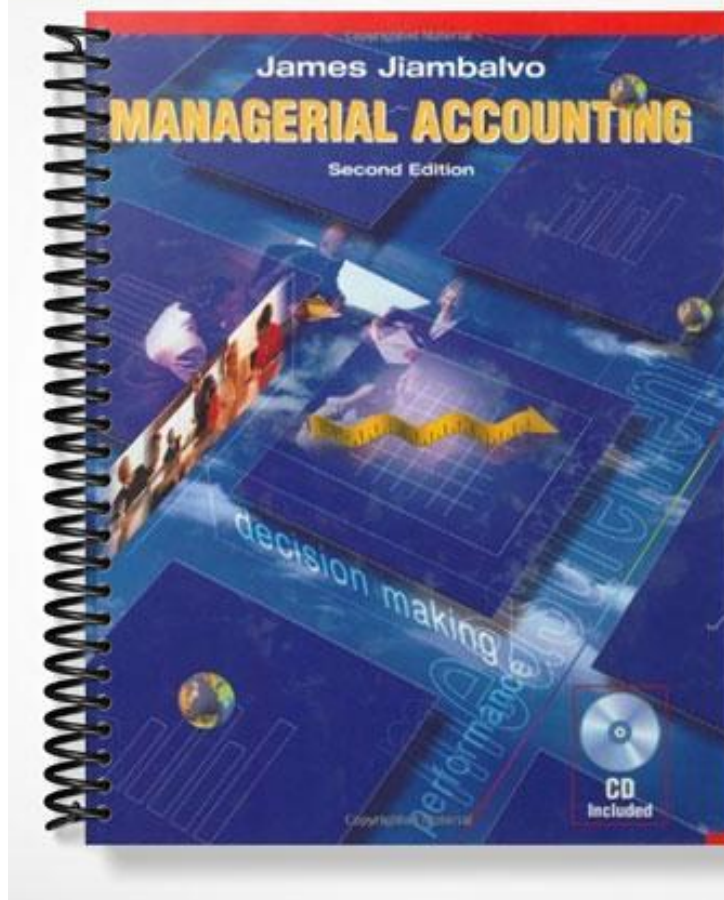


TEST BANK



CHAPTER 2

MANUFACTURING COSTS AND JOB-ORDER COSTING SYSTEMS

TRUE-FALSE

1. Manufacturing costs include direct material, direct labor, and manufacturing overhead.
2. The wages of a factory assembly line worker would be classified as direct labor.
3. Depreciation of factory equipment is part of manufacturing overhead.
4. Sales commissions are considered a product cost.
5. Period costs are identified with accounting periods rather than goods produced.
6. Rent of the office building for the sales staff is a product cost.
7. Raw Materials Inventory, Work in Process Inventory, and Finished Goods Inventory all appear on a company's balance sheet.
8. Overhead must be related to production using an activity driver.
9. Indirect labor is added directly to the Work in Process account.
10. Indirect labor costs are traced to each job.
11. Process costing systems are generally used by companies that produce large quantities of identical items.

2-2 **Test Bank** to accompany Jiambalvo *Managerial Accounting*, 2nd Edition

12. A company that builds custom homes would be likely to use a process costing system.
13. A company that bottles water would be likely to use job order costing.
14. Cost of Goods Sold appears on the balance sheet.
15. A job-cost sheet is a form used to accumulate costs of a job in a job-order costing system.
16. When overhead is applied to jobs, Work in Process is increased (debited) and Manufacturing Overhead is decreased (credited).
17. In a job-order costing system, Cost of Goods Manufactured is increased (debited) and Finished Goods is decreased (credited) when a job is sold.
18. In a job-order costing system, Work in Process is debited and Finished Goods is credited when a job is completed.
19. Underapplied overhead occurs when actual overhead is less than the amount of overhead applied to jobs.
20. One goal of just-in-time systems is to minimize inventory levels.
21. If the amount of over- or under-applied overhead is not material, the amount should be closed to Work in Process.
22. If the amount of overapplied overhead is not material, the amount should be closed to Cost of Goods Sold.
23. Increases in overhead costs should be driven by increases in the overhead allocation basis.
24. If overhead is over applied, closing it to cost of goods sold will increase income.

1 T	7 T	13 F	19 F
2 T	8 T	14 F	20 T
3 T	9 F	15 T	21 F
4 F	10 F	16 T	22 T
5 T	11 T	17 F	23 T
6 F	12 F	18 F	24 T

MULTIPLE CHOICE

Non-quantitative

25. Which of the following is **not** a reason for companies to know the cost of their products?
 - A. The company must set appropriate prices for the products.
 - B. The salary of the company president is based on the cost of the product.
 - C. The cost of the product is used in the calculation of profit when the product is sold.
 - D. The management of the company needs to assess the reasonableness of the costs incurred in purchasing or manufacturing the products.

