Chapter 17(2)
Job Order Cost Systems

OBJECTIVES

Obj 1	Describe accounting systems used by manufacturing businesses.
Obj 2	Describe and prepare summary journal entries for a job order cost accounting system.
Obj 3	Use job order cost information for decision making.
Obj 4	Diagram the flow of costs for a service business that uses a job order cost accounting system.

TRUE/FALSE

1. Cost accounting systems are used to supply cost data information on costs incurred by a manufacturing process or department.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

2. A manufacturer may employ a job order cost system for some of its products and a process cost system for others.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

3. A job order cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

4. A process cost accounting system provides for a separate record of the cost of each particular quantity of product that passes through the factory.
ANS: F DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

5. A process cost accounting system accumulates costs for each of the departments or processes within the factory.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

6. A process cost accounting system is best used by manufacturers of like units of product that are not distinguishable from each other during a continuous production process.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

7. The process cost system is appropriate where few products are manufactured and each product is made to customers' specifications.
ANS: F DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

8. A job order cost system would be appropriate for a crude oil refining business.
ANS: F DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

9. A law firm would use a job order cost system to accumulate all of the costs associated with a particular client engagement, such as lawyer time, copying charges, filing fees, and overhead.
ANS: T DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

10. The job order costing system is not used by service organizations.
ANS: F DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

11. The job order costing system is used by service firms to determine revenues, expenses, and ultimately profit.
ANS: T DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

12. Perpetual inventory controlling accounts and subsidiary ledgers are maintained for materials, work in process, and finished goods in cost accounting systems.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

13. When the goods are sold, their costs are transferred from Work in Process to Finished Goods.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

14. The materials requisition serves as the source document for debiting the accounts in the materials ledger.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

15. Materials are transferred from the storeroom to the factory in response to materials requisitions.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

16. The document that serves as the basis for recording direct labor on a job cost sheet is the time card.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

17. The document that serves as the basis for recording direct labor on a job cost sheet is the time ticket.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

18. Depreciation expense on factory equipment is part of factory overhead cost.
ANS: T DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

19. Factory overhead is applied to production using a predetermined overhead rate.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

20. If factory overhead applied exceeds the actual costs, the factory overhead account will have a credit balance.
ANS: T DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

21. If factory overhead applied exceeds the actual costs, overhead is said to be underapplied.
ANS: F DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

22. If the underapplied factory overhead amount is material, it is transferred to Cost of Goods Sold at the end of the fiscal year.
ANS: F DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

23. If the underapplied factory overhead amount is immaterial, it is transferred to Cost of Goods Sold at the end of the fiscal year.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

24. Each account in the cost ledger in a job order system is called a job cost sheet.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

25. In the job order system, the finished goods account is the controlling account for the factory overhead ledger.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

26. The inventory accounts generally maintained by a manufacturing firm are only finished goods and materials.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

27. Generally accepted accounting principles require companies to use only one factory overhead rate for product costing.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

28. Activity-based costing is a method of accumulating and allocating costs by department.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

29. Interim financial statements for a manufacturing business would report overapplied factory overhead as a deferred item on the balance sheet.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

30. The debit to factory overhead for the cost of indirect materials is obtained from the summary of the materials requisitions.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

31. In a factory with several processing departments, a single factory overhead rate may not provide accurate product costs and effective cost control.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

32. Nonmanufacturing costs are generally classified into two categories: selling and administrative.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

33. The current year's advertising costs are normally considered period costs.
ANS: T DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

34. Direct labor cost is an example of a period cost.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

35. A manufacturing business reports just two types of inventory on its balance sheet: work in process inventory and finished goods inventory.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

36. On the balance sheet for a manufacturing business, the cost of direct materials, direct labor, and factory overhead, which have entered into the manufacturing process but are associated with products that have not been finished, is reported as direct materials inventory.
ANS: F DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

37. As product costs are incurred in the manufacturing process, they are accounted for as assets and reported on the balance sheet as inventory.
ANS: T DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

38. A receiving report is prepared when purchased materials are first received by the manufacturing department.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

39. Period costs are costs that are incurred for the production requirements of a certain period.
ANS: F DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

40. Job order cost systems can be used to compare unit costs of similar jobs to determine if costs are staying within expected ranges.
ANS: T DIF: Moderate OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

41. Job cost sheets can provide information to managers on unit cost trends, the cost impact of continuous improvement in the manufacturing process, the cost impact of materials changes, and the cost impact of direct materials price or direct labor rate changes over time.
ANS: T DIF: Easy OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

42. Job order cost accounting systems may be used to evaluate a company's efficiency.
ANS: T DIF: Easy OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

43. Information about costs developed through a job order cost system can not be used to evaluate an organization’s cost performance.
ANS: F DIF: Easy OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

44. A staff department or unit is one directly involved in the basic objective of the organization.
ANS: F DIF: Moderate OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

45. Job order cost accounting systems may be used for planning and controlling a service business.
ANS: T DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

46. Job order cost accounting systems can be used only for companies that manufacture a product.
ANS: F DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

47. The direct labor and overhead costs of providing services to clients are accumulated in a work-in-process account.
ANS: T DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

48. In a job order cost accounting system for a service business, materials costs are normally included as part of overhead.
ANS: T DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

49. A service organization will not use the job order costing method because it has no direct materials.
ANS: F DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

50. Using the job order cost system, service organizations are able to bill customers on a weekly or monthly basis, even when the job has not been completed.

