## JOB ORDER COSTING AND ANALYSIS

## True/False Questions

1. Cost accounting systems accumulate manufacturing costs and then assign them to products and services.

Answer: True
Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
2. A company that uses a cost accounting system normally has only two inventory accounts: Finished Goods Inventory and Work in Process Inventory.

Answer: False

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
3. Cost accounting information is helpful to management for pricing decisions but has no effect on controlling costs.

## Answer: False

## Blooms: Understand

AACSB: Communication
AICPA BB: Industry
4. There are two basic types of cost accounting systems: job order costing and periodic costing.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
5. There are two basic types of cost accounting systems: job order costing and process costing.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
6. A company that produces a large number of standardized units would normally use a job order costing system.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
7. A company that produces products individually designed to meet the needs of a specific customer would normally use a job order costing system.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
8. Job order production systems would be appropriate for companies that produce custom homes, specialized equipment, and special computer systems.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
9. Job order production systems would be appropriate for companies that produce compact disks or disposable cameras.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
10. A job order costing system would be appropriate for a manufacturer of automobile tires.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
11. Job order production systems would be appropriate for companies that produce training films for a specific customer or custom-made furniture to be used in a new five-star resort hotel.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
12. When a job involves producing more than one unit of a custom product, it is often called a job lot.

Answer: True

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
13. A company's file of job cost sheets for jobs that are not yet completed equals the balance in the Finished Goods Inventory account.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
14. A company's file of job cost sheets for jobs that are not yet completed equals the balance in the Work in Process Inventory account.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
15. A company's file of job cost sheets for jobs that are completed but not yet sold equals the balance in the Finished Goods Inventory account.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
16. A company's file of job cost sheets for jobs that are completed but not yet sold equals the balance in the Work in Process Inventory account.

## Answer: False

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
17. The direct materials section of a job cost sheet shows the materials costs assigned to a specific job, but the direct labor section only shows the total hours of labor allocated to the job.

Answer: False

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
18. The collection of cost sheets for unfinished jobs makes up a subsidiary ledger controlled by the Work in Process Inventory account in the general ledger.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
19. A job cost sheet is useful for developing financial accounting numbers but does not contain information that is useful for managing the production process.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
20. Job cost sheets are used to track all of the costs assigned to a job, including direct materials, direct labor, overhead, and all selling and administrative costs.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
21. When a job is finished, its job cost sheet is completed and moved from the file of jobs in process to the file of finished jobs that are yet to be delivered to customers.

Answer: True

[^0]22. The file of job cost sheets for completed but undelivered jobs equals the balance in the Work in Process Inventory account.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
23. Both direct and indirect labor costs are recorded on the individual job cost sheets.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
24. Job cost sheets include both product and period costs.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
25. Only product costs are recorded on job cost sheets.

Answer: True

[^1]26. Service firms, unlike manufacturing firms, should only use actual costs when determining a selling price for their services.

Answer: False

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-A1
Topic: Pricing for Services
27. Job order costing is applicable to manufacturing firms only and not service firms.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-A1
Topic: Pricing for Services
28. The cost of all direct materials issued to production is debited to Work in Process Inventory.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
29. A materials requisition is a source document used by production managers to request materials for production and also used to assign materials costs to specific jobs or to overhead.

## Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
30. When materials are used as indirect materials, their cost is debited to the Factory Overhead account.

Answer: True

## Blooms: Remember

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
31. A materials requisition is a source document used by materials managers of a manufacturing company to order raw materials from suppliers; it serves the same purpose as a purchase order in a merchandising company.

Answer: False

## Blooms: Remember

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
32. A receiving report serves as the source document for recording materials received in both a materials ledger card and in the general ledger.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
33. In nearly all job order cost systems, materials ledger cards are perpetual records that are updated each time materials are purchased or issued for use in production.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-PI
Topic: Materials Cost Flows and Documents
34. The journal entry to record the usage of Direct Materials includes a debit to Work in Process Inventory.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
35. The journal entry to record the usage of Indirect Materials includes a debit to Work in Process Inventory.

Answer: False

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Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
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36. The journal entry to record the purchase of materials includes a debit to Work in Process Inventory.

Answer: False

[^2]37. Materials requisitions and time tickets are cost accounting source documents.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Learning Objective: 02-P2
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
38. A time ticket is a source document used by an employee to record the number of hours worked on a particular job during the work day.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
39. A time ticket is a source document that an employee uses to report how much direct labor was performed for a job and is used to determine the amount of direct labor to charge to the job.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
40. A time ticket is a source document that an employee uses to report how much indirect labor was performed for a job and is used to determine the amount of direct labor to charge to the job.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
41. A time ticket is a source document used by an employee to record the total number of hours worked and serves as a source document for entries to record labor costs.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
42. When time ticket information is entered into the accounting system, the journal entry is a debit to Factory Wages Payable and a credit to Work in Process Inventory.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
43. The predetermined overhead rate is used to allocate overhead cost to jobs.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
44. Factory overhead is often collected and summarized in a subsidiary factory overhead ledger.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
45. Predetermined overhead rates are calculated at the end of the accounting period once the actual amount of factory overhead is known.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic; Overhead Cost Flows and Documents
46. Predetermined overhead rates are calculated before the start of the accounting period, and are therefore based on estimates.

Answer: True

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic; Overhead Cost Flows and Documents
47. Predetermined overhead rates are necessary because cost accountants use periodic inventory systems.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
48. The predetermined overhead rate based on direct labor cost is the ratio of estimated overhead cost to estimated direct labor cost for the period.

Answer: True

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
49. In a job order costing system, indirect labor costs are debited to the Factory Overhead account.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Overhead Cost Flows and Documents
50. Since a predetermined overhead rate is established before a period begins, this rate is revised many times during the period to compensate for inaccurate estimates previously made.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
51. Under a job order costing system, individual jobs are always charged with actual overhead costs when they are transferred to finished goods.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
52. Actual factory overhead incurred in a job costing system is debited to a Factory Overhead general ledger account and credited to various other accounts.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
53. Direct materials and direct labor are examples of costs that are debited to the Factory Overhead account in a job costing system.

Answer: False

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
54. There should be a "cause and effect" relation between the overhead allocation base and overhead costs.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
55. Overapplied overhead is the amount by which actual overhead cost exceeds the overhead applied to products during the period.

Answer: False

[^3]56. Underapplied overhead is the amount by which actual overhead cost exceeds the overhead applied to products during the period.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
57. When actual overhead cost exceeds the overhead applied, overhead is said to be underapplied.

Answer: True

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
58. When actual overhead cost exceeds the overhead applied, overhead is said to be overapplied.

Answer: False

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
59. In a job order costing system, any immaterial underapplied overhead at the end of the period can be charged entirely to Cost of Goods Sold.

Answer: True

[^4]60. If actual overhead incurred during a period exceeds applied overhead, the difference will be a credit balance in the Factory Overhead account at the end of the period.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
61. If actual overhead incurred during a period exceeds applied overhead, the difference will be a debit balance in the Factory Overhead account at the end of the period.

Answer: True

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
62. The Factory Overhead account will have a credit balance at the end of a period if overhead applied during the period is greater than the overhead incurred.

Answer: True

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
63. The Factory Overhead account will have a debit balance at the end of a period if overhead applied during the period is greater than the overhead incurred.

Answer: False

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
64. Material amounts of under- or overapplied factory overhead are always closed entirely to Cost of Goods Sold at the end of an accounting period.

Answer: False

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
65. Underapplied overhead is the amount by which overhead applied to jobs using the predetermined overhead rate exceeds the actual overhead incurred during a period.

Answer: False

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Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
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66. Overapplied overhead is the amount by which overhead applied to jobs using the predetermined overhead rate exceeds the actual overhead incurred during a period.

Answer: True

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
67. Overapplied or underapplied overhead should be removed from the Factory Overhead account at the end of each accounting period.

Answer: True
Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
68. If overhead is underapplied, it means that individual jobs have not been charged enough during the year and the cost of goods sold reported is too low.

Answer: True

## Blooms: Remember

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
69. If overhead is overapplied, it means that individual jobs have not been charged enough overhead during the year and the cost of goods sold reported is too low.

Answer: False

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
70. If overhead is overapplied, it means that individual jobs have been charged too much overhead during the year and the cost of goods sold reported is too high.

Answer: True

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Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
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71. If overhead is underapplied, it means that individual jobs have been charged too much during the year and the cost of goods sold reported is too high.

## Answer: False

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
72. The schedule of cost of goods manufactured for a job costing system includes total actual factory overhead.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
73. Period costs for a manufacturing company, such as selling and administrative expenses, are recorded directly to Work in Process Inventory when they are incurred.

Answer: False

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
74. Manufacturing costs incurred for jobs completed during an accounting period can bypass the inventory accounts on the balance sheet and be recorded directly in expense accounts.

Answer: False
Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing

## Multiple Choice Questions

75. Cost accounting systems used by manufacturing companies are based on the:
A. Periodic inventory system.
B. Perpetual inventory system.
C. Finished goods inventories.
D. Weighted average inventories.
E. LIFO inventory system.

Answer: B

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
76. A system of accounting for production operations that produces timely information about inventories and manufacturing costs per unit of product is a:
A. Finished goods accounting system.
B. General accounting system.
C. Manufacturing accounting system.
D. Cost accounting system.
E. Production accounting system.

Answer: D

Blooms: Remember<br>AACSB: Communication<br>AICPA BB: Industry<br>AICPA FN: Measurement<br>Difficulty: 1 Easy<br>Learning Objective: 02-C1<br>Topic: Job Order Costing

77. Job order costing systems normally use:
A. Periodic inventory systems.
B. Perpetual inventory systems.
C. Real inventory systems.
D. General inventory systems.
E. Weighted average inventory systems.

Answer: B

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
78. In comparison to a general accounting system, a cost accounting system for a manufacturing company places an emphasis on:
A. Periodic inventory counts.
B. Total costs.
C. Continually updating costs of materials, work in process, and finished goods inventories.
D. Products and average costs.
E. Large volume operations involving standardized products.

Answer: C

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
79. Features of a job costing system include all but which of the following:
A. Diversity of products produced.
B. Mass production.
C. Heterogeneity
D. Customization
E. Separate manufacturing from other products

Answer: B

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
80. The two basic types of cost accounting systems are:
A. Job order costing and perpetual costing.
B. Job order costing and customized product costing.
C. Job order costing and customized service costing.
D. Job order costing and process costing.
E. Job order costing and periodic costing.

Answer: D
81. The production activities for a customized product represent $\mathrm{a}(\mathrm{n})$ :
A. Operation.
B. Job.
C. Unit.
D. Pool.
E. Process.

Answer: B

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
82. A job order costing system would best fit the needs of a company that makes:
A. Shoes and apparel.
B. Paint.
C. Cement.
D. Custom machinery.
E. Pencils and erasers.

Answer: D

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Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
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83. Job order production is also known as:
A. Mass production.
B. Process production.
C. Unit production.
D. Customized production.
E. Standard costing.

Answer: D
Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
84. Omega Contractors manufactures each house to customer specifications. It most likely would use:
A. Process costing.
B. A periodic inventory system.
C. Unique costing.
D. Job order costing.
E. Activity-based costing.

Answer: D

Blooms: Remember
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing $\backslash$
85. A type of production that yields customized products or services for each customer is called:
A. Customer orientation production.
B. Job order production.
C. Just-in-time production.
D. Job lot production.
E. Process production.

Answer: B

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
86. A company that makes which of the following types of products would best be suited for a job costing system?
A. Fruit juice
B. Bathing suits
C. Snack chips
D. Compact discs
E. Custom jewelry

## Answer: E

87. The target cost for a job using job costing is calculated as:
A. direct costs + desired profit
B. direct costs - desired profit
C. expected selling price - direct costs
D. expected selling price - desired profit
E. expected selling price + desired profit

Answer: D

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
88. A job order production system would be appropriate for a company that produces which one of the following items?
A. A landscaping design for a new hospital.
B. Seedlings for sale in a nursery.
C. Sacks of yard fertilizer.
D. Packets of flower seeds.
E. Small gardening tools, including rakes, shovels, and hoes.

Answer: A

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
89. Large aircraft producers such as the Boeing Company normally use:
A. Job order costing.
B. Process costing.
C. Mixed costing.
D. Full costing.
E. Simple costing.

Answer: A

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
90. A document in a job order costing system that is used to record the costs of producing a job is $\mathrm{a}(\mathrm{n})$ :
A. Job cost sheet.
B. Job lot.
C. Finished goods summary.
D. Process cost system.
E. Units-of-production sheet.

Answer: A

Blooms: Remember<br>AACSB: Communication<br>AICPA BB: Industry<br>AICPA FN: Measurement<br>Difficulty: 1 Easy<br>Learning Objective: 02-C2<br>Topic: Job Cost Sheet

91. A job cost sheet shows information about each of the following items except:
A. The direct labor costs assigned to the job.
B. The name of the customer.
C. The costs incurred by the marketing department in selling the job.
D. The overhead costs assigned to the job.
E. The direct materials costs assigned to the job.

Answer: C

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
92. The job order cost sheets used by Greene Company revealed the following:

| Job. No. | Bal., May 1 |  | May Production Costs |
| :---: | :---: | :---: | :---: |
| 134 | $\$ 1,700$ | $\$ 0$ |  |
| 135 | 1,200 | 300 |  |
| 136 | 0 | 900 |  |

Job No. 135 was completed during May and Jobs No. 134 and 135 were shipped to customers in May. What was the company's cost of goods sold for May and the Work in Process inventory on May 31?
A. $\$ 3,200 ; \$ 900$.
B. $\$ 2,900 ; \$ 1,200$.
C. \$1,200; \$2,900.
D. \$1,700; \$1,200.
E. \$4,100; \$ 0 .