26. Which of the following is **not** a manufacturing cost?
 - A. Manufacturing overhead
 - B. Direct materials
 - C. Direct labor
 - D. Administrative expenses

27. Which of the following is an example of a manufacturing overhead cost?
 - A. Security at the manufacturing plant
 - B. Fabric used to produce shirts
 - C. Cost of shipping product to customers
 - D. The salary of the president of the company

28. Which of the following is a manufacturing cost?
 - A. Direct material
 - B. Advertising expense
 - C. Depreciation of the office equipment used by the sales staff
 - D. Salary of the company president

29. Cold Company manufactures refrigerators. Which of the following items is most likely to be an indirect material cost for Cold Company?
 - A. Factory supervisor's salary
 - B. Lubricant for refrigerator door hinges
 - C. Glass shelves for the refrigerators
 - D. Refrigerator motors

30. Which of the following costs is **not** part of manufacturing overhead?
 - A. Electricity for the factory
 - B. Depreciation of factory equipment
 - C. Salaries for the production supervisors
 - D. Health insurance for sales staff

31. Which of the following costs is part of manufacturing overhead?
- A. Indirect labor
 - B. Direct labor
 - C. Salaries for the accounting personnel
 - D. Wages for the janitorial staff for the sales offices
32. Product costs
- A. are also called manufacturing costs.
 - B. are considered an asset until the finished goods are sold.
 - C. become an expense when the goods are sold.
 - D. All of the above answers are correct.
33. Which of the following is a period cost?
- A. Rent on an factory building
 - B. Depreciation on production equipment
 - C. Raw materials cost
 - D. Commissions paid on each unit sold
34. Which of the following is **not** a period cost?
- A. Advertising costs
 - B. Accounting staff salaries
 - C. Direct materials
 - D. Depreciation of accounting office equipment
35. Which of the following accounts does **not** appear on the balance sheet?
- A. Raw Materials Inventory
 - B. Finished Goods Inventory
 - C. Work in Process Inventory
 - D. Cost of Goods Manufactured
36. Work in Process Inventory includes the cost of
- A. goods which are only partially completed.
 - B. all goods sold during the period.
 - C. all materials purchased during the last period.
 - D. all goods which are completed and ready to sell.
37. Which of the following is **not** added to the Work in Process Inventory account?
- A. Direct materials
 - B. Direct labor
 - C. Manufacturing overhead
 - D. Sales commissions

38. Which of the following lists presents the accounts in the order in which product costs flow?
- A. Raw Materials Inventory, Finished Goods Inventory, Work in Process Inventory, Cost of Goods Sold
 - B. Cost of Goods Sold, Work in Process Inventory, Raw Materials Inventory, Finished Goods Inventory
 - C. Raw Materials Inventory, Work in Process Inventory, Finished Goods Inventory, Cost of Goods Sold
 - D. Work in Process Inventory, Finished Goods Inventory, Cost of Goods Sold, Raw Materials Inventory
39. Cost of goods manufactured
- A. is the amount transferred to Finished Goods Inventory from Work in Process Inventory during the period.
 - B. is equal to the beginning Work in Process Inventory plus the current period's manufacturing costs minus the ending Work in Process Inventory.
 - C. Both A and B are true.
 - D. Neither A nor B is true.
40. A job-order costing system is likely to be used by a
- A. soft-drink bottler.
 - B. breakfast cereal manufacturer.
 - C. paint manufacturer.
 - D. custom home builder.
41. Which of the following companies is most likely to use a process costing system?
- A. A company that builds airplanes
 - B. A company that prints wedding invitations
 - C. A hospital
 - D. A company that produces petroleum products
42. Companies that use process costing systems
- A. generally produce large quantities of identical items.
 - B. do not trace costs to specific items produced.
 - C. accumulate costs by operation rather than by the job.
 - D. All of the above answers are correct.
43. A form used to accumulate the cost of producing an item is called a(n)
- A. job-cost sheet.
 - B. material requisition.
 - C. balance sheet.
 - D. invoice.

44. Which of the following is **not** true in a job-order costing system?
- A. Cost of goods sold will include the costs of all jobs that are sold during the accounting period.
 - B. Work in Process Inventory will include the cost of all jobs that are currently being worked on.
 - C. Finished Goods Inventory will include the cost of all jobs that are completed but not yet sold.
 - D. Raw Materials Inventory will include the cost of jobs that have been started but are not yet completed.
45. An allocation base is
- A. a common characteristic that jobs share, which is used to spread the overhead costs among the various jobs.
 - B. the minimum amount of overhead assigned to a job.
 - C. used to determine how many labor hours were needed to complete a job.
 - D. used to authorize the release of materials from the storeroom to the production area.
46. Direct labor hours are a good basis for applying overhead when:
- A. most direct laborers are doing the same type of work and use about the same amount of low level technology.
 - B. the process is very capital intensive
 - C. labor is a very small part of total cost
 - D. some labor is manual and other labor uses very expensive equipment.
47. When overhead is applied to jobs, which of the following accounts is debited?
- A. Manufacturing Overhead
 - B. Finished Goods Inventory
 - C. Indirect Labor
 - D. Work in Process Inventory
48. When manufacturing overhead is applied to jobs, which of the following accounts is credited?
- A. Manufacturing Overhead
 - B. Work in Process Inventory
 - C. Accounts Payable
 - D. Raw Materials Inventory
49. Which of the following statements about job-order costing is **not** true?
- A. Materials are traced to jobs using materials requisition forms.
 - B. Indirect labor is traced to jobs using time tickets.
 - C. Manufacturing overhead cannot be traced directly to jobs, so it is assigned using the overhead allocation rate.
 - D. All of the above statements are true.

