,000
C. Work in Process 32,000

Factory Overhead 32,000
D. Factory Overhead 75,000

Accounts Payable
75,000
107. The cost of production of completed and finished goods during the period amounted to $\$ 450,000$, and the finished products shipped to customers had total production costs of $\$ 357,000$. From the following, select the entry to record the transfer of costs from work in process to finished goods.

| A. Finished Goods <br> Work in Process | 357,000 |  |
| :--- | :---: | :---: |
| B. Finished Goods | 450,000 | 357,000 |
| Work in Process |  | 450,000 |
| C. Work in Process <br> Finished Goods | 450,000 |  |
| D. Work in Process <br> Finished Goods | 357,000 | 450,000 |
|  |  | 357,000 |

108. The cost of production of completed and finished goods during the period amounted to $\$ 450,000$, and the finished products shipped to customers had total production costs of $\$ 357,000$. From the following, select the entry to record the transfer of costs from finished goods to cost of goods sold.

| A. Finished Goods <br> Cost of Goods Sold | $450,000450,000$ |  |
| :--- | :--- | :---: |
| B. Finished Goods <br> Cost of Goods Sold <br> C. Cost of Goods Sold | 357,000 |  |
| Finished Goods | 357,000 |  |
| D. Cost of Goods Sold <br> Finished Goods | 450,000 |  |
| 357,000 |  |  |

109. Costs that are used in generating revenues during the current period, but are not involved in the manufacturing process are often referred to as:
A. period costs
B. conversion costs
C. factory overhead costs
D. product costs
110. Costs that are treated as assets until the product is sold are called:
A. product costs
B. period costs
C. conversion costs
D. selling expenses
111. The period costs of a textbook publisher would include:
A. wages of a press operator
B. factory utility costs
C. advertising expenses
D. paper costs
112. Which types of inventories does a manufacturing business report on the balance sheet?
A. Finished goods inventory and work in process inventory
B. Direct materials inventory and work in process inventory
C. Direct materials inventory, work in process inventory, and finished goods inventory
D. Direct materials inventory and finished goods inventory
113. For the manufacturing business, inventory which is in the process of being manufactured is referred to as:
A. supplies inventory
B. work in process inventory
C. finished goods inventory
D. direct materials inventory
114. The proper journal entry to record the purchase of $\$ 30,000$ of raw materials on account would be:
A. Raw Material Inventory

Accounts Receivable
B. Raw Material Inventory

Accounts Payable
C. Inventory

Accounts Receivable
D. Inventory Cash

30,000
30,000
30,000
30,000
30,000
30,000
30,000
30,000
115. Select the proper journal entry to record the movement of 1,700 units of part number 116B to work in process when each unit of 116B has a value of $\$ 2.00$.
A. Raw Material Inventory 3,400

Work in Process 3,400
B. Work in Process 3,400

Factory Overhead $\quad 3,400$
C. Work in Process $\quad 3,400$

Raw Material Inventory 3,400
D. Work in Process 3,400

Cash 3,400
116. Which of the following represents the factory overhead applied to a product?
A. Predetermined factory overhead rate times estimated activity base.
B. Actual factory overhead rate times estimated activity base.
C. Predetermined factory overhead rate times actual activity base.
D. Actual factory overhead rate times actual activity base.
117. Which of the following is the correct formula to calculate the predetermined factory overhead rate?
A. Estimated total factory overhead costs divided by estimated activity base.
B. Actual total factory overhead costs divided by estimated activity base.
C. Estimated total factory overhead costs divided by actual activity base.
D. Actual total factory overhead costs divided by actual activity base.
118. The following budget data are available for Oldest Company:

Estimated direct labor hours
Estimated direct labor dollars
Estimated factory overhead costs

12,000
$\$ 90,000$
\$198,000

If factory overhead is to be applied based on direct labor hours, the predetermined overhead rate is
A. $\$ 7.50$
B. $\$ .13$
C. \$. 061
D. $\$ 16.50$
119. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000 . Actual factory overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . What is the amount of overapplied or underapplied manufacturing overhead at the end of the year?
A. $\$ 6,000$ overapplied.
B. $\$ 6,000$ underapplied.
C. $\$ 54,800$ overapplied.
D. $\$ 54,800$ underapplied.
120. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000 . Actual manufacturing overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . What is the predetermined overhead rate per direct labor hour?
A. $\$ 12.00$
B. $\$ 10.00$
C. $\$ 12.57$
D. $\$ 10.48$
121. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $\$ 360,000$ and direct labor hours would be 30,000 . Actual manufacturing overhead costs incurred were $\$ 377,200$, and actual direct labor hours were 36,000 . The entry to apply the factory overhead costs for the year would include a
A. debit to factory overhead for $\$ 360,000$.
B. credit to factory overhead for $\$ 432,000$.
C. debit to factory overhead for $\$ 377,200$.
D. credit to factory overhead for $\$ 360,000$.
122. Bar code scanners are now being used to track incoming materials and to electronically transmit this data. Scanners have replaced which of the following:
A. receiving report
B. materials requisition
C. materials ledger
D. job cost sheet
123. A separate account for each material is found in a
A. general ledger
B. materials ledger
C. receiving report
D. job cost sheet
124. The materials requisition is used to
A. release materials from the storeroom to the factory
B. release finished goods to the shipping department
C. record the acquisition of materials from a vendor
D. record and electronically transmit materials data in place of a receiving report