ANS: T DIF: Moderate OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

MATCHING

Identify the costs as one of the following:

a. Direct labor
b. Direct materials
c. Factory overhead
d. Not a product cost

1. Factory depreciation
2. President's salary
3. Salesmen commissions
4. Wood
5. Factory supervisor's salary
6. Assembler's wages
7. Plastic parts
8. Finished goods warehouse rent
9. Machine operator
10. Maintenance Supplies

1. ANS: C DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

2. ANS: D DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

3. ANS: D DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

4. ANS: B DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

5. ANS: C DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

6. ANS: A DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

7. ANS: B DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

8. ANS: D DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

9. ANS: A DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

10. ANS: C DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

MULTIPLE CHOICE

1. Which of the following are the two main types of cost accounting systems for manufacturing operations?
   a. Process cost and general accounting systems
   b. Job order cost and process cost systems
   c. Job order and general accounting systems
   d. Process cost and replacement cost systems

ANS: B DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

2. Which of the following would most likely use a job order costing system?
   a. A paper mill
   b. A swimming pool installer
   c. A company that manufactures chlorine for swimming pools
   d. An oil refinery

ANS: B DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

3. Which of the following would be most likely to use process costing?
   a. A custom furniture manufacturer.
   b. An auto body repair shop.
   c. A law firm
   d. A lawn fertilizer manufacturer.

ANS: D DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

4. Which of the following systems provides for a separate record of the cost of each particular quantity of product that passes through the factory?
   a. Job order cost system
   b. General cost system
   c. Replacement cost system
   d. Process cost system

ANS: A DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

5. For which of the following businesses would the job order cost system be appropriate?
   a. Meat processor
   b. Automobile manufacturer
   c. Oil refinery
   d. Construction contractor

ANS: D DIF: Difficult OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

6. For which of the following businesses would the process cost system be appropriate?
   a. Book retailer
   b. Dress designer
   c. Lumber mill
   d. Printing firm

ANS: C DIF: Difficult OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

7. Which of the following is *not* a characteristic of a job order costing system?
   a. It accumulates cost for each department within the factory.
   b. It provides a separate record for the cost of each quantity of product that passes through the factory.
   c. It is best suited for industries that manufactures custom goods.
   d. Uses only one work in process account.

ANS: A DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

8. Which of the following products probably would be manufactured using a job order costing system?
   a. Number 2 pencils
   b. Computer monitors.
   c. Wedding invitations.
   d. Paper.

ANS: C DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

9. Job order costing and process costing are
   a. pricing systems.
   b. cost accounting systems.
   c. cost flow systems.
   d. inventory tracking systems.

ANS: B DIF: Easy OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

10. Which of the following is not true about why a service firm will use the job order costing system?
    a. to help control costs
    b. to determine client billing
    c. to determine department costs within the firm
    d. to determine profit

ANS: C DIF: Moderate OBJ: 17(2)-01
NAT: AACSB Analytic | IMA-Cost Management

11. Which of the following costs are NOT included in finished goods inventory?
    a. Direct labor
    b. Factory overhead
    c. Company president's salary
    d. Direct materials

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

12. Which of the following is the correct flow of manufacturing costs?
    a. Raw materials, work in process, finished goods, cost of goods sold
    b. Raw materials, finished goods, cost of goods sold, work in process.
    c. Work in process, finished goods, raw materials, cost of goods sold
    d. Cost of goods sold, raw materials, work in process, finished goods.

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

13. Which of the following would record the labor costs to an individual job?
    a. Clock card
    b. In-and-out cards
    c. Time tickets
    d. Payroll register

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

14. The Collins Company forecasts that total overhead for the current year will be $12,000,000 and that total machine hours will be 200,000 hours. Year to date, the actual overhead is $8,000,000 and the actual machine hours are 100,000 hours. If the Collins Company uses a predetermined overhead rate based on machine hours for applying overhead, what is that overhead rate?
    a. $80 per machine hour
    b. $120 per machine hour
    c. $40 per machine hour
    d. $60 per machine hour

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

15. The Collins Company forecasts that total overhead for the current year will be $12,000,000 and that total machine hours will be 200,000 hours. Year to date, the actual overhead is $8,000,000 and the actual machine hours are 100,000 hours. If the Collins Company uses a predetermined overhead rate based on machine hours for applying overhead, as of this point in time (year to date) the overhead is over/under applied by?
    a. $2,000,000 over
    b. $2,000,000 under
    c. $4,000,000 over
    d. $4,000,000 under

ANS: B DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

16. At the end of the year, overhead applied was $317(2)-02,000,000. Actual overhead was $34,200,000. Closing over/under applied overhead into cost of goods sold would cause net income to increase/decrease by?
    a. Increase by $800,000
    b. Decrease by $800,000
    c. Not effect net income.
    d. Decrease net income by $200,000

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

17. Which of the following would most likely be a period cost?
    a. Depreciation on factory lunchroom furniture.
    b. Salary of telephone receptionist in the sales office.
    c. Salary of a security guard for the factory parking lot.
    d. Computer chips used by a computer manufacturer.

ANS: B DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

18. Which of the following would most likely be a product cost?
    a. Salary of VP of sales.
    b. Advertising for a particular product.
    c. Drill bits for a drill press used in the plant assembly area.
    d. Salary of the company receptionist.

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

19. The document authorizing the issuance of materials from the storeroom is the:
    a. materials requisition
    b. purchase requisition
    c. receiving report
    d. purchase order

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

20. The source of the data for debiting Work-in-Process for direct materials is the:
    a. purchase order
    b. purchase requisition
    c. materials requisition
    d. receiving report

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

21. In a job order cost accounting system, the entry to record the flow of direct materials into production is:
    a. debit Work in Process, credit Materials
    b. debit Materials, credit Work in Process
    c. debit Factory Overhead, credit Materials
    d. debit Work in Process, credit Supplies

ANS: A DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

22. A summary of the materials requisitions completed during a period serves as the basis for transferring the cost of the materials from the controlling account in the general ledger to the controlling accounts for:
    a. work in process and cost of goods sold
    b. work in process and factory overhead
    c. finished goods and cost of goods sold
    d. work in process and finished goods

ANS: B DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

23. In a job order cost accounting system, when goods that have been ordered are received, the receiving department personnel count, inspect the goods, and complete a:
    a. purchase order
    b. sales invoice
    c. receiving report
    d. purchase requisition

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

24. The amount of time spent by each employee and the labor cost incurred for each individual job or for factory overhead are recorded on:
    a. pay stubs.
    b. in-and-out cards.
    c. time cards.
    d. employees' earnings records.