50. As work is completed on a job, costs for the job are collected in which of the following accounts?
- Raw Materials Inventory
 - Work in Process Inventory
 - Finished Goods Inventory
 - Cost of Goods Sold
51. When a job is completed, it is recorded with a
- debit to Work in Process Inventory and a credit to Finished Goods Inventory.
 - debit to Finished Goods Inventory and a credit to Work in Process Inventory.
 - debit to Cost of Goods Sold and a credit to Finished Goods Inventory.
 - debit to Work in Process Inventory and a credit to Cost of Goods Sold.
52. When a job is sold, the transaction is recorded with a
- debit to Work in Process Inventory and a credit to Cost of Goods Sold.
 - debit to Finished Goods Inventory and a credit to Work in Process Inventory.
 - debit to Cost of Goods Sold and a credit to Finished Goods Inventory.
 - debit to Work in Process Inventory and a credit to Finished Goods Inventory.
53. Which of the following is **not** a commonly used measure of activity for allocating overhead?
- direct labor cost
 - machine hours
 - sales commissions
 - direct labor hours
54. The allocation base used should be most strongly associated with the
- cost of direct materials.
 - cost of direct labor.
 - overhead cost.
 - total cost.
55. Which of the following is the most reasonable allocation base for a highly mechanized process?
- direct labor cost
 - machine hours
 - direct materials cost
 - the number of different materials used to produce the product
56. Predetermined overhead rates use
- actual overhead costs and actual levels of the allocation base.
 - estimated overhead costs and estimated levels of the allocation base.
 - actual overhead costs and estimated levels of the allocation base.
 - estimated overhead costs and actual levels of the allocation base.

57. The calculation for the predetermined overhead rate is
- A. estimated overhead cost times the estimated level of the allocation base.
 - B. estimated overhead cost divided by the estimated level of the allocation base.
 - C. estimated level of the allocation base divided by the estimated overhead cost.
 - D. estimated overhead cost minus the actual overhead cost.
58. The predetermined overhead rate is generally set in advance for which period of time?
- A. a day
 - B. a week
 - C. a month
 - D. a year
59. Assume that managers are rewarded for reducing product costs as calculated by the accounting system. In keeping with the theme that "you get what you measure," if a company switches the overhead application basis from direct labor hours to machine hours, what would you expect to happen?
- A. machine hours will increase
 - B. machine hours will decrease
 - C. total costs will increase
 - D. output will be reduced
60. A predetermined overhead rate is preferred over an actual overhead rate because a predetermined overhead rate
- A. provides a rate that can be used for bidding jobs throughout the year
 - B. it is required by generally accepted accounting principles
 - C. allows for costing of jobs before the end of the period.
 - D. Both A and C
61. If the amount of underapplied overhead or overapplied overhead is **not** large, the Manufacturing Overhead account is closed to
- A. Raw Materials Inventory.
 - B. Work in Process Inventory.
 - C. Finished Goods Inventory.
 - D. Cost of Goods Sold.

62. Del Mar Company has \$1,000,000 of underapplied overhead at the end of the year. Del Mar management has asked you what the impact on income will be if you prorate the underapplied overhead to the appropriate accounts. What will you tell them?
- A. Income will be higher if the underapplied overhead is prorated than if it is closed to cost of goods sold.
 - B. Income will be lower if the underapplied overhead is prorated than if it is closed to cost of goods sold
 - C. Income will be the same regardless of which method is used.
 - D. Raw materials inventory will be higher if underapplied overhead is prorated than if it is closed to cost of goods sold.
63. If the amount of underapplied overhead is large, it is
- A. closed to Finished Goods Inventory.
 - B. apportioned between Finished Goods Inventory and Work in Process Inventory.
 - C. apportioned among Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold.
 - D. closed to Cost of Goods Sold.
64. The impact of prorating overapplied overhead between the appropriate inventory accounts and cost of goods sold (as opposed to closing it all to cost of goods sold) is to:
- A. increase cost of goods sold, decrease income, and reduce inventory
 - B. reduce cost of goods sold, increase income, and increase inventory
 - C. reduce cost of goods sold, increase income, and reduce inventory
 - D. increase cost of goods sold, decrease income and increase inventory
65. Just-in-time (JIT) systems were first used in
- A. England.
 - B. the United States.
 - C. Japan.
 - D. Germany.
66. If a company has zero beginning inventory and zero ending inventory (is completely just-in-time), then which of the following is true:
- A. cost of goods sold will equal cost of goods manufactured
 - B. cost of goods sold will be zero
 - C. cost of goods manufactured will be zero
 - D. all of the above
67. The goal of minimizing raw materials and work in process inventories is most closely associated with
- A. ABC.
 - B. JIT.
 - C. TQM.
 - D. computer-controlled manufacturing systems.