## 125. Period costs are

A. found on the balance sheet.
B. not involved in the production process.
C. classified as direct labor, direct material, or factory overhead.
D. found on the job order cost sheets.
126. Generally, period costs are classified as either A. selling expenses or production expenses.
B. administrative expense or production expenses.
C. selling expenses or administrative expenses.
D. general expenses or selling expenses.
127. The following are true regarding product costs except
A. product costs are found on the balance sheet until they are sold.
B. product costs consist of direct labor, direct materials, and factory overhead.
C. product costs can be found in three accounts in the balance sheet.
D. product costs include sales and administrative expenses.
128. Job cost sheets can provide information to managers for all but the following:
A. cost impact of materials changes
B. cost impact of continuous improvement in the manufacturing process
C. cost impact of materials price or direct labor rate changes over time
D. utilities, managerial salaries, and depreciation of computers in the corporate office
129. A difference in quantity of materials used on two comparable jobs may be caused by:
A. inadequately trained employees
B. poor quality materials
C. employee carelessness
D. all of the above
130. Which of the following would probably not be found in the accounting system of a service provider?
A. Cost ledger
B. Finished jobs ledger
C. Deferred revenue account
D. Job cost sheets
131. Which of the following entries would probably not be found on the books of a service provider?
A. Debit Work in Process; credit Materials
B. Debit Work in Process; credit Wages Payable
C. Debit Work in Process; credit Overhead
D. Debit Cost of Services; credit Work in Process
132. In a job order cost accounting system used by a service business, which of the following items would normally not be included as part of overhead?
A. Materials
B. Direct labor
C. Rent
D. Supplies
133. The direct labor and overhead costs of providing services to clients are accumulated in:
A. finished services expense
B. work in process
C. administrative salaries expense
D. overhead
134. When a job is completed in a service organization, the job costs are transferred to the A. work in process account.
B. cost of services account.
C. finished goods account.
D. cost of goods sold account.
135. The following budget data are available for Happy Company:

| Estimated direct labor hours | 12,000 |
| :--- | :--- |
| Estimated direct labor dollars | $\$ 90,000$ |
| Estimated factory overhead costs | $\$ 179,000$ |
| Actual direct labor hours | 11,500 |
| Actual direct labor dollars | $\$ 92,000$ |
| Actual factory overhead costs | $\$ 180,000$ |

If factory overhead is to be applied based on direct labor dollars, the predetermined overhead rate is
A. $199 \%$
B. $196 \%$
C. $\$ 14.92$
D. $\$ 15.65$
136. The following budget data are available for Happy Company:

Estimated direct labor hours $\quad 12,000$
Estimated direct labor dollars $\quad \$ 90,000$
Estimated factory overhead costs \$180,000
Actual direct labor hours 11,500
Actual direct labor dollars $\quad \$ 92,000$
Actual factory overhead costs \$181,000

If factory overhead is to be applied based on direct labor hours as the cost allocation base for the predetermined overhead rate, the amount of overhead applied into production is
A. $\$ 180,000$
B. $\$ 181,000$
C. \$172,500
D. $\$ 184,000$
137. Scooby Company has applied $\$ 567,988$ of overhead into production on Jobs in the Work in Process account. Actual overhead at the end of the year is $\$ 575,000$. What is the adjustment for over or underapplied overhead?
A. $\$ 7012$ Overapplied, increase Cost of Goods Sold
B. $\$ 7012$ Underapplied, increase Cost of Goods Sold
C. \$7012 Overapplied, decrease Cost of Goods Sold
D. \$7012 Underapplied, decrease Cost of Goods Sold
138. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Work in Process for Zeke Company as of the end of the 1st quarter?
A. \$0
B. $\$ 456$
C. $\$ 3,208$
D. $\$ 2,752$
139. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Finished Goods for Zeke Company as of the end of the 1st quarter?
A. $\$ 456$
B. $\$ 1,067$
C. $\$ 1,685$
D. $\$ 2,752$
140. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ \quad 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is the ending balance of Cost of Goods sold for Zeke Company as of the end of the 1st quarter?
A. $\$ 456$
B. $\$ 2,685$
C. \$1,685
D. $\$ 685$
141. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is Sales for Zeke Company as of the end of the 1st quarter?
A. $\$ 1,685$
B. $\$ 2,685$
C. $\$ 1,000$
D. $\$ 685$
142. Zeke Company is a manufacturing company that has worked on several production jobs during the 1 st quarter of the year. Below is a list of all the jobs for the quarter:

|  | Balance |
| :--- | :--- |
| Job 356 | $\$ 450$ |
| Job 357 | $\$ 1,235$ |
| Job 358 | $\$ 378$ |
| Job 359 | $\$ 689$ |
| Job 360 | $\$ 456$ |
|  |  |