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-C2
Topic: Job cost sheet
Feedback:
Cost of goods sold:

| Job 134: | $\$ 1,700$ |
| :--- | ---: |
| Job 135: $(\$ 1,200+\$ 300)$ | $\underline{1,500}$ |
|  | $\underline{\underline{\$ 3,200}}$ |

Work in Process inventory:
Job 136:
$\$ 900$
93. Job A3B was ordered by a customer on September 25. During the month of September, Jaycee Corporation requisitioned $\$ 2,500$ of direct materials and used $\$ 4,000$ of direct labor. The job was not finished by the end of the month, but needed an additional \$3,000 of direct materials and additional direct labor of $\$ 6,500$ to finish the job in October. The company applies overhead at the end of each month at a rate of $200 \%$ of the direct labor cost incurred. What is the balance in the Work in Process account at the end of September relative to Job A3B?
A. $\$ 5,500$
B. $\$ 11,500$
C. $\$ 6,500$
D. \$9,500
E. $\$ 14,500$

Answer: E

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
Feedback:
DM $\$ 2,500+$ DL $\$ 4,000+$ OH $(\$ 4,000 * 2)=$ WIP for Job A3B $\$ 14,500$
Work in process contains the sum of the costs on job cost sheets for jobs that are not yet complete.
94. Job A3B was ordered by a customer on September 25. During the month of September, Jaycee Corporation requisitioned $\$ 2,500$ of direct materials and used $\$ 4,000$ of direct labor. The job was not finished by the end of the month, but needed an additional $\$ 3,000$ of direct materials and additional direct labor of $\$ 6,500$ to finish the job in October. The company applies overhead at the end of each month at a rate of $200 \%$ of the direct labor cost incurred. What is the total cost of the job when it is completed in October?
A. $\$ 16,000$
B. $\$ 22,500$
C. $\$ 37,000$
D. $\$ 26,500$
E. \$32,000

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
Feedback:
September job costs: RM $\$ 2,500+$ DL $\$ 4,000+O H(\$ 4,000 * 2)=\$ 14,500$
October job costs: $R M \$ 3,000+D L \$ 6,500+O H(\$ 6,500 * 2)=\$ 22,500$
Total costs: September $\$ 14,500+$ October $\$ 22,500=\$ 37,000$
Work in process contains the sum of the costs on job cost sheets for jobs that are not yet complete.
95. Job A3B was ordered by a customer on September 25. During the month of September, Jaycee Corporation requisitioned $\$ 2,500$ of direct materials and used $\$ 4,000$ of direct labor. The job was not finished by the end of the month, but needed an additional $\$ 3,000$ of direct materials in October and additional direct labor of $\$ 6,500$ to finish the job. The company applies overhead at the end of each month at a rate of $200 \%$ of the direct labor cost. What is the amount of job costs added to Work in Process Inventory during October?
A. $\$ 16,000$
B. $\$ 22,500$
C. $\$ 37,000$
D. $\$ 26,500$
E. $\$ 32,000$

Answer: B

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
Feedback:
October job costs: $R M \$ 3,000+$ DL $\$ 6,500+O H(\$ 6,500 * 2)=\$ 22,500$
Work in process contains the sum of the costs on job cost sheets for jobs that are not yet complete.
96. A job cost sheet includes:
A. Direct materials, direct labor, operating costs.
B. Direct materials, estimated overhead, administrative costs.
C. Direct labor, actual overhead, selling costs.
D. Direct material, direct labor, applied overhead.
E. Direct materials, direct labor, selling costs.

Answer: D

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
97. The balance in the Work in Process Inventory at any point in time is equal to:
A. The costs for jobs finished during the period but not yet sold.
B. The cost of jobs ordered but not yet started into production.
C. The sum of the costs for all jobs in process but not yet completed.
D. The costs of all jobs started during the period, completed or not.
E. The sum of the materials, labor and overhead costs paid during the period.

Answer: C

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C2
Topic: Job cost sheet
98. The Work in Process Inventory account of a manufacturing company that uses an overhead rate based on direct labor cost has a $\$ 3,200$ debit balance after all posting is completed. The cost sheet of the one job still in process shows direct material cost of $\$ 1,400$ and direct labor cost of $\$ 800$. Therefore, the amount of the applied overhead is:
A. $\$ 1,800$.
B. $\$ 2,200$
C. $\$ 1,000$
D. $\$ 800$
E. $\$ 2,400$

## Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

$$
\begin{aligned}
\text { Feedback: } & W I P=D M+D L+O H \\
& \$ 3,200=\$ 1,400+\$ 800+O H \\
& O H=\$ 3,200-1,400-800=\$ 1,000
\end{aligned}
$$

99. The Work in Process Inventory account of a manufacturing company that uses an overhead rate based on direct labor cost has a $\$ 4,400$ debit balance after all posting is completed. The cost sheet of the one job still in process shows direct material cost of $\$ 2,000$ and direct labor cost of $\$ 800$. Therefore, the company's overhead application rate is:
A. $40 \%$ of direct labor cost.
B. $50 \%$ of direct labor cost.
C. $80 \%$ of direct labor cost.
D. $200 \%$ of direct labor cost.
E. $300 \%$ of direct labor cost.

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: $W I P=D M+D L+O H$

$$
\$ 4,400=\$ 2,000+\$ 800+O H
$$

$$
O H=\$ 1,600 ; \text { OH rate }=\$ 1,600 / \$ 800=\underline{200 \%}
$$

100. A perpetual record of a raw materials item that records data on the quantity and cost of units purchased, units issued for use in production, and units that remain in the raw materials inventory, is called a(n):
A. Materials ledger card.
B. Materials requisition.
C. Purchase order.
D. Materials voucher.
E. Purchase ledger.

Answer: A
101. A source document that production managers use to request materials for production and that is used to assign materials costs to specific jobs or to overhead is a:
A. Job cost sheet.
B. Production order.
C. Materials requisition.
D. Materials purchase order.
E. Receiving report.

Answer: C

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
102. A company that uses a job order costing system would make the following entry to record the flow of direct materials into production:
A. debit Work in Process Inventory, credit Cost of Goods Sold.
B. debit Work in Process Inventory, credit Raw Materials Inventory.
C. debit Work in Process Inventory, credit Factory Overhead.
D. debit Factory Overhead, credit Raw Materials Inventory.
E. debit Finished Goods Inventory, credit Raw Materials Inventory.

Answer: B

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
103. The Work in Process Inventory account for DG Manufacturing follows. Compute the cost of jobs completed and transferred to Finished Goods Inventory.

|  | Work in Process Inventory |  |
| :--- | ---: | ---: |
| Beginning WIP | 4,500 |  |
| Direct materials | 47,100 |  |
| Direct labor | 29,600 |  |
| Applied Overhead | 15,800 |  |
| Total Manufacturing |  |  |
| Costs | 97,000 |  |
| To Finished Goods |  | $\mathbf{?}$ |
| Ending WIP | 8,900 |  |

The cost of units transferred to finished goods is:
A. $\$ 97,000$.
B. $\$ 105,900$.
C. $\$ 88,100$.
D. $\$ 95,200$.
E. \$92,500

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents

Feedback: $\$ 4,500+\$ 47,100+\$ 29,600+\$ 15,800-F G=\$ 8,900 ; F G=\$ 88,100$
104. A company's overhead rate is $60 \%$ of direct labor cost. Using the following incomplete accounts, determine the cost of direct materials used.

|  | Work in Process Inventory |  |
| :--- | ---: | ---: |
| Beginning WIP | 100,800 |  |
| Direct Materials | $\mathbf{?}$ |  |
| Direct Labor | $\mathbf{?}$ |  |
| Applied Overhead | $\mathbf{?}$ |  |
| To Finished Goods |  | $\mathbf{?}$ |
| Ending WIP | 131,040 |  |


| Factory Overhead |  |
| :---: | :---: |
| 100,800 | 90,720 |

Finished Goods Inventory
Beginning FG

Ending FG

| 118,200 |  |
| ---: | ---: |
| 324,800 | 301,000 |
| 142,000 |  |

A. $\$ 106,400$.
B. $\$ 113,120$.
C. $\$ 30,240$.
D. $\$ 211,680$.
E. $\$ 324,800$.

Answer: B

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents

Feedback: $D L=\$ 90,720 / .60=\$ 151,200$
Beg Bal + DM + DL + OH - Tran to $F G=$ End Bal
$\$ 100,800+D M+\$ 151,200+\$ 90,720-\$ 324,800=\$ 131,040 ; D M=\underline{\$ 113,120}$

Feedback:

$\left.$| Beginning WIP | 100,800 |
| :--- | ---: |
| Direct Materials | $\mathbf{1 1 3 , 1 2 0}$ |
| Direct Labor | 151,200 |$\quad \right\rvert\,$


| Factory Overhead |  |
| :---: | :---: |
| 100,800 | 90,720 |


|  | Finished Goods Inventory |  |
| :--- | ---: | ---: |
| Beginning $F G$ | 118,200 |  |
|  | 324,800 | 301,000 |
| Ending $F G$ | 142,000 |  |

105. A company's overhead rate is $200 \%$ of direct labor cost. Using the following incomplete accounts, determine the cost of direct materials used.

|  | Work in Process Inventory |  |
| :--- | ---: | ---: |
| Beginning WIP | 50,000 |  |
| Direct Materials | $\boldsymbol{?}$ |  |
| Direct Labor | $\boldsymbol{?}$ |  |
| Applied Overhead | $\boldsymbol{?}$ |  |
| To Finished Goods |  |  |
| Ending WIP | 60,000 |  |


| Factory Overhead |  |
| :---: | :---: |
| 138,000 | 140,000 |

Finished Goods Inventory

| Beginning FG | 40,000 |  |
| :--- | ---: | ---: |
|  | 265,000 | 270,000 |
| Ending FG | 35,000 |  |

A. $\$ 130,000$.
B. \$ 65,000.
C. $\$ 270,000$.
D. $\$ 265,000$.
E. $\$ 280,000$.

## Answer: B

```
Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
```

Feedback: $D L=\$ 140,000 / 2=\$ 70,000$

$$
\begin{aligned}
& \text { Beg Bal }+D M+D L+O H-\text { Tran to } F G=\text { End Bal } \\
& \$ 50,000+D M+\$ 70,000+\$ 140,000-\$ 265,000=\$ 60,000 ; D M=\$ 65,000
\end{aligned}
$$

| Feedback: | Work in Process Inventory |  |
| :---: | ---: | ---: |
| Beginning WIP | 50,000 |  |
| Direct Materials | $\mathbf{6 5 , 0 0 0}$ |  |
| Direct Labor | 70,000 |  |
| Applied Overhead | 140,000 |  |
| To Finished Goods |  |  |
| Ending WIP | 60,000 |  |


| Factory Overhead |  |
| :---: | :---: |
| 138,000 | 140,000 |

Finished Goods Inventory
Beginning FG

Ending FG

| Finished Goods Inventory |  |
| ---: | ---: |
| 40,000 |  |
| 265,000 | 270,000 |
| 35,000 |  |

106. A source document that an employee uses to report how much time was spent working on a job or on overhead activities and that is used to determine the amount of direct labor to charge to the job or to determine the amount of indirect labor to charge to factory overhead is called a:
A. Payroll Register.
B. Factory payroll record.
C. General Ledger.
D. Time ticket.
E. Factory Overhead Ledger.

Answer: D

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
107. When factory wages payable costs for labor are allocated in a job cost accounting system:
A. Factory Wages Payable is debited and Work in Process Inventory is credited.
B. Work in Process Inventory and Factory Overhead are debited and Factory Wages Payable is credited.
C. Cost of Goods Manufactured is debited and Direct Labor is credited.
D. Direct Labor and Indirect Labor are debited and Factory Wages Payable is credited.
E. Work in Process Inventory is debited and Factory Overhead is credited.

Answer: B

## Blooms: Understand

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
108. Oxford Company uses a job order costing system. In the last month, the system accumulated labor time tickets total $\$ 24,600$ for direct labor and $\$ 4,300$ for indirect labor. How are these costs recorded?
A. Debit Payroll Expense $\$ 28,900$; credit Cash $\$ 28,900$.
B. Debit Payroll Expense $\$ 24,600$; debit Factory Overhead $\$ 4,300$; credit Factory Wages Payable \$28,900.
C. Debit Work in Process Inventory $\$ 24,600$; Debit Factory Overhead $\$ 4,300$; Credit Factory Wages Payable \$28,900.
D. Debit Work in Process Inventory $\$ 24,600$; credit Factory Wages Payable \$28,900.
E. Debit Work in Process Inventory $\$ 28,900$; credit Factory Wages Payable $\$ 28,900$.

Answer: C

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
109. Labor costs in production can be:
A. Direct or indirect.
B. Indirect or sunk.
C. Direct or payroll.
D. Indirect or payroll.
E. Direct or sunk.

Answer: A

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
110. An example of direct labor cost is:
A. Supervisor salary
B. Maintenance worker wages
C. Janitor wages
D. Product assembler wages
E. Accountant salary

Answer: D

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
111. A company has an overhead application rate of $125 \%$ of direct labor costs. How much overhead would be allocated to a job if it required total labor costing $\$ 20,000$ ?
A. \$ 5,000.
B. $\$ 16,000$.
C. $\$ 25,000$.
D. $\$ 125,000$.
E. $\$ 250,000$.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\$ 20,000 * 1.25=\$ 25,000$
112. The rate established prior to the beginning of a period that uses estimated overhead and an allocation factor such as estimated direct labor, and that is used to assign overhead cost to jobs, is the:
A. Predetermined overhead rate.
B. Overhead variance rate.
C. Estimated labor cost rate.
D. Chargeable overhead rate.
E. Miscellaneous overhead rate.

## Answer: A

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
113. Kayak Company uses a job order costing system and allocates its overhead on the basis of direct labor costs. Kayak Company's production costs for the year were: direct labor, $\$ 30,000$; direct materials, $\$ 50,000$; and factory overhead applied $\$ 6,000$. The overhead application rate was:
A. 5.0\%.
B. $12.0 \%$.
C. $20.0 \%$.
D. $500.0 \%$.
E. $16.7 \%$.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: OH rate $=$ OH applied/Direct Labor Costs $=\$ 6,000 / \$ 30,000=20 \%$
114. Lowden Company has an overhead application rate of $160 \%$ and allocates overhead based on direct material cost. During the current period, direct labor cost is $\$ 50,000$ and direct materials used cost $\$ 80,000$. Determine the amount of overhead Lowden Company should record in the current period.
A. \$ 31,250
B. $\$ 50,000$
C. $\$ 80,000$.
D. $\$ 128,000$.
E. \$ 208,000.

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: $\$ 80,000$ direct materials $* 1.60=\$ 128,000$
115. The overhead cost applied to a job during a period is recorded with a credit to Factory Overhead and a debit to:
A. Jobs Overhead Expense.
B. Cost of Goods Sold.
C. Finished Goods Inventory.
D. Indirect Labor.
E. Work in Process Inventory.

## Answer: E

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
116. CWN Company uses a job order costing system and last period incurred $\$ 80,000$ of actual overhead and $\$ 100,000$ of direct labor. CWN estimates that its overhead next period will be $\$ 75,000$. It also expects to incur $\$ 100,000$ of direct labor. If CWN bases applied overhead on direct labor cost, its predetermined overhead rate for the next period should be: A. $75 \%$.
B. $80 \%$.
C. $107 \%$.
D. $125 \%$.
E. $133 \%$.

Answer: A
Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: OH rate $=\$ 75,000 / \$ 100,000=\underline{75 \%}$
117. Cosi Company uses a job order costing system and allocates its overhead on the basis of direct labor costs. Cosi expects to incur $\$ 800,000$ of overhead during the next period, and expects to use 50,000 labor hours at a cost of $\$ 10.00$ per hour. What is Cosi Company's overhead application rate?
A. $6.25 \%$.
B. $62.5 \%$.
C. $160 \%$.
D. $1600 \%$.
E. $67 \%$.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: Total DL Cost $=50,000$ hours $* \$ 10 / h r=\$ 500,000$
OH rate $=\$ 800,000 / \$ 500,000=160 \%$
118. The B\&T Company's production costs for May are: direct labor, $\$ 13,000$; indirect labor, $\$ 6,500$; direct materials, $\$ 15,000$; property taxes on production facility, $\$ 800$; factory heat, lights and power, $\$ 1,000$; and insurance on plant and equipment, $\$ 200$. B\&T Company's factory overhead incurred for May is:
A. \$ 2,000.
B. $\$ 6,500$.
C. \$ 8,500.
D. $\$ 21,500$.
E. $\$ 36,500$.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback:

| Indirect labor | $\$ 6,500$ |
| :--- | ---: |
| Property Taxes | 800 |
| Heat, light and power | 1,000 |
| Insurance | $\underline{200}$ |
| Total OH | $\underline{\$ 8,500}$ |

119. Mesa Corp. allocates overhead to production on the basis of direct labor costs. Mesa's total estimated overhead is $\$ 450,000$ and estimated direct labor is $\$ 180,000$. Determine the amount of overhead applied to a job which used $\$ 20,000$ of direct labor.
A. $\$ 8,000$.
B. $\$ 20,000$.
C. $\$ 70,000$.
D. $\$ 50,000$.
E. \$90,000.