68. Computer-controlled manufacturing systems generally
- A. decrease the accuracy of the production process.
 - B. result in a decrease in direct labor costs.
 - C. increase the variable costs and decrease fixed costs.
 - D. mean that overhead should be allocated based on direct labor hours.
69. Total quality management (TQM) programs are also known as
- A. just-in-time programs.
 - B. activity-based allocation programs.
 - C. critical path programs.
 - D. continuous quality improvement programs.
70. Which of the following is **not** a component of a total quality management (TQM) program?
- A. Making products right the first time, thus reducing rework and scrap costs
 - B. Listening to the customers' needs
 - C. Encouraging workers to continuously improve the production process
 - D. Eliminating manufacturing overhead
71. When state of the art equipment is installed as part of incorporating a computer controlled manufacturing system:
- A. labor cost generally decrease
 - B. direct labor may no longer be a good allocation base
 - C. fixed cost will generally increase
 - D. all of the above are correct

Quantitative

72. The Sienna Company has a beginning balance in Finished Goods Inventory of \$22,000 and an ending balance in Finished Goods Inventory of \$20,000. If the cost of goods manufactured is \$380,000, what is the cost of goods sold?
- A. \$382,000
 - B. \$422,000
 - C. \$378,000
 - D. \$338,000
73. If the balance in the Finished Goods Inventory account decreased by \$30,000 during the period and the cost of goods manufactured was \$220,000, what was the cost of goods sold?
- A. \$110,000
 - B. \$190,000
 - C. \$220,000
 - D. \$250,000

74. The balance in the Finished Goods Inventory account on July 1, 2004, was \$34,000 and the June 30, 2005, balance in the Finished Goods Inventory account was \$41,000. If the cost of goods manufactured was \$200,000, what was the cost of goods sold?
- A. \$285,000
 - B. \$193,000
 - C. \$207,000
 - D. \$278,000
75. For the year ended December 31, 2004, the Jewel Company had a cost of goods sold of \$975,000 and cost of goods manufactured of \$900,000. If the January 1, 2004 balance in the Finished Goods Inventory account was \$225,000, what was the December 31, 2004, balance in Finished Goods Inventory?
- A. \$300,000
 - B. \$150,000
 - C. \$225,000
 - D. \$75,000
76. Black Company's Work in Process Inventory account has a beginning balance of \$40,000 and an ending balance of \$50,000. Current manufacturing costs total \$125,000. What is the cost of goods manufactured?
- A. \$145,000
 - B. \$115,000
 - C. \$125,000
 - D. \$135,000
77. At December 31, 2004, Blue Company has a balance in the Work in Process Inventory account of \$125,000. At January 1, 2004, the balance was \$133,000. Current manufacturing costs for the year are \$280,000. What is the cost of goods manufactured?
- A. \$269,000
 - B. \$272,000
 - C. \$258,000
 - D. \$288,000
78. Yellow Company has a beginning balance in the Work in Process Inventory account of \$230,000. Current manufacturing costs for the period are \$580,000. If the cost of goods manufactured is \$750,000, what is the ending balance in the Work in Process Inventory account?
- A. \$1,100,000
 - B. \$1,560,000
 - C. \$60,000
 - D. \$400,000

79. Wilson Company bought \$100,000 of direct material during June, incurred \$90,000 in direct labor cost, and had \$130,000 in manufacturing overhead. Inventories for June were as follows:

	Beginning	Ending
Raw material	\$14,000	\$18,000
Work in Process	\$19,000	\$17,000
Finished Goods	\$18,000	\$15,000

What is the cost of goods sold for June?

- A. \$320,000
- B. \$322,000
- C. \$318,000
- D. \$321,000

80. The following information has been collected from Green Company's accounting records for the month of April:

Direct materials added to Work in Process Inventory	\$ 160,000
Indirect materials added to Manufacturing Overhead	40,000
Direct labor added to Work in Process Inventory	150,000
Indirect labor added to Manufacturing Overhead	65,000
Manufacturing overhead added to Work in Process Inventory	100,000
Depreciation Expense added to Manufacturing Overhead	50,000
Cost of Goods Sold	340,000
Cost of Goods Manufactured	380,000

What is the amount of the current manufacturing costs?

- A. \$410,000
 - B. \$565,000
 - C. \$500,000
 - D. \$550,000
81. Alco Company had current production costs (direct material used, direct labor, and factory overhead) of \$120,000 for March. Inventories were as follows:

	<u>Beginning</u>	<u>Ending</u>
Raw material	\$14,000	\$18,000
Work in Process	\$19,000	\$17,000
Finished Goods	\$13,000	\$14,000

What is the cost of goods manufactured?