Job $356,357,358 \& 359$ were completed. Jobs $356 \& 357$ were sold at a profit of $\$ 500$ on each job.
What is Gross Margin for Zeke Company as of the end of the 1st quarter?
A. $\$ 1,685$
B. $\$ 2,685$
C. $\$ 1,000$
D. $\$ 685$
143. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . If the actual factory overhead totaled $\$ 141,800$, determine the over or under applied amount for the month.
A. $\$ 7,575$ underapplied
B. $\$ 35,220$ underapplied
C. $\$ 7,575$ overapplied
D. \$35,220 overapplied
144. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,375,000$. Determine the over or under applied amount for the year.
A. $\$ 17,500$ overapplied
B. $\$ 17,500$ underapplied
C. \$118,250 overapplied
D. $\$ 118,250$ underapplied
145. Record in good journal entry format the following transactions:

1. April 10, 400 units of raw materials were purchased at $\$ 5.50$.
2. April 15, 300 units of raw materials were requisitioned at $\$ 6.00$ for production, Job 345.
3. April 25, 200 units of raw materials were requisitioned at $\$ 5.50$ for production, Job 555.

| April 10 | Materials | 2,200 |  |
| :--- | :--- | :--- | :--- |
|  | Accounts payable |  | 2,200 |
|  | Work in process | 1,800 |  |
| April 15 | Materials |  | 1,800 |
|  | Work in process | 1,100 |  |
|  | Materials |  | 1,100 |
|  |  |  |  |
|  |  |  |  |

146. The Cavy Company accumulated 560 hours of direct labor on Job 345 and 800 hours on Job 777. The direct labor was incurred at a rate of $\$ 20$ per direct labor hour for Job 345 and $\$ 21$ per direct labor for Job 777. Journalize the entry to record the flow of labor costs into production.

| Work in process | 28,000 |  |
| :---: | :--- | :--- |
| Wages payable |  | 28,000 |
|  |  |  |

$(560 * \$ 20)+(800 * \$ 21)=\$ 28,000$
147. During the month of April, Cavy Company incurred factory overhead as follows:

| Indirect materials | $\$ 11,000$ |
| :--- | :--- |
| Factory Supervision Labor | $\$ 4,000$ |
| Utilities | $\$ 500$ |
| Depreciation (factory) | $\$ 700$ |
| Small tools | $\$ 300$ |
| Equipment rental | $\$ 750$ |
|  |  |

Journalize the entry to record the factory overhead incurred during April.

| Factory overhead | 17,250 |  |
| :--- | :--- | :--- |
| Materials |  | 11,000 |
| Wages payable |  | 4,000 |
| Utilities |  | 500 |
| Accumulated depreciation |  | 700 |
| Small tools |  | 300 |
| Equipment rental |  | 750 |

148. Cavy Company estimates that total factory overhead costs will be $\$ 660,000$ for the year. Direct labor hours are estimated to be 100,000 . Determine (a) the predetermined factory overhead rate, (b) the amount of factory overhead applied to Job 345 if the amount of direct labor hours is 560 and Job 777 if the amount of direct labor hours is 800 , and (c) prepare the journal entry to apply factory overhead in April according to the predetermined overhead rate.
(a) $\$ 660,000 / 100,000=\$ 6.60$
(b) Job 345: $560 \mathrm{hrs} * \$ 6.60=\$ 3,696$

Job 777: $800 \mathrm{hrs} * \$ 6.60=\$ 5,280$
(c)

| Work in process | 8,976 |  |
| :---: | :--- | :--- |
| Factory overhead |  | 8,976 |
|  |  |  |

149. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,470,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. Calculate the predetermined overhead rate to apply factory overhead.
$\$ 1,470,000 / 40,000=\$ 36.75$ per machine hour
150. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . What is the amount that will be applied to all of the jobs for the month of April?

4,780 hours * $\$ 31.25=\$ 149,375$
151. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,470,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . Prepare the journal entry to apply factory overhead.

| Work in Process | 175,665 |  |
| :---: | :--- | :--- |
| Factory Overhead |  | 175,665 |

152. At the end of April, Cavy Company had completed Job 766 and 765. According to the individual job cost sheets the information is as follows:

| Job | Direct Materials | Direct Labor | Machine Hours |
| :--- | :--- | :--- | :--- |
|  |  |  |  |
| Job 765 | $\$ 5,670$ | $\$ 3,500$ | 27 |
| Job 766 | $\$ 8,900$ | $\$ 4,775$ | 44 |
|  |  |  |  |
|  |  |  |  |

Job 765 produced 152 units, and Job 766 consisted of 250 units.
Assuming that the predetermined overhead rate is applied by using machine hours at a rate of $\$ 200$ per hour, determine the (a) balance on the job cost sheets for each job, and (b) the cost per unit at the end of April.
a) Job $765=\$ 14,570(\$ 5,670+\$ 3,500+(27 * \$ 200)$

Job $766=\$ 22,475(\$ 8,900+\$ 4,775+(44 * \$ 200)$
b) Job $765=\$ 95.86(\$ 14,570 / 152)$