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

25. The amount of time spent by an employee in the factory is usually recorded on:
    a. time cards
    b. job order cost sheets
    c. employees' earnings records
    d. statement of owners' equity

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

26. The basis for recording direct and indirect labor costs incurred is a summary of the period's:
    a. job order cost sheets
    b. time tickets
    c. employees' earnings records
    d. clock cards

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

27. The entry to record direct labor costs into production in a job order cost accounting system is:
    a. debit Factory Overhead, credit Work in Process
    b. debit Finished Goods, credit Wages Payable
    c. debit Work in Process, credit Wages Payable
    d. debit Factory Overhead, credit Wages Payable

ANS: C DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

28. At the end of July, the first month of the current fiscal year, the factory overhead account had a debit balance. Which of the following describes the nature of this balance and how it would be reported on the interim balance sheet?
    a. Overapplied, deferred credit
    b. Underapplied, deferred debit
    c. Underapplied, deferred credit
    d. Overapplied, deferred debit

ANS: B DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

29. At the end of the fiscal year, the balance in Factory Overhead is small. This balance would normally be:
    a. transferred to Work in Process
    b. transferred to Cost of Goods Sold
    c. transferred to Finished Goods
    d. allocated between Work in Process and Finished Goods

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

30. The details concerning the costs incurred on each job order are accumulated in a subsidiary ledger known as the:
    a. stock ledger
    b. materials ledger
    c. cost ledger
    d. creditors ledger

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

31. Each account in the cost ledger is called a:
    a. finished goods sheet
    b. stock record
    c. materials requisition
    d. job cost sheet

ANS: D DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Work in Process

Aug. 1	Balance	275,000	Aug. 31	Goods finished	1,230,000
31	Direct materials	X			
31	Direct labor	350,000			
31	Factory overhead	X			

Factory Overhead

Aug. 1-31	Costs incurred	90,000	Aug. 1	Balance	15,000
			31	Applied (30% of direct labor cost)	X

If the balance of Work in Process at August 31 is $200,000, what was the amount debited to Work in Process for direct materials in August?
    a. $700,000
    b. $805,000
    c. $300,000
    d. $605,000

ANS: A DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Work in Process

Aug. 1	Balance	275,000	Aug. 31	Goods finished	1,230,000
31	Direct materials	X			
31	Direct labor	350,000			
31	Factory overhead	X			

Factory Overhead

Aug. 1-31	Costs incurred	90,000	Aug. 1	Balance	15,000
			31	Applied	X

If the balance of Work in Process at August 31 is $200,000, what was the amount debited to Work in Process for factory overhead in August, assuming a factory overhead rate of 30%?

a. $105,000
b. $120,000
c. $90,000
d. $70,000

ANS: A DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Work in Process

Oct. 1	Balance	20,000	Oct. 31	Goods finished	X
31	Direct materials	96,700			
31	Direct labor	201,000			
31	Factory overhead	X			

Finished Goods

Oct. 1	Balance	52,000
31	Goods finished	360,000

If the balance of Work in Process at October 31 is $21,000, what was the amount of factory overhead applied in October?

a. $63,300
b. $21,300
c. $42,300
d. $11,300

ANS: A DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Work in Process

Apr. 1	Balance	7,000	Apr. 30	Goods finished	X
30	Direct materials	78,400			
30	Direct labor	195,000			
30	Factory overhead	136,500			

Finished Goods

Apr. 1	Balance	42,000	
30	Goods finished	387,000	

What was the balance of Work in Process as of April 30?
a. $8,100
b. $35,000
c. $29,900
d. $22,900

ANS: C DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

36. If the amount of factory overhead cost incurred exceeds the amount applied, the factory overhead account will have a:
a. debit balance and be underapplied
b. debit balance and be overabsorbed
c. credit balance and be overapplied
d. debit balance and be overapplied

ANS: A DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

37. The recording of the factory labor incurred for general factory use would include a debit to:
a. Factory Overhead
b. Wages Payable
c. Wages Expense
d. Cost of Goods Sold

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

38. The recording of the application of factory overhead costs to jobs would include a credit to:
a. Factory Overhead
b. Wages Payable
c. Work in Process
d. Cost of Goods Sold

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

39. The recording of the jobs completed would include a debit to:
    a. Factory Overhead
    b. Finished Goods
    c. Work in Process
    d. Cost of Goods Sold

ANS: B DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

40. The recording of the jobs completed would include a credit to:
    a. Factory Overhead
    b. Finished Goods
    c. Work in Process
    d. Cost of Goods Sold

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

41. The recording of the jobs shipped and customers billed would include a debit to:
    a. Accounts Payable
    b. Cash
    c. Finished Goods
    d. Cost of Goods Sold

ANS: D DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

42. The recording of the jobs shipped and customers billed would include a credit to:
    a. Accounts Payable
    b. Cash
    c. Finished Goods
    d. Cost of Goods Sold

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

43. The finished goods account is the controlling account for the:
    a. cost ledger
    b. materials ledger
    c. work in process ledger
    d. stock ledger

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

44. The controlling account for the cost ledger is:
    a. Finished Goods
    b. Materials
    c. Work in Process
    d. Cost of Goods Sold