- A. \$120,000
- B. \$118,000
- C. \$122,000
- D. \$121,000

82. Well Made Company applies overhead using a predetermined overhead rate. Overhead is applied based on direct labor hours. At the beginning of the year it is estimated that \$500,000 in overhead will be incurred and 25,000 hours will be worked. At year end, 24,000 hours were actually worked, and actual overhead costs were \$470,000. What can be concluded from this?
- A. Cost control was good.
 - B. Overhead is overapplied by \$10,000
 - C. Overhead is underapplied by \$10,000
 - D. Overhead is applied at a rate of \$19.58 per hour
83. Well Done Company applies overhead using machine hours as the allocation base, at a rate of \$17 per machine hour. Job KD requires \$500 worth of material, 12 hours of labor at \$15 per hour and 11 machine hours. What is the cost of job KD?
- A. \$680
 - B. \$884
 - C. \$867
 - D. \$1,064
84. Emerald Company estimates that the total overhead costs for 2004 will be \$150,000 and that the production employees will work 30,000 direct labor hours and earn \$600,000 during the year. If the company allocates overhead based on direct labor hours, what is the predetermined overhead rate?
- A. \$5.00 per direct labor hour
 - B. \$4.00 per direct labor hour
 - C. \$20.00 per direct labor hour
 - D. \$0.20 per direct labor hour
85. Rube Company estimates that its employees will work 200,000 direct labor hours during the coming year. Total overhead costs for the year are estimated to be \$1,200,000 and the direct labor costs are expected to be \$2,400,000. If the company allocates overhead based on as a percentage of direct labor cost, what is the predetermined overhead rate?
- A. \$12.00 per direct labor hour
 - B. 50% of direct labor
 - C. \$2.00 per direct labor hour
 - D. \$200% of direct labor
86. If Hatch Company budgets total overhead costs for the next year of \$50,000 and anticipates using machine hours as the overhead allocation base, which of the following statements is true?
- A. If Hatch Company expects to use 100,000 machine hours, the predetermined overhead rate is \$2.00 per machine hour.
 - B. If Hatch Company expects to use 75,000 machine hours, the predetermined overhead rate is \$1.50 per machine hour.
 - C. If Hatch Company expects to use 25,000 machine hours, the predetermined overhead rate is \$2.00 per machine hour.
 - D. Machine hours cannot be used to calculate the predetermined overhead rate.

87. Ruler Company has budgeted the following amounts for the coming year:

Direct labor hours	40,000 hours
Direct labor costs	\$480,000
Machine hours	20,000 hours
Total overhead costs	\$60,000

Which of the following would be a valid predetermined overhead rate?

- A. \$3.00 per machine hour
 - B. \$8.00 per direct labor hour
 - C. \$12.00 per direct labor hour
 - D. \$24.00 per machine hour
88. Yeld Company uses a predetermined overhead rate of \$6.00 per machine hour. If 70,000 machine hours were worked this year and actual overhead costs of \$380,000 were incurred, what was the amount of underapplied or overapplied overhead?
- A. \$420,000 overapplied
 - B. \$420,000 underapplied
 - C. \$40,000 overapplied
 - D. \$40,000 underapplied
89. Lime Company incurred manufacturing overhead costs of \$300,000. Total overhead applied to jobs was \$306,000. What was the amount of overapplied or underapplied overhead?
- A. \$1.20 per unit produced
 - B. \$6,000 overapplied
 - C. \$6,000 underapplied
 - D. It is impossible to tell with the information given
90. Weber Company applies overhead using a predetermined overhead rate based on the direct labor cost. At the beginning of the year, it was estimated that there would be 20,000 labor hours worked and that labor would be paid \$20 per hour. Overhead was estimated to be \$500,000 for the year. What is the overhead application rate to be used for the year?
- A. \$20 per direct labor hour
 - B. \$25.00 per direct labor hour
 - C. 80% of direct labor
 - D. 125% of direct labor
91. Knosby Company applies overhead based on direct labor hours at a rate of \$20 per direct labor hour. Job AMHA has accumulated \$4,000 of direct material cost and used 150 hours of labor at \$30 per hour. What is the total cost of the job AMHA?
- A. \$4,000
 - B. \$8,500
 - C. \$7,500
 - D. \$11,500

92. Kappos Company applies overhead using a predetermined rate based on direct material cost. For 2004, estimated material cost \$20,000,000 and estimated overhead was \$8,000,000. At the end of 2002, the actual material cost was \$19,000,000 and the actual overhead cost was \$7,900,000. What is the amount of under or over applied overhead for 2002?
- A. \$100,000 underapplied
 - B. \$100,000 overapplied
 - C. \$300,000 underapplied
 - D. \$400,000 underapplied
93. The Fame Company had budgeted manufacturing overhead of \$75,000 and anticipated using 50,000 direct labor hours during the period. If actual overhead incurred was \$70,000 and actual direct labor hours worked were 50,000, what was the amount of overapplied or underapplied overhead?
- A. \$5,000 overapplied
 - B. \$5,000 underapplied
 - C. \$20,000 overapplied
 - D. \$20,000 underapplied
94. Silver Company had \$380,000 in direct labor costs this year. Manufacturing overhead was applied at a predetermined rate of \$2.00 per direct labor dollar. If actual overhead incurred was \$800,000, what was the amount of overapplied or underapplied overhead?
- A. \$380,000 underapplied
 - B. \$380,000 overapplied
 - C. \$40,000 overapplied
 - D. \$40,000 underapplied
95. Indigo Company had a predetermined overhead rate of \$6.00 per direct labor hour. Budgeted overhead was \$720,000 and actual overhead incurred was \$700,000. Actual direct labor hours worked were 125,000 hours. How many labor hours did Indigo plan to work when determining the overhead rate for the year?
- A. 120,000 hours
 - B. 116,667 hours
 - C. 20,833 hours
 - D. cannot be determined from the information given.
96. Spice Company applied overhead to jobs at a rate of \$10.00 per direct labor hour. If the budgeted manufacturing overhead was \$660,000 and the actual manufacturing overhead incurred was \$630,000, how much under or over applied overhead did Spice have?
- A. \$30,000 underapplied
 - B. \$30,000 overapplied
 - C. \$60,000 overapplied
 - D. It is impossible to tell with the information in the problem.