Job $766=\$ 89.90(\$ 22,475 / 250)$
153. Cavy Company completed 26,000 units during the year at a cost of $\$ 2,139,800$. The beginning finished goods inventory was 5,000 units at $\$ 405,000$. Determine the cost of goods sold for 20,000 units, assuming a FIFO cost flow.
$\$ 405,000+(15,000 * \$ 82.30)=\$ 1,639,500$
154. The Cavy Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 40,000 hours. The machine hours for the month of April for all of the jobs was 4,780 . If the actual factory overhead totaled $\$ 141,800$, determine the over or under applied amount for the month.
$\$ 141,800-\$ 149,375=\$ 7,575$ overapplied
155. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,375,000$.
a) Determine the total factory overhead amount applied.
b) Calculate the over or under applied amount for the year.
c) Prepare the journal entry to close factory overhead into Cost of Goods Sold.
a) 54,300 hours $* \$ 25=\$ 1,357,500$
b) $\$ 1,375,000$ actual $-\$ 1,357,500$ applied $=\$ 17,500$ underapplied
c)

| Cost of goods sold | 17,500 |  |
| :---: | :--- | :--- |
| Factory overhead |  | 17,500 |
|  |  |  |
|  |  |  |

156. The Winston Company estimates that the factory overhead for the following year will be $\$ 1,250,000$. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300 . The actual factory overhead for the year was $\$ 1,348,800$.
a) Determine the total factory overhead amount applied.
b) Calculate the over or under applied amount for the year.
c) Prepare the journal entry to close factory overhead into Cost of Goods Sold.
a) 54,300 hours $* \$ 25=\$ 1,357,500$
b) $\$ 1,348,800$ actual $-\$ 1,357,500$ applied $=\$ 8,700$ overapplied
c)

| Factory Overhead | 8,700 |  |
| :---: | :--- | :--- |
| Cost of Goods Sold |  | 8,700 |
|  |  |  |

157. Cranston Company estimates the following overhead costs for the coming year:

| Equipment depreciation | $\$ 160,000$ |
| :--- | :--- |
| Equipment maintenance | 60,000 |
| Supervisory salaries | 40,000 |
| Factory rent | $\underline{00,000}$ |
| Total | $\underline{\$ 360,000}$ |

Cranston is also budgeting $\$ 600,000$ in direct labor costs and 15,000 machine hours for the coming year.
Required:
a. Calculate the predetermined overhead rate using direct labor costs as the allocation base.
b. Calculate the predetermined overhead rate using machine hours as the allocation base.
a. $\quad \$ 360,000 / \$ 600,000=\$ 0.60$ per direct labor dollar
b. $\quad \$ 360,000 / 15,000$ machine hours $=\$ 24.00$ per machine hour
158. Flagler Company allocates overhead based on machine hours. They estimated overhead costs for the year to be $\$ 420,000$. Estimated machine hours were 50,000 . Actual hours and costs for the year were 46,000 machine hours and $\$ 380,000$ of overhead.

## Required:

a. Calculate the overhead application rate for the year.
b. What is the amount of applied overhead for the year?
c. What is the amount of under or overapplied overhead for the year? Indicate whether it is over- or underapplied.
a. $\quad \$ 420,000 / 50,000=\$ 8.40 /$ machine hour
b. $\quad \$ 8.40 \times 46,000=\$ 386,400$
c. $\$ 380,000-\$ 386,400=\$ 6,400$ overapplied
159. The Tulsa Company allocates overhead based on a predetermined overhead rate of $\$ 9.00$ per direct labor hour. Job S35 required 8 tons of direct material at a cost of $\$ 600.00$ per ton and took employees who earn $\$ 21.00$ per hour a total of 80 hours to complete. What is the total cost of Job S35?

| Direct materials | 8 tons @ $\$ 600$ | $\$ 4,800$ |
| :--- | ---: | ---: |
| Direct labor | 80 hours @ $\$ 21$ | 1,680 |
| Manufacturing overhead | 80 hours @ $\$ 9$ | $\underline{720}$ |
| Total cost of S35 |  | $\$ 7,200$ |

160. Technics Inc., a manufacturing company, utilizes job order costing. Each division establishes its own estimates regarding overhead which are as follows:

|  | Division A | Division B |
| :--- | :--- | :--- |
| Total estimated overhead | $\$ 128,000$ | $\$ 261,000$ |
| Total estimated machine hours | 16,000 | 72,500 |
| Total estimated direct labor costs | $\$ 155,000$ | $\$ 290,000$ |

## Required:

If Division A allocates overhead on the basis of machine hours, and Division B allocates overhead as a percentage of direct labor costs, what would the predetermined overhead rate be for each division?
$\$ 128,000 / 16,000=\$ 8$ per machine hour
$\$ 261,000 / \$ 290,000=90 \%$ of direct labor costs
161. Crain Company budgeted 35,000 direct labor hours and incurred 40,000 direct labor hours. It incurred $\$ 780,000$ of overhead and estimated overhead was $\$ 735,000$.

What is Crain's predetermined overhead rate? Was overhead overapplied or underapplied for the year? By how much?