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

45. Putnam Manufacturers Inc. has estimated total factory overhead costs of $84,000 and 12,000 direct labor hours for the current fiscal year. If job number 117 incurred 1,500 direct labor hours, the work in process account will be debited and factory overhead will be credited for:
    a. $10,500
    b. $0; WIP is credited
    c. $84,000
    d. $1,500

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

46. A widely used activity base for developing factory overhead rates in highly automated settings is:
    a. direct labor hours
    b. direct labor dollars
    c. direct materials
    d. machine hours

ANS: D DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

47. When job 711 was completed, direct materials totaled $4,000; direct labor, $4,600; and factory overhead, $2,400, respectively. Units produced totaled 1,000. Unit costs are:
    a. $11,000
    b. $1,100
    c. $110
    d. $11

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

48. The correct entry for each sale of a finished good on account is:
    a. debit Cost of Goods Sold, credit Finished Goods
    b. debit Cost of Goods Sold, credit Finished Goods, debit Accounts Receivable, credit Sales
    c. debit Sales Expense, credit Finished Goods, credit Cash, credit Accounts Receivable
    d. debit Work in Process, credit Finished Goods, debit Accounts Receivable, credit Sales

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

49. All of the following are examples of activity bases except:
    a. salaries of supervisors
    b. quality inspections of products
    c. number of machine setups
    d. raw materials storage

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

50. Materials purchased on account during the month amounted to $195,000. Materials requisitioned and placed in production totaled $168,000. From the following, select the entry to record the transaction on the day the materials were bought.

a.	Materials	168,000		
	Accounts Payable			168,000
b.	Materials	195,000		
	Accounts Payable			195,000
c.	Materials	195,000		
	Cash			195,000
d.	Accounts Payable	195,000		
	Materials			195,000

ANS: B DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

51. Materials purchased on account during the month amounted to $195,000. Materials requisitioned and placed in production totaled $168,000. From the following, select the entry to record the transaction on the day the materials were requisitioned by the production department.

a.	Materials	168,000		
	Work in Process			168,000
b.	Work in Process	195,000		
	Materials			195,000
c.	Work in Process	168,000		
	Materials			168,000
d.	Work in Process	168,000		
	Cash			168,000

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

52. During the period, labor costs incurred on account amounted to $225,000 including $195,000 for production orders and $30,000 for general factory use. In addition, factory overhead charged to production was $17,000. From the following, select the entry to record the direct labor costs.

a.	Work in Process	195,000		
	Wages Payable			195,000
b.	Work in Process	225,000		
	Wages Payable			225,000
c.	Work in Process	212,000		
	Wages Payable			212,000
d.	Wages Payable	195,000		
	Work in Process			195,000

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

53. During the period, labor costs incurred on account amounted to $225,000 including $195,000 for production orders and $30,000 for general factory use. In addition, factory overhead applied to production was $17,000. From the following, select the entry to record the actual factory overhead costs incurred.

a.	Accounts Payable	30,000	
	Factory Overhead		30,000
b.	Factory Overhead	17,000	
	Accounts Payable		17,000
c.	Work in Process	30,000	
	Factory Overhead		30,000
d.	Factory Overhead	30,000	
	Wages Payable		30,000

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

54. During the period, labor costs incurred on account amounted to $225,000 including $195,000 for production orders and $30,000 for general factory use. In addition, factory overhead applied to production was $17,000. From the following, select the entry to record the factory overhead applied to production.

a.	Work in Process	30,000	
	Factory Overhead		30,000
b.	Factory Overhead	17,000	
	Work in Process		17,000
c.	Work in Process	17,000	
	Factory Overhead		17,000
d.	Factory Overhead	30,000	
	Accounts Payable		30,000

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

55. The cost of production of completed and finished goods during the period amounted to $400,000, and the finished products shipped to customers had total production costs of $337,000. From the following, select the entry to record the transfer of costs from work in process to finished goods.

a.	Finished Goods	337,000	
	Work in Process		337,000
b.	Finished Goods	400,000	
	Work in Process		400,000
c.	Work in Process	400,000	
	Finished Goods		400,000
d.	Work in Process	337,000	
	Finished Goods		337,000

ANS: B DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

56. The cost of production of completed and finished goods during the period amounted to $400,000, and the finished products shipped to customers had total production costs of $337,000. From the following, select the entry to record the transfer of costs from finished goods to cost of goods sold.
    a. Finished Goods 400,000
       Cost of Goods Sold 400,000
    b. Finished Goods 337,000
       Cost of Goods Sold 337,000
    c. Cost of Goods Sold 337,000
       Finished Goods 337,000
    d. Cost of Goods Sold 400,000
       Finished Goods 400,000

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

57. Costs that are used in generating revenues during the current period are often referred to as:
    a. period costs
    b. conversion costs
    c. factory overhead costs
    d. product costs

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

58. Costs that are treated as assets until the product is sold are called:
    a. product costs
    b. period costs
    c. conversion costs
    d. selling expenses

ANS: A DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

59. The period costs of a textbook printer would include:
    a. wages of a press operator
    b. utility costs of factory
    c. advertising expenses
    d. paper costs

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

60. Which types of inventories does a manufacturing business report on the balance sheet?
    a. Finished goods inventory and work in process inventory
    b. Direct materials inventory and work in process inventory
    c. Direct materials inventory, work in process inventory, and finished goods inventory
    d. Direct materials inventory and finished goods inventory

ANS: C DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

61. For the manufacturing business, inventory which is in the process of being manufactured is referred to as:
    a. supplies inventory
    b. work in process inventory
    c. finished goods inventory
    d. direct materials inventory