Answer: D

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: OH rate $=\$ 450,000 / \$ 180,000=250 \%$
OH allocated $=250 \% * \$ 20,000=\$ 50,000$
120. Dallas Company uses a job order costing system. The company's executives estimated that direct labor would be $\$ 2,000,000$ ( 200,000 hours at $\$ 10 /$ hour ) and that factory overhead would be $\$ 1,500,000$ for the current period. At the end of the period, the records show that there had been 180,000 hours of direct labor and $\$ 1,200,000$ of actual overhead costs. Using direct labor hours as a base, what was the predetermined overhead rate?
A. $\$ 6.00$ per direct labor hour.
B. $\$ 7.50$ per direct labor hour.
C. $\$ 6.67$ per direct labor hour.
D. $\$ 8.33$ per direct labor hour.
E. $\$ 7.08$ per direct labor hour.

Answer: B

[^5]Feedback: OH rate $=\$ 1,500,000 / 200,000$ hours $=\$ 7.50 /$ hour
121. Using the following accounts and an overhead rate of $90 \%$ of direct labor cost, determine the amount of applied overhead.

|  | Work in Process Inventory |  |
| :--- | ---: | ---: |
| Beginning WIP | 17,600 |  |
| Direct Materials | 52,800 |  |
| Direct Labor | $\boldsymbol{?}$ |  |
| Applied |  |  |
| Overhead | $\boldsymbol{?}$ |  |
| To Finished |  |  |
| Goods | 36,080 |  |
| Ending WIP |  |  |


|  | Finished Goods Inventory |  |
| :--- | ---: | ---: |
| Beginning FG | 5,200 |  |
|  | 201,520 |  |
| Ending FG |  |  |

A. \$79,200.
B. $\$ 167,200$.
C. \$ 34,320.
D. $\$ 88,000$.
E. $\$ 35,376$.

Answer: A

```
Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
```

Feedback: $\$ 17,600+52,800+D L+O H-201,520=\$ 36,080$
$D L+O H=\$ 167,200$
$D L+.9 D L=\$ 167,200$
$1.9 D L=\$ 167,200 ; D L=\$ 88,000$
$\$ 88,000+O H=\$ 167,200 ; O H=\$ 79,200$

| Feedback: | Work in Process Inventory |  |
| :---: | ---: | :---: |
| Beginning WIP | 17,600 |  |
| Direct Materials | 52,800 |  |
| Direct Labor | 88,000 |  |
| Applied Overhead | $\mathbf{7 9 , 2 0 0}$ |  |


| To Finished Goods |  | 201,520 |
| :--- | ---: | ---: |
| Ending WIP | 36,080 |  |

122. If one unit of Product Z 2 used $\$ 2.50$ of direct materials and $\$ 3.00$ of direct labor, sold for $\$ 8.00$, and was assigned overhead at the rate of $30 \%$ of direct labor costs, how much gross profit was realized from this sale?
A. \$8.00.
B. $\$ 5.50$.
C. $\$ 2.50$.
D. $\$ 1.60$.
E. \$0.90.

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

## Feedback:

Cost:

| DM | $\$ 2.50$ | Selling Price | $\$ 8.00$ |
| :---: | ---: | :--- | ---: |
| $D L$ | 3.00 | Cost | $\underline{6.40}$ |
| OH $(\$ 3 * 30 \%)$ | $\underline{0.90}$ | Gross Profit | $\underline{\$ 1.60}$ |
| Total Cost | $\underline{\$ 6.40}$ |  |  |

123. The ending inventory of finished goods has a total cost of $\$ 9,000$ and consists of 600 units. If the overhead applied to these goods is $\$ 3,000$, and the overhead rate is $75 \%$ of direct labor, how much direct materials cost was incurred in producing these units?
A. $\$ 3,750$.
B. $\$ 2,000$.
C. $\$ 4,000$.
D. $\$ 6,000$.
E. $\$ 9,000$.

Answer: B

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents

Feedback: $\mathrm{DM}+\mathrm{DL}+\mathrm{OH}=$ Total cost
$D M+(\$ 3,000 / .75)+\$ 3,000=\$ 9,000$
$D M+\$ 4,000+\$ 3,000=\$ 9,000 ; D M=\underline{\$ 2,000}$
124. At the current year-end, Simply Company found that its overhead was underapplied by $\$ 2,500$, and this amount was not considered material. Based on this information, Simply should
A. Close the $\$ 2,500$ to Cost of Goods Sold.
B. Close the $\$ 2,500$ to Finished Goods Inventory.
C. Do nothing about the $\$ 2,500$, since it is not material, and it is likely that overhead will be overapplied by the same amount next year.
D. Carry the $\$ 2,500$ to the income statement as "Other Expense"
E. Carry the $\$ 2,500$ to the next period.

Answer: A
Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
125. If overhead applied is less than actual overhead incurred, it is:
A. Fully applied.
B. Underapplied.
C. Overapplied.
D. Expected.
E. Normal.

## Answer: B

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Underapplied or Overapplied Overhead
126. The amount by which the overhead applied to jobs during a period exceeds the overhead incurred during the period is known as:
A. Adjusted overhead.
B. Estimated overhead.
C. Predetermined overhead.
D. Underapplied overhead.
E. Overapplied overhead.

## Answer: E

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Underapplied or Overapplied Overhead
127. The amount by which overhead incurred during a period exceeds the overhead applied to jobs is:
A. Balanced overhead.
B. Predetermined overhead.
C. Actual overhead.
D. Underapplied overhead.
E. Overapplied overhead.

Answer: D

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Underapplied or Overapplied Overhead
128. If a company applies overhead to production with a predetermined overhead rate, a credit balance in the Factory Overhead account at the end of the period means that:
A. The bookkeeper has made an error because the debits don't equal the credits.
B. The balance will be carried forward to the next period as an overhead cost.
C. Actual overhead incurred was less than the overhead amount applied to production.
D. The overhead was underapplied for the period.
E. Actual overhead was greater than the overhead amount applied to production.

## Answer: C

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
129. Marshall Enterprises charged the following amounts of overhead to jobs during the year: $\$ 20,000$ to jobs still in process, $\$ 60,000$ to jobs completed but not sold, and $\$ 120,000$ to jobs finished and sold. At year-end, Marshall Enterprise's Factory Overhead account has a credit balance of $\$ 5,000$, which is not a material amount. What entry should Marshall make at yearend?
A. No entry is needed.
B. Debit Factory Overhead $\$ 5,000$; credit Cost of Goods Sold $\$ 5,000$.
C. Debit Cost of Goods Sold $\$ 5,000$; credit Factory Overhead $\$ 5,000$.
D. Debit Factory Overhead $\$ 5,000$; credit Work in Process Inventory $\$ 5,000$.
E. Debit Factory Overhead \$5,000; credit Finished Goods Inventory \$5,000.

## Answer: B

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
130. Morris Company applies overhead based on direct labor costs. For the current year, Morris Company estimated total overhead costs to be $\$ 400,000$, and direct labor costs to be $\$ 2,000,000$. Actual overhead costs for the year totaled $\$ 380,000$, and actual direct labor costs totaled $\$ 1,800,000$. At year-end, the balance in the Factory Overhead account is a:
A. \$380,000 Debit balance.
B. $\$ 360,000$ Debit balance.
C. \$20,000 Debit balance.
D. $\$ 400,000$ Credit balance.
E. $\$ 20,000$ Credit balance

Answer: C
Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
Feedback: Predetermined overhead rate $=\$ 400,000$ estimated overhead cost $/ \$ 2,000,000$ estimated direct labor cost $=20 \%$
Overhead incurred, \$380,000 - Overhead applied, \$360,000

| Factory Overhead |  |
| ---: | ---: |
| 380,000 | 360,000 |
| 20,000 |  |

131. Morris Company applies overhead based on direct labor costs. For the current year, Morris Company estimated total overhead costs to be $\$ 400,000$, and direct labor costs to be $\$ 2,000,000$. Actual overhead costs for the year totaled $\$ 380,000$, and actual direct labor costs totaled $\$ 1,800,000$. At year-end, Factory Overhead is:
A. Overapplied by $\$ 20,000$.
B. Overapplied by $\$ 190,000$.
C. Underapplied by $\$ 20,000$.
D. Overapplied by $\$ 40,000$.
E. Neither overapplied nor underapplied.

Answer: C
Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
Feedback: Predetermined overhead rate $=\$ 400,000$ estimated overhead cost $/ \$ 2,000,000$ estimated direct labor cost $=20 \%$
Overhead applied $=$ actual direct labor cost $\$ 1,800,000 \times 20 \%=\$ 360,000$
Overhead incurred, \$380,000 - Overhead applied, \$360,000

| Factory Overhead |  |
| :--- | :--- |
| 380,000 | 360,000 |
| 20,000 |  |

132. Mango Company applies overhead based on direct labor costs. For the current year, Mango Company estimated total overhead costs to be $\$ 300,000$, and direct labor costs to be $\$ 150,000$. Actual overhead costs for the year totaled $\$ 330,000$, and actual direct labor costs totaled $\$ 170,000$. At year-end, the balance in the Factory Overhead account is a:
A. \$330,000 Debit balance.
B. $\$ 170,000$ Debit balance.
C. $\$ 10,000$ Credit balance.
D. $\$ 340,000$ Credit balance.
E. $\$ 10,000$ Debit balance.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
Feedback: Predetermined overhead rate $=\$ 300,000$ estimated overhead cost $/ \$ 150,000$ estimated direct labor cost $=200 \%$
Applied overhead $=\$ 170,000$ actual direct labor cost $x 200 \%=\$ 340,000$.
Overhead incurred, \$330,000 - Overhead applied, \$340,000

| Factory Overhead |  |
| :--- | :--- |
| 330,000 | 340,000 |


133. Mango Company applies overhead based on direct labor costs. For the current year, Mango Company estimated total overhead costs to be $\$ 300,000$, and direct labor costs to be $\$ 150,000$. Actual overhead costs for the year totaled $\$ 330,000$, and actual direct labor costs totaled $\$ 170,000$. At year-end, Factory Overhead account is:
A. Overapplied by $\$ 10,000$.
B. Overapplied by $\$ 170,000$.
C. Underapplied by $\$ 10,000$.
D. Overapplied by $\$ 20,000$.
E. Neither overapplied nor underapplied.

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
Feedback: Predetermined overhead rate $=\$ 300,000$ estimated overhead cost $/ \$ 150,000$ estimated direct labor cost $=200 \%$
Applied overhead $=\$ 170,000$ actual direct labor cost $x 200 \%=\$ 340,000$.
Overhead incurred, \$330,000 - Overhead applied, \$340,000

| Factory Overhead |  |
| :---: | :---: |
| 330,000 | 340,000 |
|  | 10.000 |

134. Clemmens Company applies overhead based on direct labor cost. Estimated overhead and direct labor costs for the year were $\$ 112,500$ and $\$ 125,000$, respectively. During the year, actual overhead was $\$ 107,400$ and actual direct labor cost was $\$ 120,000$. The entry to close the over- or underapplied overhead at year-end, assuming an immaterial amount, would include:
A. A debit to Cost of Goods Sold for $\$ 600$.
B. A credit to Factory Overhead for $\$ 600$.
C. A credit to Finished Goods Inventory for $\$ 600$.
D. A debit to Work in Process Inventory for $\$ 600$.
E. A credit to Cost of Goods Sold for $\$ 600$.

Answer: E

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4

Feedback: $O H=\$ 112,500 / \$ 125,000=90 \%$ of $D L C$

Actual Overhead
Overhead applied $(90 \% * \$ 120,000) \underline{108,000}$
Overapplied overhead
\$107,400
$\underline{\$ 600}$
135. If overapplied or underapplied overhead is material, it should be disposed of by allocating it to:
A. Cost of goods sold and finished goods inventory.
B. Finished goods inventory and work in process inventory.
C. Work in process inventory, finished goods inventory, and cost of goods sold.
D. Work in process inventory.
E. Raw materials inventory, work in process inventory, and finished goods inventory.

## Answer: C

Blooms: Understand
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
136. The Marina Corp. has applied overhead to jobs during the period as follows:
$\begin{array}{lr}\text { Jobs finished and sold } \ldots \ldots \ldots \ldots \ldots . & \$ 46,000 \\ \text { Jobs started and in process } \ldots \ldots \ldots \ldots . & 54,000 \\ \text { Jobs finished and unsold } \ldots \ldots \ldots \ldots . & 100,000\end{array}$

The application of overhead has resulted in a $\$ 5,600$ credit balance in the Factory Overhead account, and this amount is not material. The entry to dispose of this remaining factory overhead balance is:
A. Debit Cost of Goods Sold \$5,600; credit Factory Overhead \$5,600.
B. Debit Factory Overhead $\$ 5,600$; credit Cost of Goods Sold $\$ 5,600$.
C. Debit Factory Overhead $\$ 5,600$; credit Work in Process Inventory $\$ 5,600$.
D. Debit Work in Process Inventory \$5,600; credit Factory Overhead \$5,600.
E. No entry is needed.

Answer: B

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
137. Andrew Industries purchased $\$ 165,000$ of raw materials on account during the month of March. The beginning Raw Materials Inventory balance was $\$ 22,000$, and the materials used to complete jobs during the month were $\$ 141,000$ of direct materials and $\$ 13,000$ of indirect materials. What is the ending Raw Materials Inventory balance for March?
A. \$46,000
B. $\$ 11,000$
C. $\$ 33,000$
D. $\$ 24,000$
E. \$9,000

Answer: C

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Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
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Feedback: Beginning RM \$22,000 + RM Purchased \$165,000 - Direct RM used \$141,000 Indirect RM used $\$ 13,000=\$ 33,000$ Ending RM Balance

Feedback:

Beginning RM
Purchases
Direct Materials Used
Indirect Materials Used
Ending RM

| Raw Materials Inventory |  |
| ---: | ---: |
| 22,000 |  |
| 165,000 |  |
|  | 141,000 |
|  | 13,000 |
| 33,000 |  |

138. Andrew Industries purchased $\$ 165,000$ of raw materials on account during the month of March. The beginning Raw Materials Inventory balance was $\$ 22,000$, and the materials used to complete jobs during the month were $\$ 141,000$ direct materials and $\$ 13,000$ indirect materials. How should Andrews journalize the purchase of raw materials for March?
A. Debit Raw Materials Inventory $\$ 165,000$; credit Accounts Payable $\$ 165,000$
B. Debit Work in Process Inventory $\$ 165,000$; credit Raw Materials Inventory $\$ 165,000$
C. Debit Raw Materials Inventory $\$ 187,000$; credit Cash $\$ 187,000$
D. Debit Accounts Payable $\$ 165,000$; credit Raw Materials Inventory $\$ 165,000$
E. Debit Accounts Payable $\$ 187,000$; credit Raw Materials Inventory $\$ 187,000$

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
139. .Andrew Industries purchased $\$ 165,000$ of raw materials on account during the month of March. The beginning Raw Materials Inventory balance was $\$ 22,000$, and the materials used to complete jobs during the month were $\$ 141,000$ of direct materials and $\$ 13,000$ of indirect materials. What amount will Andrew debit to Work in Process Inventory for the month of March?
A. \$165,000
B. $\$ 154,000$
C. $\$ 13,000$
D. $\$ 141,000$
E. \$33,000

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents

Feedback: Only direct materials used of $\$ 141,000$ should be transferred to Work in Process Inventory for March
140. .Andrew Industries purchased $\$ 165,000$ of raw materials on account during the month of March. The beginning Raw Materials Inventory balance was $\$ 22,000$, and the materials used to complete jobs during the month were $\$ 141,000$ of direct materials and $\$ 13,000$ of indirect materials. What journal entry should Andrew use to account for direct materials used in March:
A. Debit Raw Materials Inventory $\$ 141,000$; credit Accounts Payable $\$ 141,000$.
B. Debit Work in Process Inventory $\$ 141,000$; credit Raw Materials Inventory $\$ 141,000$.
C. Debit Work in Process Inventory $\$ 141,000$; credit Accounts Payable $\$ 141,000$.
D. Debit Finished Goods Inventory $\$ 22,000$; credit Raw Materials Inventory $\$ 22,000$.
E. Debit Raw Materials Inventory $\$ 153,000$; credit Work in Process Inventory $\$ 153,000$.