97. The Trail Company had budgeted direct labor costs of \$1,600,000, manufacturing overhead of \$800,000, and allocated overhead based on direct labor costs. If actual direct costs were \$1,500,000 and actual manufacturing costs were \$770,000, what was the amount of overapplied or underapplied overhead?
- A. \$100,000 underapplied
 - B. \$30,000 overapplied
 - C. \$20,000 underapplied
 - D. \$670,000 overapplied
98. Brandon Company allocates overhead based on machine hours used on a job. The predetermined overhead rate is \$15 per machine hour. If 6,000 machine hours were used on jobs and \$97,000 in overhead costs were incurred, what is the amount of underapplied or overapplied overhead?
- A. \$7,000 underapplied
 - B. \$6,000 overapplied
 - C. \$7,000 overapplied
 - D. \$4,000 underapplied

Use the following information for questions 99 and 100:

During 2004, Clark Company applies overhead using a normal costing system at a rate of \$12 per direct labor hours. Estimated direct labor hours for the year were 150,000, estimated overhead for the year was \$1,800,000. Actual direct labor hours for 2004 were 140,000 and actual overhead was \$1,700,000.

99. What is the amount of under or over applied overhead for the year?
- A. \$100,000 underapplied
 - B. \$20,000 underapplied
 - C. \$0
 - D. \$120,000 underapplied
100. Job AKL was produced during 2002. The job used \$20,000 worth of materials, \$30,000 worth of direct labor (making \$15 per hour). What is the normal cost of the job?
- A. \$50,000
 - B. \$74,000
 - C. \$74,286
 - D. \$94,000

101. At the end of the period, the Manufacturing Overhead account had a \$3,000 debit balance. The balances in the Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold were \$10,000, \$20,000, and \$70,000, respectively. Assuming that the balance in Manufacturing Overhead is considered material, the journal entry to close the Manufacturing Overhead account will include
- A. a \$3,000 debit to Finished Goods Inventory.
 - B. a \$3,000 debit to Cost of Goods Sold.
 - C. debits to Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold for \$300, \$600, and \$2,100, respectively.
 - D. debits to Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold for \$1,000 each
102. At the end of the period, the Manufacturing Overhead account had a \$21,000 debit balance. The balances in the Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold were \$10,000, \$20,000, and \$70,000, respectively. Assuming that the balance in Manufacturing Overhead is considered immaterial, the journal entry to close the Manufacturing Overhead account will include
- A. a \$21,000 debit to Cost of Goods Sold.
 - B. a \$21,000 debit to Finished Goods Inventory.
 - C. debits to Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold for \$7,000 each.
 - D. debits to Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold for \$2,100, \$4,200, and \$14,700, respectively.
103. At the end of the period, Time Company had the following balances in its accounts. All the balances are debits.
- | | |
|---------------------------|-----------|
| Raw Materials Inventory | \$ 15,000 |
| Work in Process Inventory | 20,000 |
| Finished Goods Inventory | 30,000 |
| Cost of Goods Sold | 200,000 |
| Manufacturing Overhead | 25,000 |
- Assuming the amount in Manufacturing Overhead is considered material, the entry to allocate Manufacturing Overhead will include a
- A. debit to Cost of Goods Sold for \$20,000.
 - B. debit to Cost of Goods Sold for \$25,000.
 - C. debit to Cost of Goods sold for \$18,868.
 - D. credit to Work in Process Inventory for \$20,000.

104. At the end of the period, Anthony Company had the following balances in its accounts. All the balances are debits except the manufacturing overhead which is a credit.

Raw Materials Inventory	\$ 15,000
Work in Process Inventory	20,000
Finished Goods Inventory	30,000
Cost of Goods Sold	200,000
Manufacturing Overhead (credit)	2,000

Assuming the amount in Manufacturing Overhead is considered immaterial, the entry to allocate Manufacturing Overhead will include a \$2,000 debit to

- A. Raw Materials Inventory.
 B. Work in Process Inventory.
 C. Manufacturing Overhead.
 D. Cost of Goods Sold.
105. Actual manufacturing overhead incurred during the year was \$332,000 and manufacturing overhead applied to jobs was \$336,000. Assuming the balance in the Manufacturing Overhead account is considered immaterial, the journal entry to close the Manufacturing Overhead account will include a \$4,000 debit to
- A. Cost of Goods Sold.
 B. Work in Process Inventory.
 C. Manufacturing Overhead.
 D. Finished Goods.
106. Overhead applied to jobs during the period was \$270,000. Actual overhead costs incurred were \$268,000. Budgeted overhead used to calculate the predetermined overhead rate was \$275,000. Which of the following is a correct entry to close the Manufacturing Overhead account?
- | | | | |
|----|------------------------|-------|-------|
| A. | Manufacturing Overhead | 2,000 | |
| | Cost of Goods Sold | | 2,000 |
| B. | Cost of Goods Sold | 2,000 | |
| | Manufacturing Overhead | | 2,000 |
| C. | Manufacturing Overhead | 5,000 | |
| | Cost of Goods Sold | | 5,000 |
| D. | Cost of Goods Sold | 7,000 | |
| | Manufacturing Overhead | | 7,000 |

107. The balances in Proud Company's accounts at the end of the period were:

Work in Process Inventory	\$ 40,000
Finished Goods Inventory	60,000
Cost of Goods Sold	300,000
Manufacturing Overhead (credit balance)	60,000

If the balance in the Manufacturing Overhead account is considered immaterial, which of the following represents the amounts that should be credited to the Work in Process Inventory, Finished Goods Inventory, and Cost of Goods Sold accounts, respectively?