Predetermined overhead rate: $\$ 735,000 / 35,000=\$ 21.00$ per direct labor hour
Applied overhead: $\$ 21.00 \times 40,000=\$ 840,000$
Actual overhead $\$ 780,000$
Overapplied overhead $\quad \$ 60,000$
162. Define and discuss the two main types of cost accounting systems for manufacturing operations. What are their similarities and differences?

The two main cost accounting systems are job order cost and process cost.
A job order cost system provides product costs for each quantity of product that is manufactured. Each quantity of product that is produced is called a job. This type of system is used by companies that manufacture custom products or batches of similar products.

A process cost system provides product costs for each manufacturing department or process. Process cost systems are used by companies that manufacture products that are indistinguishable from each other and manufactured using a continuous process.

They are similar in that both systems are widely used and a company may use both -- job order for some products and process costing for others.
163. Discuss how job order cost information is used in decision making. What are some possible reasons that actual cost of materials would exceed expected costs for a job?

Since a job order cost system provides product costs for each quantity of product that is manufactured, total and unit product costs can be compared to similar jobs or expected costs. Thus, a job order cost system can be used by managers for cost evaluation and control.

Possible reasons that actual material costs would exceed expected cost include: poorly trained employees, poor quality materials, faulty equipment or incorrect instructions.
164. Discuss the use of job order costing for professional services businesses. What are the similarities and differences between service and manufacturing business job order costing?

Professional service providers -- attorneys, physicians, advertising agencies, etc. - may use job order cost accounting systems. In such cases, clients are considered jobs.

Like manufacturers, direct labor and overhead costs for service companies are accumulated in work in process accounts. Unlike manufacturers, material cost for service companies are usually insignificant and treated as overhead. When a job is completed it is transferred to Cost of Services which is similar to Cost of Goods Sold. Service companies do not use Finished Goods accounts.
165. ABC Printing Company uses a job order cost system.
(a) Indicate
the
source of
the data
for
debiting
Work in
Process
for each of the
followin
g:
(1) Direct materials requisitioned
(2) Direct labor used
(b) Indicate
the
source of
the data
for
crediting
Work in
Process
for jobs
complete
d.
(c) Present a
list of
the three
controlli
ng
accounts
used in
the
general
ledger to
record
the
inventori
es and,
in each
case,
indicate
the
related
subsidiar
y ledger.
(a) (1) Summary of materials requisitions
(2) Summary of time tickets
(b) Summary
of job cost
sheets for
jobs
completed
(c) Controllin Subsidiary Ledger
g Account
Materials Materials ledger
Work in Cost ledger
Process
Finished Finished goods ledger (or stock ledger)
Goods
166. During June, the receipts and issuances of Material No. A2FO are as follows:

June 3

June 11
18
30

Received
Balance
1,100 units at $\$ 15$
1,700 units at $\$ 17$
900 units at $\$ 18$
Issued
700 units for Job No. 116
1,900 units for Job No. 117
800 units for Job No. 118
(a) Determine the cost of each of the three issues under a perpetual system, using the first-in, first-out method.
(b) Present the journal entry to record the issuance of the materials for the month, assuming that the cost of issuances is determined by the first-in, first-out method.

| (a) | June 11 | issue: | 700 at $\$ 15$ |
| ---: | ---: | :--- | :--- |
| 18 | issue: | 400 at $\$ 15$ plus 1,500 at $\$ 17$ | $\$ 10,500$ |
| 31 | issue: | 200 at $\$ 17$ plus 600 at $\$ 18$ | 31,500 |
|  |  |  | $\underline{\$ 56,200}$ |

(b) Work in Process

Materials
56,200
56,200
167. A summary of the time tickets for August follows:

| Description | Amount | $\underline{\text { Description }}$ | $\underline{\text { Amount }}$ |
| :--- | ---: | :--- | :---: |
|  | $\$ 11,000$ | Job No. 342 | $\$ 8,300$ |
| Job No. 321 | 9,200 | Job No. 346 | 5,700 |
| Job No. 336 | 5,000 | Indirect labor | 8,000 |

Present the journal entries to record (a) the labor cost incurred and (b) the application of factory overhead to production for August. The factory overhead rate is $70 \%$ of direct labor cost.
(a) $\left.\begin{array}{ccc}\text { Work in Process } & 39,200 & \\ & \text { Factory Overhead } & 8,000 \\ \text { Wages Payable } & & 47,200 \\ & \text { Work in Process } & 27,440 \\ \text { (b) } & \text { Factory Overhead } & \end{array}\right)=27,440$
168. The following account appears in the ledger after only part of the postings have been completed for July, the first month of the current fiscal year:

| Work in Process |  |  |  |
| :--- | :--- | :--- | :--- |
| Balance, July 1 | 60,200 |  |  |
| Direct materials | 147,000 |  |  |
| Direct labor | 120,000 |  |  |
|  |  |  |  |