Answer: B

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
141. Juarez Builders incurred $\$ 285,000$ of labor costs for construction jobs completed during the month of August, of which $\$ 212,000$ was direct and $\$ 73,000$ was indirect supervisory costs. The correct journal entry to record the direct labor for the month is:
A. Debit Payroll Expense $\$ 212,000$; credit Cash $\$ 212,000$.
B. Debit Factory Wages Payable $\$ 285,000$; credit Work in Process Inventory $\$ 212,000$.
C. Debit Work in Process Inventory $\$ 212,000$; credit Cash $\$ 285,000$.
D. Debit Work in Process Inventory $\$ 285,000$; credit Factory Wages Payable $\$ 285,000$.
E. Debit Work in Process Inventory $\$ 212,000$; credit Factory Wages Payable \$212,000

## Answer: E

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
142. Juarez Builders incurred $\$ 285,000$ of labor costs for construction jobs completed during the month of August, of which $\$ 212,000$ was direct and $\$ 73,000$ was indirect supervisory costs. The correct journal entry to record the $\$ 73,000$ indirect labor for the month is:
A. Debit Supervisor Wage Expense; credit Factory Wages Payable.
B. Debit Factory Overhead; credit Factory Wages Payable.
C. Debit Supervisor Wage Expense; credit Factory Overhead.
D. Debit Factory Wages Payable; credit Factory Overhead.
E. Debit Factory Wage Expense; credit Cash.

Answer: B

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Overhead Cost Flows and Documents
143. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The journal entry to record the purchase of materials is:
A. Debit Raw Materials Inventory $\$ 198,000$; credit Accounts Payable $\$ 198,000$.
B. Debit Work in Process Inventory $\$ 198,000$; credit Accounts Payable $\$ 198,000$.
C. Debit Raw Materials Inventory $\$ 198,000$; credit Work in Process Inventory $\$ 198,000$.
D. Debit Work in Process Inventory $\$ 195,000$; credit Raw Materials Inventory $\$ 195,000$.
E. Debit Raw Materials Inventory \$198,000; credit Finished Goods Inventory \$198,000.

Answer: A

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
144. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The journal entry to record the issuance of materials to production is:
A. Debit Raw Materials Inventory \$195,000; credit Accounts Payable \$195,000.
B. Debit Work in Process Inventory \$195,000; credit Raw Materials Inventory \$195,000.
C. Debit Raw Materials Inventory \$195,000; credit Work in Process Inventory \$195,000.
D. Debit Work in Process Inventory $\$ 165,000$; debit Factory Overhead $\$ 30,000$; credit Raw Materials Inventory \$195,000.
E. Debit Finished Goods Inventory $\$ 195,000$; credit Raw Materials Inventory $\$ 195,000$.

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
145. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The journal entry to record the factory payroll is:
A. Debit Work in Process Inventory \$150,000; debit Factory Overhead \$40,000; credit Factory Wages Payable \$190,000.
B. Debit Work in Process Inventory $\$ 150,000$; credit Cash $\$ 150,000$.
C. Debit Work in Process Inventory $\$ 110,000$; debit Factory Overhead $\$ 40,000$; credit Factory Wages Payable \$150,000.
D. Debit Work in Process Inventory $\$ 150,000$; credit Factory Overhead $\$ 40,000$; credit Factory Wages Payable \$110,000.
E. Debit Work in Process Inventory $\$ 110,000$; credit Factory Overhead $\$ 40,000$; credit Factory Wages Payable \$150,000.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
146. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The journal entry to record the payment of the factory payroll is:
A. Debit Work in Process Inventory \$150,000; credit Factory Wages Payable \$150,000.
B. Debit Work in Process Inventory $\$ 150,000$; credit Cash $\$ 150,000$.
C. Debit Factory Wages Payable $\$ 150,000$; credit Cash $\$ 150,000$.
D. Debit Factory Overhead $\$ 40,000$; credit Factory Wages Payable $\$ 40,000$.
E. Debit Work in Process Inventory $\$ 110,000$; credit Cash $\$ 150,000$.

Answer: C

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
147. Minstrel Manufacturing uses a job order costing system. During one month Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The journal entry to record the application of factory overhead to production is: A. Debit Work in Process Inventory $\$ 225,000$; credit Factory Overhead \$225,000.
B. Debit Work in Process Inventory $\$ 165,000$; credit Factory Overhead \$165,000.
C. Debit Factory Payroll \$150,000; credit Work in Process Inventory \$150,000.
D. Debit Factory Overhead $\$ 165,000$; credit Work in Process Inventory $\$ 165,000$.
E. Debit Work in Process Inventory $\$ 165,000$; credit Factory Payroll $\$ 165,000$.

Answer: B

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\$ 110,000 * 1.5=\$ 165,000$
148. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead rate of $150 \%$ of direct labor cost. The total manufacturing costs added during the period are:
A. $\$ 440,000$.
B. $\$ 470,000$.
C. $\$ 500,000$.
D. $\$ 570,000$.
E. $\$ 540,000$.

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: P1
Learning Objective: P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Feedback: $\$ 165,000+\$ 110,000+(\$ 110,000 * 1.5)=\$ 440,000$
149. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead application rate of $150 \%$ of direct labor cost. If Minstrel incurred total overhead costs of $\$ 167,800$ during the month, compute the amount of under- or overapplied overhead:
A. \$2,800 overapplied.
B. $\$ 17,800$ underapplied.
C. $\$ 2,800$ underapplied.
D. $\$ 17,800$ overapplied.
E. \$57,200 overapplied.

## Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
Feedback: $\$ 167,800-(\$ 110,000 * 1.5)=\$ 2,800$
150. Minstrel Manufacturing uses a job order costing system. During one month, Minstrel purchased $\$ 198,000$ of raw materials on credit; issued materials to production of $\$ 195,000$ of which $\$ 30,000$ were indirect. Minstrel incurred a factory payroll of $\$ 150,000$, of which $\$ 40,000$ was indirect labor. Minstrel uses a predetermined overhead application rate of $150 \%$ of direct labor cost. Minstrel's beginning and ending Work in Process Inventory are \$15,500 and $\$ 27,000$ respectively. Compute the cost of product transferred to Finished Goods Inventory:
A. $\$ 558,500$.
B. $\$ 440,000$.
C. $\$ 413,000$.
D. $\$ 428,500$.
E. $\$ 415,000$.

Answer: D

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\$ 165,000+\$ 110,000+(\$ 110,000 * 1.5)+15,500-\$ 27,000=\$ 428,500$
151. Finished goods inventory is $\$ 190,000$. If overhead applied to these goods is $\$ 72,000$, and the overhead rate is $120 \%$ of direct labor, how much direct materials cost was incurred in producing the inventory?
A. \$31,600.
B. $\$ 58,000$.
C. $\$ 56,000$.
D. \$60,000.
E. \$86,400.

Answer: B

## Blooms: Apply

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\mathrm{DM}+\mathrm{DL}+\mathrm{OH}=$ Total cost
$D M+(\$ 72,000 / 1.20)+\$ 72,000=\$ 190,000$
$D M+\$ 60,000+\$ 72,000=\$ 190,000 ; D M=\$ 58,000$
152. Adams Manufacturing allocates overhead to production on the basis of direct labor costs. At the beginning of the year, Adams estimated total overhead of $\$ 396,000$; materials of $\$ 410,000$ and direct labor of $\$ 220,000$. During the year Adams incurred $\$ 418,000$ in materials costs, $\$ 413,200$ in overhead costs and $\$ 224,000$ in direct labor costs. Compute the overhead application rate.
A. $180 \%$.
B. $55.6 \%$.
C. $186 \%$.
D. $184 \%$.
E. $96.6 \%$.

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: OH rate $=\$ 396,000 / \$ 220,000=180 \%$
153. Adams Manufacturing allocates overhead to production on the basis of direct labor costs. At the beginning of the year, Adams estimated total overhead of $\$ 396,000$; materials of $\$ 410,000$ and direct labor of $\$ 220,000$. During the year Adams incurred $\$ 418,000$ in materials costs, $\$ 413,200$ in overhead costs and $\$ 224,000$ in direct labor costs. Compute the amount of overhead applied to jobs during the year.
A. $\$ 396,000$.
B. $\$ 424,450$.
C. $\$ 413,190$.
D. $\$ 413,200$.
E. $\$ 403,200$.

Answer: E

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: OH rate $=\$ 396,000 / \$ 220,000=180 \% ;$ Applied $=\$ 224,000 * 1.8=\$ 403,200$
154. Adams Manufacturing allocates overhead to production on the basis of direct labor costs. At the beginning of the year, Adams estimated total overhead of $\$ 396,000$; materials of $\$ 410,000$ and direct labor of $\$ 220,000$. During the year Adams incurred $\$ 418,000$ in materials costs, $\$ 413,200$ in overhead costs and $\$ 224,000$ in direct labor costs. Compute the amount of under- or overapplied overhead for the year.
A. $\$ 10,000$ overapplied.
B. $\$ 17,200$ overapplied.
C. $\$ 10,000$ underapplied.
D. $\$ 17,200$ underapplied.
E. $\$ 4,800$ underapplied.

Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead

Feedback: OH rate $=\$ 396,000 / \$ 220,000=180 \%$
Applied $=\$ 224,000 * 1.8=\$ 403,200 ; \$ 413,200-\$ 403,200=\$ 10,000$ underapplied
155. Using the following accounts and an overhead rate of $130 \%$ of direct labor cost, compute the amount of applied overhead.

| Beginning WIP | Work in Process Inventory |  | Beginning FG <br> Cost of Goods Mfg'd | Finished Goods Inventory |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 35,200 |  |  | 5,200 |  |
| Direct materials | 55,300 |  |  | 203,300 |  |
| Direct labor | ? |  |  |  |  |
| Factory Overhead | ? |  |  |  |  |
| To Finished Goods |  | 203,300 |  |  |  |
| Ending WIP | 25,200 |  |  |  |  |

A. $\$ 78,000$.
B. $\$ 60,000$.
C. $\$ 138,000$.
D. $\$ 71,890$.
E. \$ 90,500.

Answer: A

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\$ 35,200+55,300+D L+O H-203,300=\$ 25,200$
$D L+O H=\$ 25,200-35,200-55,300+203,300$
$D L+O H=\$ 138,000 ; D L+1.3 D L=\$ 138,000 ; 2.3 D L=\$ 138,000 ; D L=\$ 60,000$
$\$ 60,000+\mathrm{OH}=\$ 138,000 ; \mathrm{OH}=\$ 78,000$
156. Portside Watercraft uses a job order costing system. During one month Portside purchased $\$ 173,000$ of raw materials on credit; issued materials to production of $\$ 164,000$ of which $\$ 24,000$ were indirect. Portside incurred a factory payroll of $\$ 95,000$, of which $\$ 25,000$ was indirect labor. Portside uses a predetermined overhead rate of $170 \%$ of direct labor cost. The journal entry to record the issuance of materials to production is:
A. Debit Raw Materials Inventory $\$ 153,000$; credit Accounts Payable \$153,000.
B. Debit Work in Process Inventory $\$ 140,000$; debit Factory Overhead $\$ 24,000$; credit Raw Materials Inventory $\$ 164,000$.
C. Debit Raw Materials Inventory $\$ 195,000$; credit Work in Process Inventory $\$ 195,000$.
D. Debit Work in Process Inventory $\$ 140,000$; debit Raw Materials Inventory $\$ 24,000$; credit Materials Inventory \$164,000.
E. Debit Finished Goods Inventory \$140,000; credit Raw Materials Inventory \$140,000.

Answer: B<br>Blooms: Apply<br>AACSB: Analytic<br>AICPA BB: Industry<br>AICPA FN: Measurement<br>Difficulty: 2 Medium<br>Learning Objective: 02-P1<br>Topic: Materials Cost Flows and Documents

157. Portside Watercraft uses a job order costing system. During one month Portside purchased $\$ 173,000$ of raw materials on credit; issued materials to production of $\$ 164,000$ of which $\$ 24,000$ were indirect. Portside incurred a factory payroll of $\$ 95,000$, of which $\$ 25,000$ was indirect labor. Portside uses a predetermined overhead rate of $170 \%$ of direct labor cost. The journal entry to record the allocation of factory wages to production is:
A. Debit Work in Process Inventory $\$ 95,000$; credit Factory Wages Payable \$95,000.
B. Debit Work in Process Inventory $\$ 95,000$; credit Cash $\$ 95,000$.
C. Debit Factory Wages Payable $\$ 95,000$; credit Cash $\$ 95,000$.
D. Debit Work in Process Inventory $\$ 70,000$; debit Factory Overhead $\$ 25,000$; credit Factory Wages Payable \$95,000.
E. Debit Work in Process Inventory $\$ 70,000$; debit Factory Overhead $\$ 25,000$; credit Cash \$95,000.

Answer: D

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
158. Portside Watercraft uses a job order costing system. During one month Portside purchased $\$ 153,000$ of raw materials on credit; issued materials to production of $\$ 164,000$ of which $\$ 24,000$ were indirect. Portside incurred a factory payroll of $\$ 95,000$, of which $\$ 25,000$ was indirect labor. Portside uses a predetermined overhead rate of $170 \%$ of direct labor cost. The journal entry to record the application of factory overhead to production is:
A. Debit Work in Process Inventory $\$ 55,800$; credit Factory Overhead \$55,800.
B. Debit Work in Process Inventory $\$ 161,500$; credit Factory Overhead \$161,500.
C. Debit Work in Process Inventory $\$ 119,000$; credit Factory Overhead \$119,000.
D. Debit Factory Overhead $\$ 119,000$; credit Work in Process Inventory $\$ 119,000$.
E. Debit Work in Process Inventory \$95,000; credit Factory Payroll \$95,000.