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

62. The proper journal entry to record the purchase of $25,000 of raw materials on account would be:

a.	Jan 2	Raw Material Inventory	25,000	
		Accounts Receivable		25,000
b.	Jan 2	Raw Material Inventory	25,000	
		Accounts Payable		25,000
c.	Jan 2	Inventory	25,000	
		Accounts Receivable		25,000
d.	Jan 2	Inventory	25,000	
		Cash		25,000

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

63. Select the proper journal entry to record the movement of 1,250 units of part number 116B to work in process when each unit of PN 116B has a value of $1.50.

a.	Jan 15	Work in Process	1,875	
		Cash		1,875
b.	Jan 15	Work in Process	1,250	
		Raw Material Inventory		1,250
c.	Jan 15	Work in Process	1,875	
		Raw Material Inventory		1,875
d.	Jan 15	Work in Process	1,250	
		Cash		1,250

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

64. Which of the following represents the factory overhead applied to a product?
    a. Predetermined factory overhead rate times estimated activity base.
    b. Actual factory overhead rate times estimated activity base.
    c. Predetermined factory overhead rate times actual activity base.
    d. Actual factory overhead rate times actual activity base.

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

65. Which of the following is the correct formula to calculate the predetermined factory overhead rate?
    a. Estimate total factory overhead costs divided by estimated activity base.
    b. Actual total factory overhead costs divided by estimated activity base.
    c. Estimate total factory overhead costs divided by actual activity base.
    d. Actual total factory overhead costs divided by actual activity base.

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

66. The following budget data are available for Newest Company:

Estimated direct labor hours	9,000
Estimated direct dollars	$60,000
Estimated factory overhead costs	$154,000

If factory overhead is to be applied based on direct labor hours, the predetermined overhead rate is
a. $2.57
b. $.39
c. $6.67
d. $17.11

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

67. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $360,000 and direct labor hours would be 45,000. Actual factory overhead costs incurred were $377,200, and actual direct labor hours were 46,000. What is the amount of overapplied or underapplied manufacturing overhead at the end of the year?
a. $17,000 overapplied.
b. $17,000 underapplied.
c. $9,200 overapplied.
d. $9,200 underapplied.

ANS: D DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

68. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $360,000 and direct labor hours would be 45,000. Actual manufacturing overhead costs incurred were $377,200, and actual direct labor hours were 46,000. What is the predetermined overhead rate per direct labor hour?
a. $8.00
b. $8.20
c. $8.38
d. $7.83

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

69. A manufacturing company applies factory overhead based on direct labor hours. At the beginning of the year, it estimated that factory overhead costs would be $360,000 and direct labor hours would be 45,000. Actual manufacturing overhead costs incurred were $377,200, and actual direct labor hours were 46,000. The entry to apply the factory overhead costs for the year would include a
a. debit to factory overhead for $360,000.
b. credit to factory overhead for $368,000.
c. debit to factory overhead for $377,200.
d. credit to factory overhead for $360,000.

ANS: B DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

70. Bar code scanners are now being used to track incoming materials and to electronically transmit this data. Scanners have replaced which of the following:
    a. receiving report
    b. materials requisition
    c. materials ledger
    d. job cost sheet

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

71. A separate account for each material is found in a
    a. general ledger
    b. materials ledger
    c. receiving report
    d. job cost sheet

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

72. The materials requisition is used to
    a. release materials from the storeroom to the factory
    b. release finished goods to the shipping department
    c. record the acquisition of materials from a vendor
    d. record and electronically transmit materials data in place of a receiving report

ANS: A DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

73. Period costs are
    a. found on the balance sheet.
    b. not involved in the production process.
    c. classified as direct labor, direct material, or factory overhead.
    d. found on the job order cost sheets.

ANS: B DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

74. Generally, period costs are classified as either
    a. selling expenses or production expenses.
    b. administrative expense or production expenses.
    c. selling expenses or administrative expenses.
    d. general expenses or selling expenses.

ANS: C DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

75. The following are true regarding product costs except
    a. product costs are found on the balance sheet until they are sold.
    b. product costs consist of direct labor, direct materials, and factory overhead.
    c. product costs can be found in three accounts in the balance sheet.
    d. product costs include sales and administrative expenses.

ANS: D DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

76. Job cost sheets can provide information to managers for all but the following:
    a. cost impact of materials changes
    b. cost impact of continuous improvement in the manufacturing process
    c. cost impact of materials price or direct labor rate changes over time
    d. utilities, managerial salaries, and depreciation of computers in the corporate office

ANS: D DIF: Moderate OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

77. A difference in quantity of materials used on two comparable jobs may be caused by:
    a. inadequately trained employees
    b. poor quality materials
    c. employee carelessness
    d. all of the above

ANS: D DIF: Moderate OBJ: 17(2)-03
NAT: AACSB Analytic | IMA-Cost Management

78. Which of the following would probably not be found in the accounting system of a service provider?
    a. Cost ledger
    b. Finished jobs ledger
    c. Deferred revenue account
    d. Job cost sheets

ANS: B DIF: Moderate OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

79. Which of the following entries would probably not be found on the books of a service provider?
    a. Debit Work in Process; credit Materials
    b. Debit Work in Process; credit Wages Payable
    c. Debit Work in Process; credit Overhead
    d. Debit Cost of Services; credit Work in Process

ANS: A DIF: Moderate OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

80. In a job order cost accounting system used by a service business, which of the following items would normally not be included as part of overhead?
    a. Materials
    b. Direct labor
    c. Rent
    d. Supplies

ANS: B DIF: Difficult OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

81. The direct labor and overhead costs of providing services to clients are accumulated in:
    a. finished services expense
    b. work in process
    c. administrative salaries expense
    d. overhead

ANS: B DIF: Easy OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

82. When a job is completed in a service organization, the job costs are transferred to the
    a. work in process account.
    b. cost of services account.
    c. finished goods account.
    d. cost of goods sold account.