Factory overhead is applied to jobs at the rate of $60 \%$ of direct labor cost. The actual factory overhead incurred for July was $\$ 75,000$. Jobs completed during the month totaled $\$ 301,200$.
(a) Prepare the journal entries to record (1) the application of factory overhead to production during July and (2) the jobs completed during July.
(b) What is the balance of the factory overhead account on July 31?
(c) Was factory overhead overapplied or underapplied on July 31?
(d) Determine the cost of the unfinished jobs on July 31.

| (a) | (1) Work in Process Factory Overhead | 72,000 | 72,000 |
| :---: | :---: | :---: | :---: |
|  | (2) Finished Goods Work in Process | 301,200 | 301,200 |
| (b) | \$3,000 <br> debit |  |  |
| (c) | Underap plied |  |  |
| (d) | Total <br> debits to <br> Work in <br> Process: <br> Balanc \$ 60,200 <br> e, July 1 <br> Direct 147,000 <br> materials <br> Direct 120,000 <br> labor |  |  |
|  | $\begin{gathered} \text { Factory } \\ \text { overhead } \end{gathered}$ | \$399,200 |  |
|  | Less cost of goods finished during July | 301,200 |  |
|  | Balance, <br> Work in <br> Process, <br> July 31 <br> (cost of unfinish ed jobs) | \$ 98,000 |  |

169. Present entries to record the following summarized operations related to production for a company using a job order cost system:

| (a) | Materials purchased on account | $\$ 167,000$ |
| :--- | :--- | :--- |
| (b) | Prepaid expenses incurred on account | 12,200 |
| (c) | Materials requisitioned: | 153,700 |
|  | For production orders | 2,700 |
| (d) | For general factory use | 141,300 |
|  | Factory labor used: | On production orders |
|  | For general factory purposes | 37,000 |
| (e) | Depreciation on factory equipment |  |
| (f) | Expiration of prepaid expenses, |  |
| chargeable to factory | 6,100 |  |
| (g) | Factory overhead costs incurred on account | 67,000 |
| (h) | Factory overhead applied, based on machine hours | 105,300 |
| (i) | Jobs finished | 415,300 |
| (j) | Jobs shipped to customers: cost, $\$ 412,000 ;$ |  |
|  | selling price | 638,000 |


| (a) | Materials | 167,000 |  |
| :---: | :---: | :---: | :---: |
|  | Accounts Payable |  | 167,000 |
| (b) | Prepaid Expenses | 12,200 |  |
|  | Accounts Payable |  | 12,200 |
| (c) | Work in Process | 153,700 |  |
|  | Factory Overhead | 2,700 |  |
|  | Materials |  | 156,400 |
| (d) | Work in Process | 141,300 |  |
|  | Factory Overhead | 12,000 |  |
|  | Wages Payable |  | 153,300 |
| (e) | Factory Overhead | 37,000 |  |
|  | Accumulated Depreciation - |  |  |
|  | Factory Equipment |  | 37,000 |
| (f) | Factory Overhead | 6,100 |  |
|  | Prepaid Expenses |  | 6,100 |
| (g) | Factory Overhead | 67,000 |  |
|  | Accounts Payable |  | 67,000 |
| (h) | Work in Process | 105,300 |  |
|  | Factory Overhead |  | 105,300 |
| (i) | Finished Goods | 415,300 |  |
|  | Work in Process |  | 415,300 |
| (j) | Cost of Goods Sold | 412,000 |  |
|  | Finished Goods |  | 412,000 |
|  | Accounts Receivable | 638,000 |  |
|  | Sales |  | 638,000 |

170. The balance of Material Q on May 1 and the receipts and issuances during May are as follows:

| Balance May 1 | 8 at $\$ 32$ |
| :--- | ---: |
| Received May 11 | 23 at $\$ 33$ |
| Received May 25 | 15 at $\$ 35$ |
|  |  |
| Issued May 17 | 14 |
| Issued May 27 | 18 |

Determine the cost of each of the issuances under a perpetual system, using the first-in, first-out method.
171. Prepare the journal entry for materials and labor, based on the following:

| Raw materials issued: | $\begin{aligned} & \$ 850 \\ & 600 \end{aligned}$ | for Job 609 <br> for general use in the factory |
| :---: | :---: | :---: |
| Labor time tickets: | $\begin{aligned} & \$ 1,600 \\ & 400 \end{aligned}$ | for Job 609 for supervision |
| Work in Process | 850 |  |
| Factory Overhead | 600 |  |
| Raw Materials |  | 1,450 |
| Work in Process | 1,600 |  |
| Factory Overhead | 400 |  |
| Wages Payable |  | 2,000 |

172. Six selected transactions for the current month are indicated by letters in the following T accounts in a job order cost accounting system:


Describe each of the six transactions.

| (a) | Direct and indirect materials are issued. |
| :--- | :--- |
| (b) | Direct and indirect labor costs are incurred. |
| (c) | Factory overhead is applied. |
| (d) | Completed goods are transferred to finished goods. |
| (e) | Goods are sold. |
| (f) | Underapplied overhead is allocated. |