## Answer: C

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
Feedback: $\$ 70,000 * 1.7=\$ 119,000$
159. Copy Center pays an average wage of $\$ 12$ per hour to employees for printing and copying jobs, and allocates $\$ 18$ of overhead for each employee hour worked. Materials are assigned to each job according to actual cost. If Job M-47 used $\$ 350$ of materials and took 20 hours of labor to complete, what is the total cost that should be assigned to the job?
A. $\$ 590$
B. $\$ 600$
C. $\$ 380$
D. $\$ 950$
E. $\$ 710$

Answer: D
Feedback: Direct materials $\$ 350+$ Direct labor $(\$ 12 * 20)+$ Factory overhead $(\$ 18 * 20)=$ $\$ 350+\$ 240+\$ 360=\$ 950$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-A1
Topic: Pricing for Services
160. Copy Center pays an average wage of $\$ 12$ per hour to employees for printing and copying jobs, and allocates $\$ 18$ of overhead for each employee hour worked. Materials are assigned to each job according to actual cost. Jobs are marked up 20\% above cost to determine the selling price. If Job M-47 used \$350 of materials and took 20 hours of labor to complete, what is the selling price of the job?
A. $\$ 852$
B. $\$ 1,140$
C. $\$ 456$
D. $\$ 720$
E. $\$ 708$

## Answer: B

Feedback: Direct materials $\$ 350+$ Direct labor $(\$ 12 * 20)+$ Factory overhead $(\$ 18 * 20)=$ $\$ 350+\$ 240+\$ 360=\$ 950$ Total cost $\$ 950 * 120 \%=\$ 1,140$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-A1
Topic: Pricing for services

## Matching Questions

161. Match the following terms to the appropriate definition.
A. Cost accounting system
B. Time ticket
C. Finished Goods Inventory
D. Materials requisition
E. Underapplied overhead
F. Work in Process Inventory
G. Overapplied overhead
H. Job cost sheet
I. Job order costing system
J. Predetermined overhead rate
K. Materials ledger card
$\qquad$ 1. The production of products in response to special orders; also called customized production.
$\qquad$ 2. Records manufacturing activities using a perpetual inventory system.
$\qquad$ 3. The amount by which the overhead applied to jobs in a period with the predetermined overhead rate exceeds the actual overhead incurred in a period.
$\qquad$ 4. An asset account where costs are accumulated while jobs are being produced.
$\qquad$ 5. The rate established prior to the beginning of a period that relates estimated overhead to an allocation factor such as estimated direct labor and is used to assign overhead cost to a job.
$\qquad$ 6. An asset account where costs of completed jobs reside until the jobs are delivered to customers.
$\qquad$ 7. A source document that production managers use to request materials needed for manufacturing and that is used to assign materials costs to specific jobs or to overhead.
$\qquad$ 8. A perpetual record that is updated each time units of raw material are purchased and issued for use in production.
$\qquad$ 9. A source document that is used to report how much time an employee spent working on a job or on overhead activities and the labor costs to assign to jobs or overhead.
$\qquad$ 10. The amount by which actual overhead incurred in a period exceeds the overhead applied to jobs with the predetermined overhead rate.
$\qquad$ 11. A separate record maintained for each job in a job order costing system; it shows the costs of direct materials, direct labor, and overhead for each job.

## Answer:

1. I; 2. A; 3. G; 4. F; 5. J; 6. C; 7. D; 8. K; 9. B; 10. E; 11. H

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1Easy
Learning Objective: 02-C1
Learning Objective: 02-C2
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P4
Topic: Job Order Costing
Topic: Job Cost Sheet
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead

## Short Answer Questions

162. What is a cost accounting system? What are the two basic types of cost accounting systems?

Answer: A cost accounting system is an accounting system that uses a perpetual inventory system to continuously update records for costs of materials, work in process, and finished goods inventories. It also provides timely information about inventories and manufacturing costs per unit of product. The two basic types of cost accounting systems are job order costing and process costing.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
163. Describe the purpose of a job cost sheet, and explain what information is found on the job cost sheet.

Answer: A job cost sheet is a separate record that is maintained for each job. The job cost sheet will include the job number, the customer name, and the costs of the job separated into direct materials, direct labor, and overhead.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-C1
Topic: Job Order Costing
164. Explain how a service firm, such as an advertising agency, might use job order costing.

Answer: Since most jobs in a service firm such as an advertising agency have unique requirements, a job order costing system is appropriate. The service firm would estimate the labor required for each customer order, and then add overhead to the estimated labor based on a predetermined overhead rate. This estimated total cost could be used to prepare a bid for a potential customer. Cost of the job is one factor to consider when determining a potential selling price (bid) for a service.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Decision Making
Difficulty: 2 Medium
Learning Objective: 02-A1
Topic: Pricing for Services
165. Describe how materials flow through a job order costing system, and identify the key documents in the system.

Answer: When materials are received from suppliers, they are inspected and counted, and the information is recorded on a receiving report. The materials ledger card is a perpetual record that keeps track of each item of raw materials. When materials are needed for production, a materials requisition is prepared and the materials are issued into production. Direct materials are added to the job cost sheet. Indirect materials are added to overhead.

[^6]166. Describe the flow of the raw materials, both direct and indirect, through the inventory accounts from purchase to use.

Answer: When raw materials are purchased, the cost is debited to Raw Materials Inventory. When materials are requisitioned for use, the direct materials are moved from Raw Materials Inventory to Work in Process Inventory and the indirect materials are moved from Raw Materials Inventory to the Factory Overhead account.

[^7]167. Describe the flow of labor costs in a job order costing system, and identify the documents used in the system.

Answer: Labor costs are classified as either direct or indirect. The flow of direct labor costs in a job order costing system begins by employee tracking their hours worked to specific jobs using time tickets. Employees who perform work classified as indirect labor also use time tickets, but their work is not assigned to individual jobs, but to overhead.

Blooms: Understand<br>AACSB: Communication<br>AICPA BB: Industry<br>AICPA FN: Measurement<br>Difficulty: 2 Medium<br>Learning Objective: 02-P2<br>Topic: Labor Cost Flows and Documents

168. Describe the flow of the employee labor, both direct and indirect, through the inventory accounts.

Answer: Direct labor is assigned to jobs using time tickets and is recorded in Work in Process Inventory as it is incurred. The indirect labor that comes from time tickets or salary contracts is recorded in the Factory Overhead account.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P2
Learning Objective 19-P3
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
169. Explain what a predetermined overhead rate is, how it is calculated, and why it is used.

Answer: A predetermined overhead rate is used to apply factory overhead costs to jobs produced during the period. It is calculated by dividing estimated overhead costs for a period by an allocation factor such as estimated direct labor hours. It is used because overhead costs benefit all jobs and cannot be directly related to any one job. In addition, the perpetual inventory system requires an estimate of overhead for timeliness of information for decision making.

[^8]170. Explain why the Factory Overhead account for a company may have a difference between the amount debited and the amount credited, resulting in an end of period balance prior to adjustment.

Answer: If a company incurs more actual overhead than it applies to jobs during the period, the Factory Overhead will have an ending debit balance. If a company applies move overhead to jobs than it actually incurs, Factory Overhead will have an ending credit balance.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
171. Briefly describe how manufacturing firms dispose of overapplied or underapplied factory overhead.

Answer: If overapplied or underapplied overhead is immaterial, the amount of under- or overapplied overhead is closed entirely to Cost of Goods Sold. If the amount is material, it is allocated between Cost of Goods Sold, Finished Goods Inventory, and Work in Process Inventory.

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead

## Problems

172. The Merker Manufacturing Company has the following job cost sheets on file. They represent jobs that have been worked on during April of the current year. This table summarizes information provided on each sheet:

| Number | Total Cost Incurred |  |
| :---: | :---: | :--- |
|  | $\$ 15,050$ | Status of Job |
| 544 |  | Finished and delivered |
| 545 | $\$ 22,400$ | Finished and delivered |
| 546 | $\$ 7,500$ | Finished and unsold |
| 547 | $\$ 4,300$ | Finished and delivered |
| 548 | $\$ 33,000$ | Unfinished |
| 549 | $\$ 62,000$ | Finished and unsold |
| 550 | $\$ 14,600$ | Unfinished |
| 551 | $\$ 22,200$ | Finished and delivered |
| 552 | $\$ 3,600$ | Finished and unsold |
| 553 | $\$ 1,000$ | Unfinished |

(a) What is the cost of goods sold for the month of April?
(b) What is the cost of the Work in Process inventory on April 30?
(c) What is the cost of the finished goods inventory on April 30?

Answer:
(a) Cost of goods sold for April:

| Number | Total Cost Incurred |  |
| :---: | :---: | :---: | | Status of Job |
| :---: |
| 544 |
| 545 |

(b) Cost of the Work in Process inventory on April 30:

| Number | Total Cost Incurred | Status of Job |
| :---: | :---: | :---: |
| 548 | 33,000 | Unfinished |
| 550 | \$14,600 | Unfinished |
| 553 | 1,000 | Unfinished |
| Total | \$48,600 |  |

(c) Cost of the finished goods inventory on April 30:

| Number | Total Cost Incurred |  | Status of Job <br> 546 |
| :---: | :---: | :---: | :---: |
| 54,500 |  | Finished and unsold |  |
| 549 | 62,000 |  | Finished and unsold |
| 552 | 3,600 |  | Finished and unsold |
| Total | $\$ 73,100$ |  |  |

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-C2
Topic: Job Cost Sheet
173. The Luna Manufacturing Company has the following job cost sheets on file. They represent jobs that have been worked on during September of the current year. This table summarizes information provided on each sheet:

| Number | Total Cost Incurred | Status of Job |
| :---: | :---: | :---: |
| 951 | \$ 4,200 | Finished and delivered |
| 952 | \$ 7,700 | Unfinished |
| 953 | \$ 9,300 | Finished and unsold |
| 954 | \$11,100 | Finished and delivered |
| 955 | \$ 3,000 | Finished and unsold |
| 956 | \$ 5,500 | Finished and delivered |
| 957 | \$35,000 | Unfinished |
| 958 | \$ 3,200 | Finished and delivered |
| 959 | \$ 500 | Unfinished |
| 960 | \$22,110 | Unfinished |
| 961 | \$ 7,200 | Finished and delivered |
| 962 | \$ 8,500 | Unfinished |
| 963 | \$11,200 | Finished and unsold |

(a) What is the cost of the Work in Process inventory on September 30?
(b) What is the cost of the finished goods inventory on September 30?
(c) What is the cost of goods sold for the month of September?

Answer:
(a) Cost of the Work in Process inventory on September 30:

| Number | Total Cost Incurred | Status of Job |
| :---: | :---: | :---: |
| 952 | \$ 7,700 | Unfinished |
| 957 | 35,000 | Unfinished |
| 959 | 500 | Unfinished |
| 960 | 22,110 | Unfinished |
| 962 | 8,500 | Unfinished |
| Total | \$73,810 |  |

(b) Cost of the finished goods inventory on September 30:

| Number Total Cost Incurred Status of Job <br> 953 | $\$ 9,300$ |  | Finished and unsold |
| :---: | :---: | :---: | :---: |
| 955 | 3,000 |  | Finished and unsold |
| 963 | $\underline{11,200}$ |  | Finished and unsold |
| Total | $\underline{\$ 23,500}$ |  |  |

(c) Cost of goods sold for September:

| Number | Total Cost Incurred | Status of Job <br> 951 | $\$ 4,200$ |
| :---: | :---: | :---: | :---: |
| 954 | 11,100 |  | Finished and delivered |
| 956 | 5,500 |  | Finished and delivered |
| 958 | 3,200 | Finished and delivered |  |
| 961 | 7,200 | Finished and delivered |  |
| Total | $\underline{\$ 31,200}$ |  |  |

Blooms: Apply
AACSB: Analytic AICPA BB: Industry AICPA FN: Measurement Difficulty: 3 Hard Learning Objective: 02-C2
Topic: Job Cost Sheet
174. Chung Corporation uses a job order costing system. Five jobs were worked on during the current year. The predetermined overhead rate is $20 \%$ of direct labor costs. The following cost information is available (all materials and time ticket information applies to direct costs):

| Job | Materials Requisitions | Time Tickets |
| :---: | :---: | :---: |
| 101 | $\$ 66,000$ | $\$ 32,000$ |
| 102 | $\$ 63,000$ | $\$ 74,000$ |
| 103 | $\$ 39,000$ | $\$ 50,000$ |
| 104 | $\$ 32,000$ | $\$ 36,000$ |
| 105 | $\$ 53,000$ | $\$ 68,000$ |

Part 1-Complete the job cost sheets for each job.

| Job No. 101 | Job No. 102 | Job No. 103 |
| :--- | :--- | :--- |
| Materials | Materials | Materials |
| Labor | Labor | Labor |
| Overhead | Overhead | Overhead |
| Total Cost | Total Cost | Total Cost |
| Status $\quad$ In Process | Status $\quad$ Sold | Status $\quad$ Finished |


| Job No. 104 | Job No. 105 |  |
| :--- | :--- | :--- |
| Materials | Materials |  |
| Labor | Labor |  |
| Overhead | Overhead |  |
| Total Cost | Total Cost |  |
| Status | Sold | Status | Finished 

Part 2-Identify the amounts of each of the following accounts at the end of the period
a. Work in Process $\qquad$
b. Finished Goods $\qquad$
c. Cost of Goods Sold $\qquad$

Answer:

Part 1

| Job No. 101 |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Materials | $\$ 66,000$ | Materials | $\$ 63,000$ | Materials | $\$ 39,000$ |
| Labor | $\$ 32,000$ | Labor | $\$ 74,000$ | Labor | $\$ 50,000$ |
| Overhead | $\$ 6,400$ | Overhead | $\$ 14,800$ | Overhead | $\$ 10,000$ |
| Total Cost | $\$ 104,400$ | Total Cost | $\$ 151,800$ | Total Cost | $\$ 99,000$ |
|  |  |  |  |  |  |
| Status | In Process | Status | Sold | Status | Finished |


| Job No. 104 |  | Job No. 105 |  |
| :--- | ---: | :--- | ---: |
| Materials | $\$ 32,000$ | Materials | $\$ 53,000$ |
| Labor | $\$ 36,000$ | Labor | $\$ 68,000$ |
| Overhead | $\$ 7,200$ | Overhead | $\$ 13,600$ |
| Total Cost | $\$ 75,200$ | Total Cost | $\$ 134,600$ |
| Status | Sold |  | Status |

Part 2
a. Work in Process: $\$ 104,400$ (Job 101)
b. Finished Goods: $\$ 233,600$ (Job 103 \& Job 105)
c. Cost of Goods Sold: $\$ 227,000$ (Job 102 \& Job 104)

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-C2
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Job Cost Sheet
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
175. The following data relates to the Mass Company's first operating period. Calculate the total cost of goods sold for each product.

| Product | Cost/unit |  | Units |  | Overhead <br> rate <br> (Percent <br> of Direct |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Direct | Direct |  | Ending |  |
|  | Materials | Labor | Produced | Inventory |  |
| A | \$10 | \$12 | 215 | 115 | 60\% |
| B | 8 | 15 | 330 | 180 | 40\% |
| C | 14 | 10 | 250 | 200 | 80\% |

Answer:

|  |  |  | $\underline{C}$ |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$ 10.00$ | $\$ 8.00$ | $\$ 14.00$ |
| Direct labor | 12.00 | 15.00 | 10.00 |
| Overhead $*$ | $\underline{7.20}$ | $\underline{6.00}$ | $\underline{8.00}$ |
| Total cost | $\$ 29.20$ | $\$ 29.00$ | $\$ 32.00$ |
| Units sold** | $\underline{x} 100$ | $\underline{x} 150$ | $\underline{x} 50$ |
| Cost of goods sold | $\underline{\$ 2,920}$ | $\underline{\$ 4,350}$ | $\underline{\$ 1,600}$ |

## * Overhead applied:

A: $\$ 12.00 * 60 \%=\$ 7.20 ; B: \$ 15.00 * 40 \%=\$ 6.00 ; C: \$ 10.00 * 80 \%=\$ 8.00$
** Units sold
A: 215 produced -115 in ending inventory $=100$ sold
B: 330 produced -180 in ending inventory $=150$ sold
C: 250 produced -200 in ending inventory $=50$ sold

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-C2
Topic: Job Cost Sheet
176. Southwick Company uses a job order costing system. On November 1, $\$ 15,000$ of direct materials and $\$ 3,500$ of indirect materials were requisitioned for production. Prepare the general journal entries to record this requisition.