- A. \$4,000, \$6,000, \$30,000
- B. \$20,000, \$20,000, \$20,000
- C. \$6,000, \$9,000, \$45,000
- D. \$0, \$0, \$60,000

Answers

25 B	42 D	59 B	76 B	93 A
26 D	43 A	60 D	77 D	94 D
27 A	44 D	61 D	78 C	95 A
28 A	45 A	62 A	79 D	96 D
29 B	46 A	63 C	80 A	97 C
30 D	47 D	64 C	81 C	98 A
31 A	48 A	65 C	82 B	99 B
32 D	49 B	66 A	83 C	100 B
33 D	50 B	67 B	84 A	101 C
34 C	51 B	68 B	85 B	102 A
35 D	52 C	69 D	86 C	103 A
36 A	53 C	70 D	87 A	104 C
37 D	54 C	71 D	88 C	105 C
38 C	55 B	72 A	89 B	106 A
39 C	56 B	73 D	90 D	107 D
40 D	57 B	74 B	91 D	
41 D	58 D	75 B	92 C	

MATCHING

108. Match each of the following terms with the phrase that most closely describes it. Each answer may be used only once.

- | | |
|---|---------------------------------------|
| _____ 1. activity-based costing | _____ 9. overapplied overhead |
| _____ 2. cost of goods available for sale | _____ 10. period costs |
| _____ 3. cost of goods manufactured | _____ 11. process costing system |
| _____ 4. direct materials | _____ 12. product costs |
| _____ 5. job-order costing system | _____ 13. total quality management |
| _____ 6. just-in-time system | _____ 14. underapplied overhead |
| _____ 7. indirect materials | _____ 15. work in process |
| _____ 8. manufacturing overhead | _____ 16. predetermined overhead rate |

- A. Costs assigned to the goods produced; also known as manufacturing costs
- B. Materials costs that are not traced directly to products produced
- C. System that seeks to minimize Raw Materials Inventory and Work in Process Inventory
- D. Cost of items that are completed and transferred from Work in Process Inventory to Finished Goods Inventory
- E. Costs that are identified with accounting periods rather than with goods produced
- F. Actual overhead is greater than overhead that has been applied to products
- G. Method of assigning overhead costs that uses multiple allocation bases
- H. System that uses job-order sheets to collect costs for each individual job
- I. Cost of all materials and parts that are directly traced to the items produced
- J. Beginning balance in the Finished Goods Inventory plus cost of goods manufactured
- K. Overhead applied to products is greater than the actual overhead costs incurred
- L. Used by companies that produce large quantities of identical items
- M. Cost of all manufacturing activities other than direct material and direct labor
- N. Inventory account that contains the cost of goods that are only partially completed
- O. Program that encourages workers to constantly improve their production processes
- P. Amount determined at the beginning of the period to be used to apply overhead to production

Answer

- | | | | |
|------|------|-------|-------|
| 1. G | 5. H | 9. K | 13. O |
| 2. J | 6. C | 10. E | 14. F |
| 3. D | 7. B | 11. L | 15. N |
| 4. I | 8. M | 12. A | 16. P |

PROBLEMS

109. Classify each of the following costs as a product cost or a period cost.

- _____ a. Depreciation of production equipment
- _____ b. Sales commissions
- _____ c. Insurance on factory building
- _____ d. Direct materials
- _____ e. Rent for company headquarters building
- _____ f. Company president's salary
- _____ g. Wages for production workers
- _____ h. Advertising expenses
- _____ i. Cost of shipping finished goods inventory

Answer

- a. Product
- b. Period
- c. Product
- d. Product
- e. Period
- f. Period
- g. Product
- h. Period
- i. Period

110. The Seattle Company allocates overhead based on a predetermined overhead rate of \$8.00 per direct labor hour. Job b 689 required 6 tons of direct material at a cost of \$900.00 per ton and took employees who earn \$15.00 per hour a total of 90 hours to complete. What is the total cost of Job b 689?

Answer

Direct materials	6 tons @ \$900	\$ 5,400
Direct labor	90 hours @ \$15	1,350
Manufacturing overhead	90 hours @ \$8	<u>720</u>
Total cost of A2346		<u>\$7,470</u>

111. At the end of the period, Can Company had the following balances in selected accounts:

Raw Materials Inventory	\$ 90,000
Finished Goods	180,000
Work in Process Inventory	70,000
Cost of Goods Sold	1,000,000
Manufacturing Overhead	Debit balance 100,000

- a. Prepare the journal entry to close the Manufacturing Overhead account if the balance in the account is considered material.
- b. Prepare the entry assuming the balance is not considered material.