173. On January 2nd, Newsprint Manufacturing purchases 5 rolls of paper on account at $\$ 125.00$ per roll for use within the production process. On January 5th 4 rolls of this paper are issued to Job 010507A in the Printing Department. The Printing Department records $\$ 675.00$ in direct labor and $\$ 1,150.00$ of factory overhead to Job 010507A. On January 8th Printing transfers Job 010507A to the Folding Department. The folding department applies $\$ 450.00$ in direct labor and $\$ 655.00$ in factory overhead to Job 010507A. Job 010507A is transferred to Finished Goods Inventory on January 9th.
(a) Journalize the purchasing of the paper to Raw Materials Inventory.
(b) Journalize the transfer of raw materials to work in process, the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Printing Department.
(c) Journalize the transfer of Job 010507A to the Folding Department at actual cost.
(d) Journalize the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Folding Department.
(e) Journalize the transfer of Job 010507A to Finished Goods Inventory at actual cost.

| (a) Jan 2nd | Raw Materials Accounts Payable | 625.00 | 625.00 |
| :---: | :---: | :---: | :---: |
| (b) Jan 5th | Work in Process - Job 010507A - Printing Raw Materials | 500.00 | 500.00 |
| Jan 5th | Work in Process - Job 010507A - Printing Wages Payable | 675.00 | 675.00 |
| Jan 5th | Work in Process - Job 010507A - Printing Factory Overhead | 1,150.00 | 1,150.00 |
| (c) Jan 8th | Work in Process - Job 010507A - Folding Work in Process - Job 010507A - Printing | 2,325.00 | 2,325.00 |
| (d) Jan 8th | Work in Process - Job 010507A - Folding Wages Payable | 450.00 | 450.00 |
| Jan 8th | Work in Process - Job 010507A - Folding Factory Overhead | 655.00 | 655.00 |
| (e) Jan 9th | Finished Goods <br> Work in Process - Job 010507A - Folding | 3,430.00 | 3,430.00 |

174. The Stamping Department accepted Job 051507A on May 15th to make 1,000 funnels.

To complete the job they requisitioned 1,100 sheets at $\$ 1.20$ per sheet and 1,150 grommets at $\$ 0.15$ per set.
The cost driver that the Stamping Department uses is drop-forge strokes which are counted on a machine mounted counter. $\$ 2.25$ is applied as overhead for each drop-forge stroke. Additionally $\$ 375.00$ of overhead is applied to each job due to setup and teardown.

Direct labor is applied at $\$ 22.50$ per hour for the machine operator and $\$ 11.10$ for the machine loader. The job required $61 / 2$ hours of labor by the team.

When the job was complete Job 051507A was transferred to Semi-finished Goods Inventory (SFGI). When the job was transferred, 20 sheets were returned unused to raw material inventory, 75 grommet sets were returned, and there were 1,115 strokes on the counter.

Journalize all events depicted as of May 15th.

| May 15th | WIP - Job 051507A | $(\$ 1,320.00+\$ 172.50)$ | $1,492.50$ |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Raw Material |  |  | $1,492.50$ |
| May 15th | WIP - Job 051507A |  |  |  |
|  | WIP - Job 051507A $(1,115 \times \$ 2.25)$ | $2,508.75$ |  |  |
|  | Mfg Overhead |  | $2,883.75$ |  |
| May 15th | WIP - Job 051507A $((\$ 22.50+\$ 11.10)$ X 6.5 hrs$)$ | 218.40 |  |  |
|  | Wages Payable |  | 218.40 |  |
| May 15th | SFGI | $4,559.40$ |  |  |
|  | Raw Materials (\$24.00 + 11.25) | 35.25 |  |  |
|  | WIP - Job 051507A |  | $4,594.65$ |  |

175. On November 14th the Milling Department has accepted Job 111407A for 1,000 pounds of Cereal Mix. The bill of materials (BOM) for the Cereal Mix is:

| Material: | Standard Qty: |
| :--- | :--- |
| Oats | 525 pounds |
| Wheat | 450 pounds |
| Barley | 85 pounds |
| Malt | 65 pounds |
| Honey | 25 quarts |
| Water | 25 gallons |
| Time: |  |
| Miller | $41 / 2$ hours |
| Loader | $11 / 2$ hours |

[^0]Manufacturing overhead is applied at $\$ 5.75$ per pound completed, and $\$ 75.75$ of materials are returned to Raw Materials Inventory. The recipe produced 1,025 pounds of cereal mix.
(a) Write the journal entry to transfer raw materials to Job 111407A.
(b) Write the journal entry to provide labor to Job 111407A.
(c) Write the journal entry to return 50 pounds oats, 5 pounds of barley, and 5 quarts of honey back to raw materials inventory.
(d) Write the journal entry to apply manufacturing overhead to Job 111407A.
(e) Write the journal entry to transfer Job 111407A to finished goods on November 14th.