Answer:

| 11/1 | Work in Process Inventory ................... | 15,000 |  |
| :---: | :---: | :---: | :---: |
|  | Raw Materials Inventory ................... | 15,000 |  |
|  | Factory Overhead .............................. | 3,500 |  |
|  | Raw Materials Inventory .............. |  | 3,500 |

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
177. A company that uses a job order costing system incurred $\$ 10,000$ of factory payroll during May. Present the May 31 entry assuming $\$ 8,000$ is direct labor and $\$ 2,000$ is indirect labor.

Answer:

178. Time tickets for factory employees during the month of August are summarized as follows:

Job 919................................................ \$ 9,800
Job 920....................................................... 14,650
Job 921.................................................... 12,250
Job 922.................................................. 16,000
Total direct labor....................................... \$52,700
Indirect labor............................................. 16,800
Total labor cost........................................ $\$ 69,500$

Make the necessary journal entries to record factory payroll for direct and indirect labor.

Work in Process
.......................... Factory Wages Payable

Factory Overhead $\qquad$
Factory Wages Payable
$\qquad$

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2-Medium
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents

52,700
52,700
16,800
16,800
179. Chumley Advertising Agency contracted with a company to prepare an ad campaign. Chumley uses a job order costing system. Chumley estimates that the job will take 140 designer hours at $\$ 90$ per hour and 85 staff hours at $\$ 45$ per hour. Chumley uses two overhead rates in applying overhead to jobs: Designer-related at $\$ 100$ per designer hour and staffrelated at $\$ 50$ per staff hour. Determine the total estimated cost for this job.

Answer:

Direct labor:
Designers (140 hours @ \$90 per hour)..................... \$12,600
Staff (85 hours @ \$45 per hour)................................ 3,825
Total direct labor. $\qquad$ $\$ 16,425$
Overhead:
Designer-related (140 hours @ \$100 per hour) ......... \$14,000
Staff-related (85 hours @ \$50 per hour)................... 4,250
Total overhead. $\qquad$ 18,250
Total estimated cost $\qquad$ \$34,675

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-A1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Pricing Services in a Job Order Cost System
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
180. KL Company uses a job order costing system. During the month of July, the following events occurred:
(a) Purchased raw materials on credit, $\$ 32,000$.
(b) Raw materials requisitioned: $\$ 25,800$ as direct materials and $\$ 10,500$ indirect materials.
(c) Assigned the factory payroll totaling $\$ 37,700$, which includes $\$ 8,200$ indirect labor, to jobs and overhead.
Make the necessary journal entries to record the above transactions and events.
Answer:
(a) Raw Materials Inventory................................ 32,000 Accounts Payable ................................. 32,000
(b) Work in Process Inventory

25,800
Raw Materials Inventory...................... 25,800
Factory Overhead ......................................... 10,500
Raw Materials Inventory ...................... 10,500
(c) Work in Process Inventory ............................ 29,500

Factory Wages Payable .................................................................... 8,200
Factory Wages Payable......................... 8,200

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
181. EXP, Inc. had the following activities during its most recent period of operations:
(a) Purchased raw materials on account for $\$ 140,000$ (both direct and indirect materials are recorded in the Raw Materials Inventory account).
(b) Issued raw materials to production of \$130,000 ( $80 \%$ direct and $20 \%$ indirect).
(c) Incurred factory labor costs of $\$ 250,000$; allocated the factory labor costs to production ( $70 \%$ direct and $30 \%$ indirect).
(d) Incurred factory utilities costs of $\$ 20,000$; this amount is still payable.
(e) Applied overhead at $80 \%$ of direct labor costs.
(f) Recorded factory depreciation, $\$ 22,000$.

Prepare journal entries to record the above transactions.
Answer:

| (a) | Raw Materials Inventory ..... | 140,000 |  |
| :---: | :---: | :---: | :---: |
|  | Accounts Payable........................... |  | 140,000 |
| (b) | Work in Process Inventory ............................ | 104,000 |  |
|  | Raw Materials Inventory...................... |  | 104,000 |
|  | Factory Overhead............. | 26,000 |  |
|  | Raw Materials Inventory...................... |  | 26,000 |
| (c) |  |  |  |
|  | Work in Process Inventory ............................ | 175,000 |  |
|  | Factory Wages Payable ....................... |  | 175,000 |
|  | Factory Overhead.. | 75,000 |  |
|  | Factory Wages Payable .................... |  | 75,000 |
| (d) | Factory Overhead........................................ | 20,000 |  |
|  | Accounts Payable ................................ |  | 20,000 |
| (e) | Work in Process Inventory ............................ | 140,000 |  |
|  | Factory Overhead ............................ |  | 140,000 |
|  | $(\$ 175,000 * 80 \%=\$ 140,000)$ |  |  |
| (f) | Factory Overhead....................................... | 22,000 |  |
|  | Accumulated Depreciation-Factory...... |  | 22,000 |

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
182. Lock Production Co. applies factory overhead to production on the basis of direct labor costs. Assume that at the beginning of the current year the company estimated that direct material costs would be $\$ 178,800$, direct labor costs would be $\$ 154,000$, and factory overhead costs would be $\$ 231,000$.
(1) If the $\$ 28,000$ cost of Lock's Work in Process inventory included $\$ 5,200$ of direct labor cost, what amount of direct materials cost was included?
(2) If $\$ 8,100$ of the company's $\$ 34,300$ finished goods inventory was direct materials cost, determine the direct labor cost and factory overhead cost of the finished goods inventory.

Answer:
(1) Overhead rate: $(\$ 231,000 / \$ 154,000)=150 \%$

| Total cost of Work in Process inventory |  | \$28,000 |
| :---: | :---: | :---: |
| Deduct: Direct labor | \$5,200 |  |
| Factory overhead (\$5,200 * 150\%) ................... | 7,800 | 13,000 |
| Direct materials |  | \$15,000 |

(2) The overhead rate is 150\%. (part 1)

| Total cost of finished goods inventory ................. | $\$ 34,300$ |
| :--- | ---: |
| Direct materials ....................................... | 8,100 |
| Direct labor and factory overhead costs .............. | $\underline{\$ 26,200}$ |

Direct labor $+1.5($ Direct Labor $)=\$ 26,200$
Direct Labor $=\underline{\underline{\$ 10,480}}$
$O H=D L * 1.5$
$O H=\$ 10,480 * 1.5$
$O H=\underline{\$ 15,720}$

Blooms: Apply
AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
183. Prepare journal entries to record the following transactions and events for April using a job order costing system.
(a) Purchased raw materials on credit, $\$ 69,000$.
(b) Raw materials requisitioned: $\$ 26,000$ direct and $\$ 5,400$ indirect.
(c) Factory payroll totaled $\$ 46,000$, including $\$ 9,500$ indirect labor.
(d) Paid other actual overhead costs totaling $\$ 14,500$ cash.
(e) Applied overhead totaling $\$ 28,200$.
(f) Finished and transferred jobs totaling $\$ 77,500$.
(g) Jobs costing $\$ 58,800$ were sold on credit for $\$ 103,000$.

Answer:
(a) Raw Materials Inventory................................. 69,000

Accounts Payable ................................. 69,000
(b) Work in Process Inventory ............................... 26,000

Raw Materials Inventory....................... 26,000
Factory Overhead............................................. 5,400
Raw Materials Inventory....................... 5,400
(c)

| W | 36,500 |  |
| :---: | :---: | :---: |
| actory Wages Pa |  | 36,5 |

Factory Overhead............................................ 9,500
Factory Wages Payable ........................ 9,500
(d) Factory Overhead............................................ 14,500

Cash..................................................... 14,500
(e) Work in Process Inventory ............................... 28,200

Factory Overhead ................................. 28,200
(f) Finished Goods Inventory ................................ 77,500

Work in Process Inventory.................... 77,500
(g) Accounts Receivable........................................ 103,000

Sales..................................................... 103,000

Cost of Goods Sold .......................................... 58,800
Finished Goods Inventory..................... 58,800

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
184. A company's ending inventory of finished goods has a cost of $\$ 45,000$ and consists of 750 units. If the overhead applicable to these goods is $\$ 8,400$, and overhead is applied at the rate of $60 \%$ of direct labor, what is the cost of the direct materials used to produce these units?

Answer:

| Factory overhead in finished goods inventory ............... | $\$ 8,400$ |
| :--- | ---: |
| Direct labor in finished goods inventory $(\$ 8,400 / 0.60)$ | $\ldots .$. |
| Total factory overhead and direct labor ................... | 14,000 |
|  | 22,400 |
| Total job cost ................................................ |  |
| Factory overhead and direct labor ........................... | $\$ 45,000$ |
| Direct materials ......................................... | $\underline{22,400}$ |
|  | $\underline{\$ 22,600}$ |

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
185. The production of one unit of Product BJM used $\$ 27.50$ of direct materials and $\$ 21.00$ of direct labor. The unit sold for $\$ 76.00$ and was assigned overhead at a rate of $30 \%$ of labor costs. What is the gross profit per unit on its sale?

Answer:

$$
\begin{aligned}
& \text { Selling price per unit..................... \$76.00 } \\
& \text { Direct materials.......................... } \$ 27.50 \\
& \text { Direct labor................................ } 21.00 \\
& \text { Overhead applied (\$21 *.3)......... } 6.30 \\
& \text { Total job cost per unit................... } \\
& 54.80 \\
& \text { Gross profit per unit...................... } \underline{\underline{\$ 21.20}}
\end{aligned}
$$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
186. A company uses a job order costing system and applies overhead on the basis of direct labor cost. A summary of the company's Work in Process Inventory account for December appears below.

| Work in Process |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Date | Explanation | PR | Debit | Credit | Balance |
| Dec. 1 |  |  |  |  | 73,800 |
| Dec. | Direct Materials | G-20 | 235,800 |  | 309,600 |
| Dec. | Direct Labor | G-20 | 117,000 |  | 426,600 |
| Dec. | Factory Overhead | G-20 | 187,200 |  | 613,800 |
| Dec. | Job No. 5 completed | G-8 |  | 90,900 | 522,900 |
| Dec. | Job No. 6 completed | G-10 |  | 131,400 | 391,500 |
| Dec. | Job No. 7 completed | G-12 |  | 73,800 | 317,700 |
| Dec. 31 | Job No. 8 completed | G-15 |  | 168,300 | 149,400 |

Fill in the blanks for the following:
(1) The total cost of the direct materials, direct labor, and factory overhead applied in the December 31 Work in Process inventory is $\$$ $\qquad$ —.
(2) The company's overhead application rate is $\qquad$ \%
(3) Job No. 6 had \$26,550 of direct labor cost. Therefore, the job must have had \$ $\qquad$ of direct materials cost.
(4) Job No. 8 had $\$ 73,998$ of direct materials cost. Therefore, the job must have had \$ $\qquad$ of factory overhead cost.

Answer:
(1) \$149,400 (ending balance of account)
(2) $(\$ 187,200 / \$ 117,000) * 100 \%=160 \%$
(3) $\$ 26,550 * 160 \%=\$ 42,480 ; \$ 131,400-\$ 26,550-\$ 42,480=\$ 62,370$
(4) $\$ 168,300-\$ 73,998=\$ 94,302$ Direct labor $+O H ; \$ 94,302 / 2.60=\$ 36,270$
$O H=\$ 94,302-\$ 36,270=\$ 58,032$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
187. Heintz Company's job order costing system applies overhead based on direct labor costs. The company's manufacturing costs for the current year were: direct materials, $\$ 108,000$; direct labor, $\$ 144,000$; and factory overhead, $\$ 36,000$. At year-end, the total cost of Work in Process is $\$ 38,000$, which includes $\$ 12,000$ of direct labor cost. What amount of direct material cost is included in the ending Work in Process inventory?

Answer:
Direct labor in Work in Process inventory ........................ \$12,000
Factory overhead in Work in Process inventory (\$12,000 *. 25) 3,000
Total factory overhead and direct labor ............................ 15,000

Total cost in Work in Process inventory ........................... \$38,000
Factory overhead and direct labor ................................... $\underline{15,000}$
Direct materials ........................................................ \$23,000
Overhead rate $=\$ 36,000 / \$ 144,000=.25 \%$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
188. MOB Corp. maintains an internet-based general ledger. Overhead is applied on the basis of direct labor costs. Its bookkeeper accidentally deleted most of the entries that had been recorded for January. A printout of the general ledger (in T-account form) showed the following:

| Raw Materials Inventory |  | Work in Process Inventory |  |
| :---: | :---: | :---: | :---: |
| DR | CR | DR | CR |
| Ba1.1/1 10,000 |  | Bal 1/1 4,000 | f) |
| a) | b) | c) |  |
|  |  | d) |  |
|  |  | e) |  |
| Bal 17,500 |  | (Bal 1/31) g) |  |
|  |  |  |  |
|  | nts Payable | Finished | Goods Inventory |
| DR | CR | DR | C |
| h) | Bal. 1/1 5,000 | j) | 1) |
|  | i) | k) |  |
|  | Bal. 1/31 9,000 | Bal. 1/31 15,000 |  |
|  |  |  |  |
|  |  |  |  |
|  | Overhead | Cost | Goods Sold |
| DR | CR | DR | CR |
| m) | n) | o) |  |
|  |  |  |  |

A review of the prior year's financial statements, the current year's budget, and January's source documents produced the following information:
(1) Accounts Payable is used for raw material purchases only. January purchases were $\$ 49,000$.
(2) Factory overhead costs for January were $\$ 17,000$ none of which is indirect materials.
(3) The January 1 balance for finished goods inventory was $\$ 10,000$.
(4) There was a single job in process at January 31 with a cost of $\$ 2,000$ for direct materials and $\$ 1,500$ for direct labor.
(5) Total cost of goods manufactured for January was $\$ 90,000$.
(6) All direct laborers earn the same rate (\$13/hour). During January, 2,500 direct labor hours were worked.
(7) The predetermined overhead rate is based on direct labor costs. Budgeted (expected) overhead for the year is $\$ 195,000$ and budgeted (expected) direct labor is $\$ 390,000$.

Fill in the missing amounts a through o above in the T-accounts above.
Answer:

| Raw Materials Inventory |  |  | Work in Process Inventory |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $D R$ |  | $C R$ |  | $D R$ | $C R$ |
| Bal 1/1 10,000 |  |  |  | Bal $1 / 14,000$ |  |
| a) 49,000 |  | b) 41,500 |  | c) $D M 41,500$ |  |



## Blooms: Apply

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
189. Chen Service applied overhead on the basis of direct labor costs during the current year. Overhead applied was $\$ 16,500$. Actual overhead incurred was $\$ 17,200$.
(a) Prepare a journal entry to remove this difference assuming that it is not material.
(b) Instead, assume actual overhead incurred was $\$ 24,000$. Describe (without computations) the alternative procedure that Chen might perform assuming this difference is material.

Answer:
(a) Cost of Goods Sold ............................. 700

Factory Overhead .....................
(b) Since the $\$ 7,500$ difference is material, it should be allocated among Cost of Goods Sold, Finished Goods Inventory and Work in Process Inventory.