ANS: B DIF: Moderate OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management

EXERCISE/OTHER

1. Record in good journal entry format the following transactions:

    1. April 10, 300 units of raw materials were purchased at $5.50.
    2. April 15, 200 units of raw materials were requisitioned at $6.00 for production, Job 345.
    3. April 25, 100 units of raw materials were requisitioned at $5.50 for production, Job 555.

ANS:

April 10	Materials	1,650	
	Accounts payable		1,650
April 15	Work in process	1,200	
	Materials		1,200
April 25	Work in process	550	
	Materials		550

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-1

2. The Good News Company accumulated 460 hours of direct labor on Job 345 and 810 hours on Job 777. The direct labor was incurred at a rate of $15 per direct labor hour for Job 345 and $13 per direct labor for Job 777. Journalize the entry to record the flow of labor costs into production.

ANS:

Work in process	17,430	
Wages payable		17,430

(460 * $15) + (810 * $13) = $17,430
DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-2

3. During the month of April, Good News Company incurred factory overhead as follows:

Indirect materials	$10,000
Indirect labor	$4,000
Utilities	$500
Depreciation (factory)	$700
Small tools	$300
Equipment rental	$650

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

ANS:

Factory overhead	16,150	
Materials		10,000
Wages payable		4,000
Utilities		500
Accumulated depreciation		700
Small tools		300
Equipment rental		650

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-3

4. Good News Company estimates that total factory overhead costs will be $560,000 for the year. Direct labor hours are estimated to be 70,000. Determine (a) the predetermined factory overhead rate, (b) the amount of factory overhead applied to Job 345 if the amount of direct labor hours is 460 and Job 777 if the amount of direct labor hours is 810, and (c) prepare the journal entry to apply factory overhead in April according to the predetermined overhead rate.

ANS:
(a) $560,000 / 70,000 = $8

(b) Job 345: 460 hrs * $8 = $3,680
Job 777: 810 hrs * $8 = $6,480

(c)

Work in process	10,160	
Factory overhead		10,160

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-4

5. At the end of April, Good News Company had completed Job 766 and 765. Job 766 is for 675 units, and Job 765 is for 900 units. According to the individual job cost sheets the information is as follows:

Job	Direct Materials	Direct Labor	Machine Hours
Job 765	$5,670	$3,500	25
Job 766	$8,900	$4,775	46

Job 765 produced 152 units, and Job 766 consisted of 250 units.

Assuming that the predetermined overhead rate is applied by using machine hours at a rate of $150 per hour, determine the (a) balance on the job cost sheets for each job, and (b) the cost per unit at the end of April.

ANS:
(a) Job 765 = $12,920 ($5,670 + $3,500 + (25 * $150)
Job 766 = $20,575 ($8,900 + $4,775 + (46 * $150)

(b) Job 765 = $85 ($12,920 / 152)
Job 766 = $82.30 ($20,575 / 250)
DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-5

6. Good News Company completed 26,000 units during the year at a cost of $2,139,800. The beginning finished goods inventory was 5,000 units at $405,000. Determine the cost of goods sold for 20,000 units, assuming a FIFO cost flow.

ANS: $405,000 + (15,000 * $82.30) = $1,639,500
DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management TOP: Example Exercise 17(2)-6

7. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. Calculate the predetermined overhead rate to apply factory overhead.

ANS: $1,250,000 / 50,000 = $25 per machine hour
DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

8. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The machine hours for the month of April for all of the jobs was 4,780. What is the amount that will be applied to all of the jobs for the month of April?

ANS: 4,780 hours * $25 = $119,500
DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

9. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The machine hours for the month of April for all of the jobs was 4,780. Prepare the journal entry to apply factory overhead.

ANS:

Work in Process	119,500	
Factory Overhead		119,500

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

10. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The machine hours for the month of April for all of the jobs was 4,780. If the actual factory overhead totaled $121,800, determine the over or under applied amount for the month.

ANS: $121,800 - $119,500 = $2,300 underapplied
DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

11. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300. The actual factory overhead for the year was $1,375,000. (a) Determine the total factory overhead amount applied.

(b) Calculate the over or under applied amount for the year.
(c) Prepare the journal entry.

ANS:
(a) 54,300 hours * $25 = $1,357,500

(b) $1,375,000 - $1,357,500 = $17,500 underapplied

(c)

Cost of goods sold	17,500	
Factory overhead		17,500

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

12. The Good News Company estimates that the factory overhead for the following year will be $1,250,000. The company has decided that the basis for applying factory overhead should be machine hours, which is estimated to be 50,000 hours. The total machine hours for the year was 54,300. The actual factory overhead for the year was $1,348,800.
    (a) Determine the total factory overhead amount applied.
    (b) Calculate the over or under applied amount for the year.
    (c) Prepare the journal entry.

ANS:
(a) 54,300 hours * $25 = $1,357,500

(b) $1,348,800 - $1,357,500 = $8,700 overapplied

(c)

Factory overhead	8,700	
Cost of goods sold		8,700

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

PROBLEM

1. KCT Printing Company uses a job order cost system.
   (a) Indicate the source of the data for debiting Work in Process for each of the following:
      (1) Direct materials requisitioned
      (2) Direct labor used

   (b) Indicate the source of the data for crediting Work in Process for jobs completed.

   (c) Present a list of the three controlling accounts used in the general ledger to record the inventories and, in each case, indicate the related subsidiary ledger.