176. Put the following in the order of the flow of manufacturing costs for a company
a. Closing under/over applied factory overhead to cost of goods sold
b. Materials purchased
c. Factory labor used and factory overhead incurred in production
d. Completed jobs moved to finished goods
e. Factory overhead applied to jobs according to the predetermined overhead rate
f. Materials requisitioned to jobs
g. Selling of finished product
h. Preparation of financial statements to determine gross profit
b. Materials purchased
f. Materials requisitioned to jobs
c. Factory labor used and factory overhead incurred in production
e. Factory overhead applied to jobs according to the predetermined overhead rate
d. Completed jobs moved to finished goods
a. Closing under/over applied factory overhead to cost of goods sold
g. Selling of finished product
h. Preparation of financial statements to determine gross profit
177. The following is a list of costs incurred by several business organizations:
(a) Telephone cable for a telephone company.
(b) Subscription to a health club for executives.
(c) Salary of the Director of Internal Auditing.
(d) Long-distance telephone bill for calls made by salespersons.
(e) Carrying cases for a manufacturer of video camcorders.
(f) Cotton for a textile manufacturer of blue jeans.
(g) Bandages for the emergency room of a hospital.
(h) Cost of company holiday party.
(i) Electricity used to operate factory machinery.
(j) State unemployment compensation taxes for factory workers.
(k) Gloves for factory machine operators.
(1) Fees paid for lawn service for office grounds.
(m) Salary of secretary to vice-president of finance.
(n) Salary of secretary to vice-president of marketing.
(o) Production supervisor's salary.
(p) Engine oil for manufacturer and distributor of motorcycles.
(q) Oil lubricants for factory plant and equipment.
(r) Cost of a radio commercial.
(s) Depreciation on factory equipment.
(t) Wages of check-out clerk in company-owned retail outlet.
(u) Maintenance and repair costs for factory equipment.
(v) Depreciation on office equipment.
(w) Bonuses paid to salespersons.
(x) Insurance on factory building.
(y) Training for accounting personnel on use of microcomputer.
(z) Steel for a construction contractor.

Classify each of the preceding costs as product costs or period costs. For those costs classified as product costs, indicate whether the product cost is a direct materials cost, direct labor cost, or factory overhead cost. For those costs classified as period costs, indicate whether the period cost is a selling expense or an administrative expense. Use the following tabular headings for preparing your answer. Place an X in the appropriate column.

|  | Product Cost |  | Period Cost <br> Cost |  | Direct <br> Materials <br> Cost |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  |  | Direct <br> Labor <br> Cost | Factory <br> Overhead <br> Cost | Selling <br> Expense | Administrative <br> Expense |


|  | Product Cost |  | Period Cost |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Cost | Direct <br> Materials <br> Cost | $\begin{array}{\|l} \text { Direct } \\ \text { Labor } \\ \text { Lost } \\ \hline \end{array}$ | Factory <br> Overhead <br> Cost | Selling Expense | Administrative Expense |
| (a) | X |  |  |  |  |
| (b) |  |  |  |  | X |
| (c) |  |  |  |  | X |
| (d) |  |  |  | X |  |
| (e) | X |  |  |  |  |
| (f) | X |  |  |  |  |
| (g) | X |  |  |  |  |
| (h) |  |  |  |  | X |
| (i) |  |  | X |  |  |
| (j) |  | X |  |  |  |
| (k) |  |  | X |  |  |
| (1) |  |  |  |  | X |
| (m) |  |  |  |  | X |
| (n) |  |  |  | X |  |
| (o) |  |  | X |  |  |
| (p) | X |  |  |  |  |
| (q) |  |  | X |  |  |
| (r) |  |  |  | X |  |
| (s) |  |  | X |  |  |
| (t) |  |  |  | X |  |
| (u) |  |  | X |  |  |
| (v) |  |  |  |  | X |
| (w) |  |  |  | X |  |
| (x) |  |  | X |  |  |
| (y) |  |  |  |  | X |
| (z) | X |  |  |  |  |
|  |  |  |  |  |  |

178. List the accounts used in the cost flow for (a) a manufacturer and (b) a service provider.
(a) Materials

Wages Payable
Factory Overhead
Work in Process
Finished Goods
Cost of Goods Sold
(b) Supplies

Wages Payable
Overhead
Work in Process
Cost of Services
179. At the end of the period, Carson Company had the following balances in selected accounts:

| Raw Materials Inventory | $\$ 80,000$ |
| :--- | ---: |
| Finished Goods | 190,000 |
| Work in Process Inventory | 70,000 |
| Cost of Goods Sold | $1,000,000$ |
| Factory Overhead | 30,000 |

Required:
a. Assuming the factory overhead balance is relatively small, prepare the journal entry to close the Factory Overhead account if the balance in the account is a debit balance. What does a debit balance mean?
b. Assuming the factory overhead balance is relatively small, prepare the journal entry to close the Factory Overhead account if the balance in the account is a credit balance. What does a credit balance mean?
a. Cost of Goods Sold
30,000
Factory Overhead
30,000

This means underapplied overhead in the factory overhead account.
b. Factory Overhead
30,000
Cost of Goods Sold
30,000

This means overapplied overhead in the factory overhead account.


[^0]:    Standard Cost:
    $\$ 1.25$ per pound
    $\$ 1.15$ per pound
    $\$ 1.45$ per pound
    $\$ 2.15$ per pound
    $\$ 1.20$ per quart
    $\$ 0.45$ per gallon
    $\$ 22.75$ per hour
    $\$ 11.50$ per hour