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
190. Calwell Corp. uses a job order costing system. Four jobs were started during the current year. The following is a record of the costs incurred:

|  | Material | Direct Labor | Direct Labor |
| :---: | :---: | :---: | :---: |
| Job \# | Used | Used | Hours Used |
| 1010 | \$45,000 | \$72,000 | 8,000 |
| 1011 | 59,000 | 77,000 | 7,000 |
| 1012 | 35,000 | 30,000 | 3,000 |
| 1013 | 26,000 | 40,000 | 5,000 |

Actual overhead costs were $\$ 55,800$. The predetermined overhead rate is $\$ 2.40$ per direct labor hour. During the year, Jobs 1010, 1012, and 1013 were completed. Also, Jobs 1010 and 1013 were sold for $\$ 387,000$. Assuming that this is Calwell's first year of operations:
(a) Make the necessary journal entries to charge the costs to the jobs started and to record the completion and sale of finished jobs.
(b) Calculate the balance in the Work in Process Inventory, Finished Goods Inventory, and Factory Overhead accounts. Does the Factory Overhead account balance indicate an over- or underapplied overhead?

Answer:

| Job <br> No. | Direct <br> materials | Direct labor | Overhead <br> applied $*$ | Total job <br> cost |
| :--- | ---: | ---: | ---: | ---: |
| 1010 | $\$ 45,000$ | $\$ 72,000$ | $\$ 19,200$ | $\$ 136,200$ |
| 1011 | 59,000 | 77,000 | 16,800 | 152,800 |
| 1012 | 35,000 | 30,000 | 7,200 | 72,200 |
| 1013 | 26,000 | 40,000 | $\underline{12,000}$ | $\underline{78,000}$ |
| Totals | $\$ 165,000$ | $\$ 219,000$ | $\$ 55,200$ | $\$ 439,200$ |

Job 1010: 8,000 hours $* \$ 2.40 /$ hour $=\$ 19,200$
Job 1011: 7,000 hours * \$2.40/hour $=\$ 16,800$
Job 1012: 3,000 hours $* \$ 2.40 /$ hour $=\$ 7,200$
Job 1013: 5,000 hours $* \$ 2.40 /$ hour $=\$ 12,000$

Work in Process Inventory ...................... 165,000
Raw Materials Inventory $\qquad$ 165,000

Work in Process Inventory
219,000
Factory Wages Payable $\qquad$ 219,000
Work in Process Inventory
Factory Overhead ..............................
Finished Goods Inventory

$\qquad$ ..... 286,400Work in Process Inventory ..................286,400
$(\$ 136,200+\$ 72,200+\$ 78,000)=\$ 286,400$
Cost of Goods Sold ............................... ..... 214,200
Finished Goods Inventory ................... ..... 214,200
$(\$ 136,200+\$ 78,000=\$ 214,200)$
Accounts Receivable

$\qquad$ ..... 387,000
SalesWork in Process Inventory: Job1011\$152,800\$72,200
Factory Overhead:

| Applied | $\$ 55,200$ |
| :--- | ---: |
| Actual | 55,800 |$\$ 600$ debit balance(underapplied)

Blooms: ApplyAICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2Learning Objective: 02-P4Topic: Materials Cost Flows and DocumentsTopic: Labor Cost Flows and DocumentsTopic: Overhead Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead
191. The following information is available for the Annum Corporation for the current year:

Cost of goods sold
\$292,000
Depreciation of factory equipment 25,200
Direct labor 64,750
Finished goods inventory, Beginning-year 45,000

Factory utilities 16,800
Goods transferred from Work in Process
Inventory to Finished Goods Inventory 285,150
Indirect labor 8,400
Raw materials inventory, Beginning-year. ..... 4,200
Raw materials purchased ..... 116,200Raw materials used in production(includes $\$ 7,000$ of indirect materials) ........ 121,800
Rent on factory building ..... 22,400

Annum Company uses a predetermined overhead rate of $150 \%$ of direct labor cost. Prepare journal entries for the following transactions and events:
(a) Purchase of raw materials on account.
(b) Assignment of materials costs to Work in Process Inventory and Factory Overhead.
(c) Assignment of Factory Payroll to Work in Process Inventory and Factory Overhead.
(d) Recording of other factory overhead. Assume that all items other than depreciation are paid in cash.
(e) Assignment of Factory Overhead to Work in Process Inventory.
(f) Transfer of goods completed to Finished Goods Inventory.
(g) Recording cost of goods sold.
(h) Assignment of over- or underapplied overhead to Cost of Goods Sold.

Answer:

| a. Raw Materials Inventory .......................... | 116,200 |  |
| :---: | :---: | :---: |
| Accounts Payable .......................... |  | 116,200 |
| b. Work in Process Inventory .................... | 114,800 |  |
| Raw Materials Inventory.................... |  | 114,800 |
| Factory Overhead ................................. | 7,000 |  |
| Raw Materials Inventory.................. |  | 7,000 |

c. Work in Process Inventory $\qquad$
Factory Wages Payable ..... 64,750
Factory Overhead ..... 8,400
Factory Wages Payable ..... 8,400
d. Factory Overhead ..... 75,600
Accumulated Depreciation-Factory Equipment... ..... 25,200
Cash

$\qquad$ ..... 50,400
e. Work in Process Inventory ..... 97,125
Factory Overhead (64,750 * 150\%) ......... ..... 97,125
f. Finished Goods Inventory ..... 285,150
Work in Process Inventory ..... 285,150
g. Cost of Goods Sold

$\qquad$ ..... 292,000Finished Goods Inventory
$\qquad$292,000
h. Factory Overhead ..... 6,125
Cost of Goods Sold ..... 6,125
Actual Overhead $=\$ 7,000+8,400+75,600=\$ 91,000$Overhead applied $=$\$97,125
Overapplied overhead $=$ ..... \$6,125
Blooms: ApplyAACSB: AnalyticAICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Learning Objective: 02-P4
Topic: Materials Cost Flows and DocumentsTopic: Labor Cost Flows and DocumentsTopic: Overhead Cost Flows and DocumentsTopic: Underapplied or Overapplied Overhead
192. A company's predetermined overhead rate is applied at $130 \%$ of direct labor cost. How much overhead would be allocated to Job No. 105 if it required total direct labor costs of $\$ 60,000$ ?

Answer:
$\$ 60,000 * 130 \%=\$ 78,000$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
193. A company's predetermined overhead rate is applied at $150 \%$ of direct materials cost. How much overhead would be allocated to Job No. 325 if the total direct materials costs was $\$ 40,000$ ?

Answer:
$\$ 40,000 * 150 \%=\$ 60,000$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
194. Selected information from the budget of the Singh Corp. at the beginning of the year follows:

Estimated factory overhead ......
Estimated direct labor hours.....
Estimated machine hours
Estimated direct labor cost .......
Actual factory overhead incurred during the year .......
\$132,000
55,000 hours
41,250 hours
\$825,000
\$144,000

Calculate the predetermined overhead rate if the company uses the following as a basis:
(a) Direct labor hours.
(b) Direct labor cost.
(c) Machine hours.

Answer:
(a) $\$ 132,000 / 55,000=\$ 2.40$ per direct labor hour
(b) $\$ 132,000 / \$ 825,000=16 \%$ of direct labor cost
(c) $\$ 132,000 / 41,250=\$ 3.20$ per machine hour

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
195. A manufacturing company uses an overhead rate based on direct labor cost. The company's Work in Process Inventory account has a $\$ 15,000$ debit balance after all posting is completed, and the cost sheet of the one job still in process shows direct material costs of $\$ 6,600$ and direct labor costs of $\$ 3,000$. What is the company's overhead application rate?

Answer: $(\$ 15,000-\$ 6,600-\$ 3,000) / \$ 3,000=\underline{180 \%}$
196. Nutley Company uses a job order cost system and last period incurred $\$ 70,000$ of overhead and $\$ 100,000$ of direct labor. Nutley estimates that its overhead next period will be $\$ 65,000$. The company also expects to incur $\$ 100,000$ of direct labor. If Nutley bases its overhead applied on direct labor cost, what should be the overhead rate for the next period?

Answer: $\frac{\$ 65,000}{\$ 100,000}=65 \%$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
197. A company's job order costing system applies overhead based on direct labor cost. The company's estimated production costs for were: direct labor, $\$ 57,600$; direct materials, $\$ 76,800$; and factory overhead, $\$ 9,600$. Calculate the company's overhead rate.

Answer:

$$
\frac{\$ 9,600}{\$ 57,600}=16.7 \%
$$

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
198. The job cost sheet for Job number 83-421 includes the following information:

## DIRECT MATERIALS:

7/12 Requisition R88-566: 20 units @ $\$ 3.50$ per unit
7/13 Requisition R88-576: 18 units @ $\$ 5.00$ per unit
7/13 Requisition R88-578: 4 units @ \$25.00 per unit
7/14 Requisition R88-591: 40 units @ \$ 1.25 per unit
DIRECT LABOR:
7/12 Employee 19: 8 hours @ $\$ 9.00$ per hour 7/13 Employee 19: 6 hours @ $\$ 9.00$ per hour
7/13 Employee 37: 6 hours @ $\$ 7.00$ per hour 7/14 Employee 19: 5 hours @ $\$ 9.00$ per hour
7/14 Employee 92: 5 hours @ $\$ 11.00$ per hour
FACTORY OVERHEAD: Assigned at $150 \%$ of direct labor cost.
What is the total cost of Job number 83-421?
Answer:
Total cost of job:
DIRECT MATERIALS:

| 7/12 Requisition R88-566: 20 units @ \$ 3.50 per unit ... | = | \$ 70 |
| :---: | :---: | :---: |
| 7/13 Requisition R88-576: 18 units @ \$ 5.00 per unit | = | 90 |
| 7/13 Requisition R88-578: 4 units @ \$25.00 per unit ... | = | 100 |
| 7/14 Requisition R88-591: 40 units @ \$ 1.25 per unit ... | = | 50 |
| Total direct materials cost | = | \$310 |
| DIRECT LABOR: |  |  |
| 7/12 Employee 19: 8 hours @ \$ 9.00 per hour ........... | = | \$ 72 |
| 7/13 Employee 19: 6 hours @ \$ 9.00 per hour ........... | = | 54 |
| 7/13 Employee 37: 6 hours @ 7.00 per hour ............ | = | 42 |
| 7/14 Employee 19: 5 hours @ \$ 9.00 per hour ........... | = | 45 |
| 7/14 Employee 92: 5 hours @ \$11.00 per hour .......... | = | 55 |
| Total direct labor cost | = | \$268 |
| FACTORY OVERHEAD |  |  |
| 150\% of direct labor cost (150\% * \$268) ................ | $=$ | $\underline{\$ 402}$ |
| TOTAL COST ASSIGNED TO THE JOB | = | \$980 |

199. The following calendar year information about the Tchulahota Corporation is available on December 31:

Advertising expense............................... \$28,800
Depreciation of factory equipment............... 42,320
Depreciation of office equipment................. 10, 800
Direct labor........................................... 142,600
Factory utilities.............................................. 35,650
Interest expense............................................ 6,650
Inventories, January 1:
Raw materials.................................... 3,450
Work in Process............................... 17,250
Finished goods................................. 35,600
Inventories, December 31:
Raw materials.................................... 2,300
Work in Process................................. 20,700
Finished goods.................................. 31,050
Raw materials purchases............................ 132,450
Rent on factory building............................ 41,400
Indirect labor............................................. 51,750
Sales commissions.......................................16,500
The company applies overhead on the basis of $125 \%$ of direct labor costs. Calculate the amount of over- or underapplied overhead.

| Answer: Factory overhead costs: |  |
| :--- | ---: |
| Depreciation of factory equipment .............. | $\$ 42,320$ |
| Factory utilities ................................. | 35,650 |
| Rent on factory building ...................... | 41,400 |
| Indirect labor .................................... | 51,750 |
| Total actual factory overhead costs ........... | $\$ 171,120$ |

```
Factory overhead applied (142,600 * 125%) ... $178,250
Overapplied overhead
```

$\qquad$

| Direct materials | \$240,000 |
| :---: | :---: |
| Direct labor. | 410,000 |
| Indirect materials | 55,000 |
| Indirect labor | 125,000 |
| Sales commissions | 55,000 |
| Factory depreciation. | 170,000 |
| Property taxes, factory. | 15,000 |
| Factory utilities. | 35,000 |
| Advertising. | 62,500 |
| Factory equipment rental. | 110,000 |

(a) Calculate the predetermined overhead rate and calculate the overhead applied during the year.
(b) Determine the amount of over- or underapplied overhead and prepare the journal entry to eliminate the over- or underapplied overhead assuming that it is not material in amount.

Answer:
(a) Predetermined overhead rate $=\$ 500,000 / \$ 400,000=125 \%$ of direct labor cost Overhead applied $=\$ 410,000 * 125 \%=\$ 512,500$
(b)

| Actual overhead: |  |
| :---: | :---: |
| Indirect materials. | \$ 55,000 |
| Indirect labor. | 125,000 |
| Factory depreciation | 170,000 |
| Property taxes, factory. | 15,000 |
| Factory utilities. | 35,000 |
| Factory equipment rental | 110,000 |
| Total actual overhead.. | \$510,000 |
| Overhead applied. | 512,500 |
| Overapplied overhead | \$ 2,500 |

Factory Overhead......................................................... 2,500
Cost of Goods Sold .................................................. 2,500

[^9]201. A company charged the following amounts of overhead to jobs during the current year: $\$ 12,000$ to jobs still in process, $\$ 42,000$ to jobs completed but not sold, and $\$ 66,000$ to jobs finished and sold. At year-end, the company's Factory Overhead account has a credit balance of $\$ 9,000$, which is not a material amount. What entry (if any) should the company make at year-end related to this overhead balance?

Answer:
Dec. 31 Factory Overhead .............................. 9,000
Cost of Goods Sold ........................ 9,000

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P4
Topic: Underapplied or Overapplied Overhead
202. Oddley Corp. uses a job order costing system. The following is selected information pertaining to costs applied to jobs during the year:

Jobs still in process at the end of the year:
$\$ 167,000$, which includes $\$ 65,000$ direct labor costs.
Jobs finished and sold during the year:
$\$ 395,000$, which includes $\$ 172,000$ direct labor costs.
Jobs finished but unsold during the year:
$\$ 103,000$, which includes $\$ 38,000$ direct labor costs.

Oddley Corp.'s predetermined overhead rate is $60 \%$ of direct labor cost. At the end of the year, the company's records show that $\$ 189,000$ of factory overhead has been incurred.
(a) Determine the amount of overapplied or underapplied overhead.
(b) Prepare the necessary journal entry to close the Factory Overhead account assuming that any remaining balance is not material.

Answer:

| (a) | Actual overhead cost ... ............................ | \$189,000 |
| :---: | :---: | :---: |
|  | Applied overhead ( $60 \%$ * \$275,000)* ............ | 165,000 |
|  | Underapplied overhead | \$24,000 |
| (b) | Cost of Goods Sold ... | \$24,000 |

$\$ 65,000+\$ 172,000+\$ 38,000=\$ 275,000$
203. Taylor Corp. uses a job order costing system and worked only on Job 101 during the current period. Job 101 was sold for $\$ 460,000$. The following information pertains to costs incurred for Job 101.

| Direct Materials | $\$ 90,000$ |
| :--- | ---: |
| Indirect Materials | $\$ 30,000$ |
| Direct Labor | $\$ 130,000$ |
| Indirect Labor | $\$ 75,000$ |
| Depreciation of Machinery | $\$ 10,000$ |
| Factory Supplies | $\$ 8,000$ |
| Overhead Application Rate | $90 \%$ of direct labor |

After adjusting for the amount of over or underapplied overhead, determine the amount of gross profit earned on Job 101.