ANS:
(a) (1) Summary of materials requisitions
    (2) Summary of time tickets

(b) Summary of job cost sheets for jobs completed

(c)

Controlling Account	Subsidiary Ledger
Materials	Materials ledger
Work in Process	Cost ledger
Finished Goods	Finished goods ledger (or stock ledger)

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

2. During June, the receipts and issuances of Material No. A2FO are as follows:

		Received
June 3	Balance	1,100 units at $15
16		1,700 units at $17
29		900 units at $18
		Issued
June 11		700 units for Job No. 116
18		1,900 units for Job No. 117
30		800 units for Job No. 118

(a) Determine the cost of each of the three issues under a perpetual system, using the first-in, first-out method.

(b) Present the journal entry to record the issuance of the materials for the month, assuming that the cost of issuances is determined by the first-in, first-out method.

ANS:

(a)	June 11	issue:	700 at $15	$10,500
	18	issue:	400 at $15 plus 1,500 at $17	31,500
	31	issue:	200 at $17 plus 600 at $18	14,200
				$56,200

(b)	Work in Process	56,200	
	Materials		56,200

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

3. A summary of the time tickets for August follows:

Description	Amount	Description	Amount
Job No. 321	$11,000	Job No. 342	$8,300
Job No. 329	8,200	Job No. 346	5,700
Job No. 336	2,000	Indirect labor	5,000

Present the journal entries to record (a) the labor cost incurred and (b) the application of factory overhead to production for August. The factory overhead rate is 70% of direct labor cost.**ANS:**

(a)	Work in Process	35,200	
	Factory Overhead	5,000	
	Wages Payable		40,200

(b)	Work in Process	24,640	
	Factory Overhead		24,640

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

4. The following account appears in the ledger after only part of the postings have been completed for July, the first month of the current fiscal year:

Work in Process	
Balance, July 1	53,200
Direct materials	147,000
Direct labor	120,000

Factory overhead is applied to jobs at the rate of 60% of direct labor cost. The actual factory overhead incurred for July was $75,000. Jobs completed during the month totaled $301,200.

(a) Prepare the journal entries to record (1) the application of factory overhead to production during July and (2) the jobs completed during July.

(b) What is the balance of the factory overhead account on July 31?

(c) Was factory overhead overapplied or underapplied on July 31?

(d) Determine the cost of the unfinished jobs on July 31.

ANS:

(a) (1) Work in Process 72,000
Factory Overhead 72,000

(2) Finished Goods 301,200
Work in Process 301,200

(b) $3,000 debit

(c) Underapplied

(d) Total debits to Work in Process:

Balance, July 1	$ 53,200	
Direct materials	147,000	
Direct labor	120,000	
Factory overhead	72,000	$392,200
Less cost of goods finished during July		301,200
Balance, Work in Process, July 31 (cost of unfinished jobs)		$ 91,000

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

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

ANS:

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

Accounts Receivable	638,000	
Sales		638,000

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Balance May 1	8 at $32
Received May 11	23 at $34
Received May 25	15 at $35
Issued May 17	14
Issued May 27	18

Determine the cost of each of the issuances under a perpetual system, using the first-in, first-out method.

ANS:

May 17 issue:	8 at $32 plus 6 at $34	$460
May 27 issue:	17 at $34 plus 1 at $35	$613

DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

7. Prepare the journal entry for materials and labor, based on the following:

Raw materials issued:	$750	for Job 609
	300	for general use in the factory
Labor time tickets:	$800	for Job 609
	325	for supervision

ANS:

Work in Process	750	
Factory Overhead	300	
Raw Materials		1,050
Work in Process	800	
Factory Overhead	325	
Wages Payable		1,125

DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Materials	
	(a)

Work in Process	
(a)	(d)
(b)	
(c)	
(f)	

Wages Payable	
	(b)

Factory Overhead	
(a)	(c)
(b)	(f)

Finished Goods	
(d)	(e)
(f)	

Cost of Goods Sold	
(e)	
(f)	

Describe each of the six transactions.

ANS:

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

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

9. On January 2nd, Paper Punchers Manufacturing purchases 5 rolls of paper on account at $125.00 per roll for use within the production process. On January 5th 3 rolls of this paper are issued to Job 010507A in the Printing Department. The Printing Department records $575.00 in direct labor and $1,150.00 of factory overhead to Job 010507A. On January 8th Printing transfers Job 010507A to the Folding Department. The folding department applies $450.00 in direct labor and $655.00 in factory overhead to Job 010507A. Job 010507A is transferred to Finished Goods Inventory on January 9th.

(a) Journalize the purchasing of the paper to Raw Materials Inventory.

(b) Journalize the transfer of raw materials to work in process, the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Printing Department.

(c) Journalize the transfer of Job 010507A to the Folding Department at actual cost.

(d) Journalize the application of direct labor, and the application of manufacturing overhead to Job 010507A while in the Folding Department.

(e) Journalize the transfer of Job 010507A to Finished Goods Inventory at actual cost.

ANS:

(a)	Jan 2nd	Raw Materials	625.00	
		Accounts Payable		625.00
(b)	Jan 5th	Work in Process - Job 010507A - Printing	375.00	
		Raw Materials		375.00
	Jan 5th	Work in Process - Job 010507A - Printing	575.00	
		Wages Expense or Wages Payable		575.00
	Jan 5th	Work in Process - Job 010507A - Printing	1,150.00	
		Factory Overhead		1,150.00
(c)	Jan 8th	Work in Process - Job 010507A - Folding	2,100.00	
		Work in Process - Job 010507A - Printing		2,100.00
(d)	Jan 8th	Work in Process - Job 010507A - Folding	450.00	
		Wages Expense or Wages Payable		450.00
	Jan 8th	Work in Process - Job 010507A - Folding	655.00	
		Factory Overhead		655.00
(e)	Jan 9th	Finished Goods	3,205.00	
		Work in Process - Job 010507A - Folding		3,205.00