Answer

a.	Work in Process Inventory	14,400	
	Finished Goods Inventory	5,600	
	Cost of Goods Sold	80,000	
	Manufacturing Overhead		100,000
	To apportion underapplied overhead		
b.	Cost of Goods Sold	100,000	
	Manufacturing overhead		100,000

112. Showers Company estimates the following overhead costs for the coming year:

Equipment depreciation	\$150,000
Equipment maintenance	50,000
Supervisory salaries	20,000
Factory rent	<u>200,000</u>
Total	<u>\$420,000</u>

Showers is also budgeting \$600,000 in direct labor costs and 14,000 machine hours for the coming year.

- Calculate the predetermined overhead rate using direct labor costs as the allocation base.
- Calculate the predetermined overhead rate using machine hours as the allocation base.
- Which of the allocation bases is preferred? Why?

Answer

- $\$420,000 / \$600,000 = \$ 0.70$ per direct labor dollar
- $\$420,000 / 14,000$ machine hours = \$30.00 per machine hour
- Since most of the overhead costs are related to equipment, machine hours is the preferred allocation base.

113. Croquet Company allocates overhead based on machine hours. Estimated overhead costs for the year total \$390,000 and the company estimates that it will use 50,000 machine hours during the year. Croquet works 48,000 machine hours during the year and incurs \$380,000 of overhead?

- What is the overhead application rate for the year?
- What is the amount of applied overhead for the year?
- What is the amount of under or overapplied overhead for the year? Label over or under.
- (Bonus) Why do you think you got the result you got in c above when overhead was less than expected?

Answer

- $\$390,000/50,000 = \$7.80/\text{machine hour}$
- $\$7.80 * 48,000 = \$374,400$
- $\$380,000 - \$374,400 = \$5,600$ underapplied
- Overhead was less than expected, but not proportionately so, since part of the overhead is probably fixed.

SHORT-ANSWER ESSAYS

114. Manufacturing costs are added to the Work in Process Inventory account as goods are manufactured. List and briefly describe the three categories of manufacturing costs.

Answer

The three categories of manufacturing costs are:

Direct materials = those materials and parts that are directly traced to the items produced

Direct labor = the labor costs for those workers who are directly involved in the manufacturing process

Manufacturing overhead = the cost of all manufacturing activities other than direct material and direct labor. This includes indirect materials, indirect labor, depreciation of factory equipment, utilities and insurance on the manufacturing facility, among other items.

115. Costs can be classified as product costs or period costs. Define the term “product cost” and give at least two examples of costs that are considered product costs.

Answer

Product costs are also known as manufacturing costs and are those costs assigned to goods produced. These costs are an asset until the finished goods are sold, at which time these costs are expensed. Direct material, direct labor and all the costs that are part of manufacturing overhead are product costs.

116. Costs can be classified as product costs or period costs. Define the term “period cost” and give at least two examples of costs that are considered period costs.

Answer

Period costs are identified with accounting periods rather than goods produced.

They are recognized as expenses in the periods they are incurred. Selling expenses and general and administrative expenses such as the CEO’s salary are period costs.

117. What is a job-order costing system? What type of company would be most likely to use a job-order costing system?

Answer

A job-order costing system collects direct material, direct labor, and manufacturing overhead costs for specific, individual jobs. Job-order costing is used by construction companies, shipbuilding companies, and any company that manufactures goods to a customer’s specifications.

118. Why is a predetermined overhead rate preferred to an actual rate?

Answer

The predetermined overhead rate allows a company to cost jobs before the end of the period, making it timelier. It also allows a company to use the rate for bidding.

119. Discuss the use of job-order costing by service companies. Give at least two examples of service companies that use job-order costing.

Answer

A service company that collects costs for each “job” is using job-order costing. A patient in a hospital or health-care facility or a client of an accounting, legal, or consulting firm would be considered a job, and these companies use a job-order system.

120. Many companies are going to Computer Controlled Manufacturing Systems which increase the level of fixed costs in the production process. What is the impact of these systems when the economy softens and volume is less than expected? What implications does this have for corporate earnings in times of recessions?

Answer

When there are large amounts of fixed costs present, and volume is less than expected, the company will have large amounts of underapplied overhead at the end of the period. The closing of this overhead will increase cost of goods sold and inventory, and result in lower earnings for this period and the future periods when higher costed inventory are sold.

121. Briefly explain the concepts of JIT and TQM. Could a company use both ideas, or are they mutually exclusive?

Answer

A just-in-time system seeks to minimize the raw materials and work in process inventories by careful scheduling and the development of a smooth, flexible production system. A total quality management system encourages workers to reduce defects and continuously improve the production process. The two systems are not mutually exclusive, and companies may use some of the just-in-time tools in a TQM program.

122. A company may choose from several possible bases when allocating overhead costs. How does the company decide which allocation basis it will use?

Answer

A company should choose an allocation base that is strongly associated with the type of costs that make up manufacturing overhead. If most of the manufacturing overhead costs are related to equipment and facilities, machine hours is a reasonable allocation base. If the overhead costs are primarily labor-related, direct labor hours or direct labor costs are good choices for the allocation base.