Answer:
Job Costs:

| Direct Materials | $\$ 90,000$ |
| :--- | :---: |
| Direct Labor | 130,000 |
| Overhead | 117,000 |
| Underapplied Overhead | $\underline{10,000 *(\text { closed to cost of goods sold) }}$ |
| Total Cost of Goods Sold | $\underline{\$ 343,000}$ |

Gross Profit:
Sales Price $\$ 460,000$
Less Cost of Goods Sold $\quad 343,000$
Gross Profit $\underline{\underline{\$ 117,000}}$
*Actual Overhead Incurred:
Indirect Materials \$ 30,000
Indirect Labor 75,000
Depreciation of Machinery 10,000
Factory Supplies 8,000
Total Actual Overhead \$123,000
Applied Overhead
117,000
Underapplied Overhead
$\$ \quad 6,000$
Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Learning Objective: 02-P4
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead
204. At the end of June, the job cost sheets for Kennedy Manufacturing show the following total costs accumulated on three custom jobs.

|  | Job 203 | Job 204 | Job 205 |
| :--- | ---: | ---: | ---: |
| Direct materials | $\$ 32,000$ | $\$ 47,000$ | $\$ 43,000$ |
| Direct labor | 18,000 | 22,000 | 25,000 |
| Overhead | 26,100 | 31,900 | 36,250 |

Job 203 was started in production in May and the following costs were assigned to it in May: direct materials, $\$ 12,000$; direct labor, $\$ 6,000$; and overhead $\$ 8,700$. Jobs 204 and 205 are started in June. Overhead cost is applied with a predetermined rate based on direct labor cost. Jobs 203 and 204 are finished in June, and Job 205 will be finished in July. No raw materials are used indirectly in June. Using this information, answer the following questions assuming the company's predetermined overhead rate did not change.
a. What is the cost of the raw materials requisitioned in June for each of the three jobs?
b. How much direct labor cost is incurred during June for each of the three jobs?
c. What predetermined overhead rate is used during June?
d. How much total cost is transferred to finished goods during June?

Answer:

| a. | Materials for Job 203 | $\$ 32,000$ |  |
| :--- | :--- | ---: | ---: |
|  | Less prior costs | $\underline{12,000}$ | $\$ 20,000$ |
|  | Job 204 |  | 47,000 |
|  | Job 205 |  | $\underline{43,000}$ |
|  | Total materials requisitioned |  | $\underline{\$ 110,000}$ |


| b. | Labor for Job 203 | $\$ 18,000$ |  |
| :--- | :--- | ---: | ---: |
|  | Less prior costs | $\underline{6,000}$ | $\$ 12,000$ |
|  | Job 204 |  | 22,000 |
|  | Job 205 |  | $\underline{\underline{55,000}}$ |
|  | Total direct labor |  | $\underline{\$ 59,000}$ |


| c. |  | Job 204 | Job 205 |
| :--- | :--- | ---: | ---: |
|  | Overhead | $\$ 31,900$ | $\$ 36,250$ |
|  | Direct labor | 22,000 | 25,000 |
|  | Ratio | $145 \%$ | $145 \%$ |


| $d$. |  | Job 203 | Job 204 | Total |
| :--- | :--- | ---: | ---: | ---: |
|  | Direct materials | $\$ 32,000$ | $\$ 47,000$ | $\$ 79,000$ |
|  | Direct labor | 18,000 | 22,000 | 40,000 |
|  | Overhead | $\underline{26,100}$ | $\underline{31,900}$ | $\underline{58,000}$ |
|  |  | $\underline{\$ 76,100}$ | $\underline{\$ 100,900}$ | $\underline{\$ 177,000}$ |

Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-C2
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Topic: Job Cost Sheet
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
205. Booth Manufacturing uses a job order costing system that charges overhead to jobs on the basis of direct material cost. At year-end, the Work in Process Inventory account shows the following.

| Date | Explanation | Debit | Credit | Balance |
| ---: | :--- | ---: | ---: | ---: |
| Dec. 31 | Direct materials cost | 980,000 |  | 980,000 |
| 31 | Direct labor cost | 320,000 |  | $1,300,000$ |
| 31 | Overhead costs | 637,000 |  | $1,937,000$ |
| 31 | To finished goods |  | $1,818,000$ | 119,000 |

a. Determine the overhead rate used (based on direct material cost).
b. Only one job remained in the Work in Process inventory at December 31. Its direct materials cost is $\$ 60,000$. How much direct labor cost and overhead cost are assigned to it?

Answer:
a. Rate $=\$ 637,000 / \$ 980,000=65 \%$

| $b$. | Total cost of job in process | $\$ 119,000$ |  |
| :--- | :--- | ---: | ---: |
|  | Less materials costs of job in process | $\underline{60,000}$ | $\$ 59,000$ |
|  | Less overhead applied $(\$ 60,000 * .65)$ |  | $\underline{39,000}$ |
|  | Direct labor cost |  | $\underline{\$ 20,000}$ |

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
206. Franklin Manufacturing uses a job order costing system that charges overhead to jobs on the basis of direct labor cost. Franklin used the following cost predictions: overhead costs $\$ 1,285,750$, and direct labor costs of $\$ 695,000$. At year-end, the company's records show that actual overhead costs for the year are $\$ 1,278,800$, and actual direct labor costs are $\$ 692,000$.
a. Determine the predetermined overhead rate for the year.
b. Compute the amount of overapplied or underapplied overhead.
c. Prepare the adjusting entry to allocate the over- or underapplied overhead assuming the amount is immaterial.

Answer:
a. $\$ 1,285,750 / \$ 695,000=185 \%$
b. $\$ 1,278,800-(\$ 692,000 * 1.85)=-\$ 1,400$ overapplied
c. Factory Overhead............................................................. 1,400

Cost of Goods Sold................................................ 1,400

## Blooms: Apply

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Learning Objective: 02-P4
Topic: Overhead Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead
207. Drop Anchor takes special orders to manufacture sail boats for high end customers. Complete the job cost sheets for Drop Anchor for September based on the following
information. Prepare journal entries to record the transactions as well as post to the job cost sheets.
a. Purchased raw materials on credit, $\$ 145,000$.
b. Materials requisitions: Job 240, \$48,000; Job 241, \$36,000; Job 242, \$42,000; indirect materials were $\$ 12,000$.
c. Time tickets used to charge labor to jobs: Job 240, \$40,000; Job 241, \$30,000; Job 242, $\$ 35,000$, indirect labor is $\$ 25,000$.
d. The company incurred the following additional overhead costs: depreciation of factory building, $\$ 70,000$; depreciation of factory equipment, $\$ 60,000$; expired factory insurance, $\$ 10,000$; utilities and maintenance cost of $\$ 20,000$ were paid in cash.
e. Applied overhead to all three jobs. The predetermined overhead rate is $190 \%$ of direct labor cost.
f. Transferred jobs 240 and 242 to Finished Goods Inventory.
g. Sold job 240 for $\$ 300,000$ for cash.
h. Closed the under- or over-applied overhead account balance.

## Job Cost Sheets

$240241 \quad 242 \quad$ Total

For the current month
Direct materials
Direct labor
Applied overhead

Total costs

Answer:

| $a$. | Raw Materials Inventory.. | 145,000 |  |
| :---: | :---: | :---: | :---: |
| Accounts Payable. |  |  | 145,000 |
| $b$. | Work in Process Inventory ... | 126,000 | 126,000 |
|  | Raw Materials Inventory.................................. |  |  |
|  | Factory Overhead................................................... | 12,000 |  |
|  | Raw Materials Inventory................................ |  | 12,000 |

c. Work in Process Inventory ................................................ 105,000

Factory Wages Payable ........................................
Factory Overhead............................................................. 25,000
Factory Wages Payable ........................................ 25,000
$\begin{array}{rrrr}\text { d. Factory Overhead.............................................................. } & 160,000 & \\ \text { Accumulated Depreciation-Factory Building...... } & 70,000 \\ \text { Accumulated Depreciation-Factory Equip......... } & 60,000\end{array}$

|  | Prepaid Insurance............................................ |  | 10,000 |
| :---: | :---: | :---: | :---: |
|  | Cash .............................................................. |  | 20,000 |
| $e$. | Work in Process Inventory. | 199,500 |  |
|  | Factory Overhead (\$105,000 * 190\%)................. |  | 199,500 |
| $f$. | Finished Goods Inventory (\$164,000 + \$143,500) ............ | 307,500 |  |
|  | Work in Process Inventory................................. |  | 307,500 |
| $g$. | Cash... | 300,000 |  |
|  | Sales.. |  | 300,000 |
|  | Cost of Goods Sold... | 164,000 |  |
|  | Finished Goods Inventory................................. |  | 164,000 |
| $h$. | Factory Overhead....................................................... | 2,500 |  |
|  | Cost of Goods Sold.. |  | 2,500 |
|  | Overhead $=\$ 12,000+25,000+160,000=\$ 197,000$ |  |  |
|  | Overhead applied $=\quad 199,500$ |  |  |
|  | Overapplied overhead $=\quad \underline{\text { \$2,500 }}$ |  |  |

## Job Cost Sheets

| $\mathbf{2 4 0}$ | $\mathbf{2 4 1}$ | $\mathbf{2 4 2}$ | Total |
| :--- | :--- | :--- | :--- |
| 48,000 | 36,000 | 42,000 | 126,000 |
| 40,000 | 30,000 | 35,000 | 105,000 |
| 76,000 | 57,000 | 66,500 | 199,500 |
|  |  |  |  |
| 164,000 | 123,000 | 143,500 | 430,500 |

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P1
Learning Objective: 02-P2
Learning Objective: 02-P3
Learning Objective: 02-P4
Topic: Materials Cost Flows and Documents
Topic: Labor Cost Flows and Documents
Topic: Overhead Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead
208. The predetermined overhead rate for Shilling Manufacturing is based on estimated direct labor costs of $\$ 350,000$ and estimated factory overhead of $\$ 770,000$. Actual costs incurred were:

| Direct materials | \$475,000 |
| :---: | :---: |
| Direct labor. | 347,000 |
| Indirect materials | 78,000 |
| Indirect labor | 143,500 |
| Sales commissions | 150,000 |
| Factory depreciation. | 260,000 |
| Property taxes, factory | 35,000 |
| Factory utilities ..................................................... | 65,000 |
| Advertising. | 62,500 |
| Factory supervision ............................................. | 185,000 |

a. Calculate the predetermined overhead rate and calculate the overhead applied during the year.
b. Determine the amount of over- or underapplied overhead and prepare the journal entry to eliminate the over- or underapplied overhead assuming that it is not material in amount.

Answer:
a. Predetermined overhead rate $=\$ 770,000 / \$ 350,000=220 \%$ of direct labor cost

Overhead applied $=\$ 347,000 * 220 \%=\$ 763,400$
b.

Actual overhead:
Indirect materials..................................... \$ 78,000
Indirect labor........................................... 143,500
Factory depreciation ................................ 260,000
Property taxes, factory.............................. 35,000
Factory utilities........................................ 65,000
Factory supervision .................................. 185,000
Total actual overhead................................. \$766,500
Overhead applied....................................... 763,400
Underapplied overhead .............................. \$3,100

Cost of Goods Sold....................................................... 3,100
Factory Overhead................................................. 3,100

Blooms: Apply
AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 3 Hard
Learning Objective: 02-P3
Learning Objective: 02-P4
Topic: Overhead Cost Flows and Documents
Topic: Underapplied or Overapplied Overhead

## Fill in the Blank Questions

209. A $\qquad$ accounting system records production activities using a perpetual inventory system.

Answer: cost

Feedback: answers must appear in this order

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
210. $\qquad$ , or customized production, produces products in response to customer orders.

## Answer: Job order production

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C1
Topic: Job Order Costing
211. A $\qquad$ is a separate record maintained for each job.

Answer: job cost sheet

[^10]212. The collection of job cost sheets for all jobs in process makes up the subsidiary ledger controlled by the $\qquad$ Inventory.

Answer: Work in Process

```
Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-C2
Topic: Job cost sheet
```

213. In a job order costing system, raw materials requisitioned as direct materials are debited to $\qquad$ ; indirect materials are debited to $\qquad$ .

## Answer: Work in Process Inventory; Factory Overhead

## Feedback: answers must appear in this order

Blooms: Understand
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 2 Medium
Learning Objective: 02-P1
Topic: Materials Cost Flows and Documents
214. When factory payroll is assigned to specific jobs, $\qquad$ is debited.

## Answer: Work in Process Inventory

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P2
Topic: Labor Cost Flows and Documents
215. When factory payroll for indirect labor is assigned, $\qquad$ is debited.

Answer: Factory Overhead

[^11]216. A $\qquad$ is calculated by relating total estimated factory overhead to an allocation factor such as total estimated direct labor cost, and is used to allocate factory overhead to specific jobs.

Answer: predetermined overhead rate

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
217. When the actual overhead incurred during an accounting period is more than the overhead applied to jobs, the overhead is said to be $\qquad$
Answer: underapplied

Blooms: Remember
AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P3
Topic: Overhead Cost Flows and Documents
218. Immaterial amounts of overapplied overhead should be $\qquad$ to the
$\qquad$ account when closed.

Answer: credited, Cost of Goods Sold

## Blooms: Remember

AACSB: Communication
AICPA BB: Industry
AICPA FN: Measurement
Difficulty: 1 Easy
Learning Objective: 02-P4
Topic: Underapplied and Overapplied Overhead


[^0]:    Blooms: Remember
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-C2

[^1]:    Blooms: Remember
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-C2
    Topic: Job cost sheet

[^2]:    Blooms: Remember
    AACSB: Analytic
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-P1
    Topic: Materials Cost Flows and Documents

[^3]:    Blooms: Remember
    AACSB: Analytic
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-P4
    Topic: Underapplied or Overapplied Overhead

[^4]:    Blooms: Remember
    AACSB: Analytic
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-P4
    Topic: Underapplied or Overapplied Overhead

[^5]:    Blooms: Apply
    AACSB: Analytic
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 2 Medium
    Learning Objective: 02-P3
    Topic: Overhead Cost Flows and Documents

[^6]:    Blooms: Understand
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 2 Medium
    Learning Objective: 02-P1
    Topic: Materials Cost Flows and Documents

[^7]:    Blooms: Understand
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 2 Medium
    Learning Objective: 02-P1
    Topic: Materials Cost Flows and Documents

[^8]:    Blooms: Understand
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 2 Medium
    Learning Objective: 02-P3
    Topic: Overhead Cost Flows and Documents

[^9]:    Blooms: Apply
    AACSB: Analytic
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 3 Hard
    Learning Objective: 02-P3
    Learning Objective: 02-P4
    Topic: Overhead Cost Flows and Documents
    Topic: Underapplied or Overapplied Overhead

[^10]:    Blooms: Remember
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-C2
    Topic: Job cost sheet

[^11]:    Blooms: Remember
    AACSB: Communication
    AICPA BB: Industry
    AICPA FN: Measurement
    Difficulty: 1 Easy
    Learning Objective: 02-P2
    Topic: Labor Cost Flows and Documents