DIF: Easy OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

10. The Stamping Department accepted Job 051507A on May 15th to make 1,000 funnels. To complete the job they drew 1,100 sheets at $1.10 per sheet and 1,150 grommets at $0.15 per set. The driver that the Stamping Department uses is drop-forge strokes which are counted on a machine mounted counter. $375.00 is applied to each job as overhead due to setup and teardown and $2.25 is applied as overhead for each drop-forge stroke. Direct labor is applied at $22.50 per hour for the machine operator and $11.10 for the machine loader. The job required 6 1/2 hours of labor by the team. When the job was complete Job 051507A was transferred to SFGI (Semi-finished Goods Inventory). When the job was transferred, 20 sheets were returned unused to raw material inventory, 75 grommet sets were returned, and there were 1,115 strokes on the counter. Journalize all events depicted as of May 15th.

ANS:

First, "load" the job with raw materials"

May 15th	WIP - Job 051507A	1,382.50 ($1,210.00 + $172.50)	
	Raw Material Inventory		1,382.50
May 15th	WIP - Job 051507A	375.00 (Mfg overhead for setup)	
	WIP - Job 051507A	2,508.75 (Mfg overhead for strokes)	
	Mfg Overhead		2,883.75
May 15th	WIP - Job 051507A	218.40 (($22.50 + $11.10) × 6.5 hrs)	
	Wages Payable or Wages Expense		218.40
May 15th	SFGI	4,451.40	
	Raw Materials	33.25 ($22.00 + 11.25)	
	WIP - Job 051507A		4,484.65

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

Material:	Standard Qty:	Standard Cost:
Oats	525 pounds	$1.25 per pound
Wheat	450 pounds	$1.15 per pound
Barley	85 pounds	$1.45 per pound
Malt	65 pounds	$2.15 per pound
Honey	25 quarts	$1.20 per quart
Water	25 gallons	$0.45 per gallon
Time:		
Miller	4 1/2 hours	$22.75 per hour
Loader	1 1/2 hours	$11.50 per hour

Manufacturing overhead is applied at $5.75 per pound completed, and $75 of materials are returned to Raw Materials Inventory. The recipe produced 1,025 pounds of cereal mix.

(a) Write the journal entry to "load" (furnish raw materials) to Job 111407A.

(b) Write the journal entry to provide labor to Job 111407A.

(c) Write the journal entry to return 50 pounds oats, 5 pounds of barley, and 5 quarts of honey back to raw materials inventory.

(d) Write the journal entry to apply manufacturing overhead to Job 111407A.

(e) Transfer Job 111407A to finished goods on November 14th.

ANS:

(a) Nov 14th WIP - Job 111407A 1,478.00
Raw Materials 1,478.00
(525*$1.25)+(450*$1.15)+(85*$1.45)+(65*$2.15)+(25*$1.20)+(25*$0.45)= $1,478

(b) Nov 14th WIP - Job 111407A 119.63
Wages Payable or Wages Expense 119.63
(4.5*$22.75)+(1.5*$11.50)= $119.63

(c) Nov 14th Raw Materials 75.75
WIP - Job 111407A 75.75
(50*$1.25)+(5*$1.45)+(5*$1.20)= $75.75

(d) Nov 14th WIP - Job 111407A 5,893.75
Mfg Overhead 5,893.75
(1,025*$5.75)=$5,893.75)

(e) Nov 14th Finished Goods 7,415.63
WIP - Job 111407A 7,415.63
$1,478.00 + $119.63 - $75.75 +$5,893.75 =$7,415.63

DIF: Difficult OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

12. Put the following in the order of the flow of manufacturing costs for a company
    a. Closing under/over applied factory overhead to cost of goods sold
    b. Materials purchased
    c. Factory labor used and factory overhead incurred in production
    d. Completed jobs moved to finished goods
    e. Factory overhead applied to jobs according to the predetermined overhead rate
    f. Materials requisitioned to jobs
    g. Selling of finished product
    h. Preparation of financial statements to determine gross profit

ANS:

B- Materials purchased
F- Materials requisitioned to jobs
C- Factory labor used and factory overhead incurred in production
E- Factory overhead applied to jobs according to the predetermined overhead rate
D- Completed jobs moved to finished goods
A- Closing under/over applied factory overhead to cost of goods sold
G- Selling of finished product
H- Preparation of financial statements to determine gross profit

DIF: Moderate OBJ: 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

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

	Product Cost			Period Cost	
	Direct Materials	Direct Labor	Factory Overhead		
Cost	Cost	Cost	Cost	Selling Expense	Administrative Expense

ANS:

		Product Cost			Period Cost	
	Cost	Direct Materials Cost	Direct Labor Cost	Factory Overhead Cost	Selling Expense	Administrative Expense
(a)		X				
(b)						X
(c)						X
(d)					X	
(e)		X				
(f)		X				
(g)		X				
(h)						X
(i)				X		
(j)			X			
(k)				X		
(l)						X
(m)						X
(n)					X	
(o)				X		
(p)		X				
(q)				X		
(r)					X	
(s)				X		
(t)					X	
(u)				X		
(v)						X
(w)					X	
(x)				X		
(y)						X
(z)		X				

DIF: Difficult OBJ: 17(2)-03 | 17(2)-02
NAT: AACSB Analytic | IMA-Cost Management

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

ANS:

(a) Materials
Wages Payable
Factory Overhead
Work in Process
Finished Goods
Cost of Goods Sold

(b) Supplies
Wages Payable
Overhead
Work in Process
Cost of Services

DIF: Difficult OBJ: 17(2)-04
NAT: AACSB Analytic | IMA-Cost Management