TEST BANK Garrison Noreen Brewer

True/False Questions

1. Manufacturing overhead is an indirect cost with respect to units of product.

Answer: True Level: Medium LO: 1

2. Depreciation on office equipment would not be included in the cost of goods manufactured.

Answer: True Level: Easy LO: 2,4

3. Rent on a factory building used in the production process would be classified as a period cost and as a fixed cost.

Answer: False Level: Medium LO: 2,5

4. Period costs are found only in manufacturing companies, not in merchandising companies.

Answer: False Level: Medium LO: 2

5. Depreciation on equipment a company uses in its selling and administrative activities would be classified as a product cost.

Answer: False Level: Medium LO: 2

6. If the finished goods inventory increases between the beginning and the end of a period, then the cost of goods manufactured is smaller than the cost of goods sold.

Answer: False Level: Hard LO: 3,4

7. The cost of goods manufactured is calculated by adding the amount of work in process at the end of the year to the cost of raw materials used, direct labor worked, and manufacturing overhead incurred for the year and then subtracting work in process at the beginning of the year.

Answer: False Level: Medium LO: 4

8. A publisher that sells its books through agents who are paid a constant percentage commission on each book sold would classify the commissions as a fixed cost.

Answer: False Level: Medium LO: 5

9. Variable costs per unit are affected by changes in activity.

Answer: False Level: Easy LO: 5

10. A cost is either direct or indirect. The classification will not change if the cost object changes.

Answer: False Level: Medium LO: 6

11. The amount that a manufacturing company could earn by renting unused portions of its warehouse is an example of an opportunity cost.

Answer: True Level: Easy LO: 7

12. Labor fringe benefits may be charged to direct labor or manufacturing overhead while overtime premiums paid usually are considered a part of manufacturing overhead.

Answer: True Level: Easy LO: 8 Appendix: 2A

13. The cost of idle time should be charged as direct labor of the job that is in process when the breakdown occurs.

Answer: False Level: Medium LO: 8 Appendix: 2A

14. Internal failure costs result from identification of defects during the appraisal process. Such costs may include scrap, rejected products, rework, and downtime.

Answer: True Level: Easy LO: 9 Appendix: 2B

15. ISO 9000 certification is relatively easy to achieve because little documentation on quality control procedures is needed.

Answer: False Level: Easy LO: 11 Appendix: 2B

Multiple Choice Questions

- 16. Indirect labor is a part of:
 - A) Prime cost.
 - B) Conversion cost.
 - C) Period cost.
 - D) Nonmanufacturing cost.

Answer: B Level: Medium LO: 1,2 Source: CPA, adapted

- 17. The cost of lubricants used to grease a production machine in a manufacturing company is an example of a(n):
 - A) period cost.
 - B) direct material cost.
 - C) indirect material cost.
 - D) none of the above.

Answer: C Level: Easy LO: 1,2

- 18. The salary paid to the president of King Company would be classified on the income statement as a(n):
 - A) administrative expense.
 - B) direct labor cost.
 - C) manufacturing overhead cost.
 - D) selling expense.

Answer: A Level: Easy LO: 1

19. Direct labor cost is a part of:

| | Conversion cost | Prime cost |
|----|-----------------|------------|
| A) | No | No |
| B) | No | Yes |
| C) | Yes | Yes |
| D) | Yes | No |

Answer: C Level: Easy LO: 1 Source: CPA, adapted

20. Direct material cost is a:

Conversion cost Prime cost A) No No B) No Yes C) Yes Yes D) Yes No

Answer: B Level: Medium LO: 1 Source: CPA, adapted

- 21. Prime cost and conversion cost share what common element of total cost?
 - A) Direct materials.
 - B) Direct labor.
 - C) Variable overhead.
 - D) Fixed overhead.

Answer: B Level: Easy LO: 1 Source: CPA, adapted

- 22. Prime cost consists of:
 - A) direct labor and manufacturing overhead.
 - B) direct materials and manufacturing overhead.
 - C) direct materials and direct labor.
 - D) direct materials, direct labor and manufacturing overhead.

Answer: C Level: Easy LO: 1

23. Wages paid to a timekeeper in a factory are a:

Prime cost Conversion cost A) Yes No

- Yes B) Yes C) No No
- D) No Yes

Answer: D Level: Medium LO: 1 Source: CPA, adapted

- 24. Property taxes on a company's factory building would be classified as a(n):
 - A) product cost.
 - B) opportunity cost.
 - C) period cost.
 - D) variable cost.

Answer: A Level: Easy LO: 2,5,7

- 25. Depreciation on a personal computer used in the marketing department of a manufacturing firm would be classified as:
 - A) a product cost that is fixed with respect to the company's output.
 - B) a period cost that is fixed with respect to the company's output.
 - C) a product cost that is variable with respect to the company's output.
 - D) a period cost that is fixed with respect to the company's output.

Answer: B Level: Medium LO: 2,5

- 26. The nursing station on the fourth floor of Central Hospital is responsible for the care of patients who have undergone orthopedic surgery. The costs of drugs administered by the nursing station to patients would be classified as:
 - A) direct costs of the patients.
 - B) indirect costs of the patients.
 - C) overhead costs of the nursing station.
 - D) period costs of the hospital.

Answer: A Level: Hard LO: 2.6

- 27. All of the following would be classified as product costs except:
 - A) property taxes on production equipment.
 - B) insurance on factory machinery.
 - C) salaries of the advertising staff.
 - D) wages of machine operators.

Answer: C Level: Easy LO: 2

- 28. Product costs appear on the balance sheet:
 - A) only if goods are partially completed at the end of the period.
 - B) only if goods are unsold at the end of a period.
 - C) only if goods are partially completed or are unsold at the end of a period.
 - D) only in merchandising firms.

Answer: C Level: Medium LO: 2

- 29. Ross Corporation shipped finished goods to a customer on credit, but the sale was not recorded and the costs of the finished goods were incorrectly included on the period's balance sheet as part of the finished goods inventory. Which one of the following statements is correct concerning the effects of this error?
 - A) Accounts receivable was not affected, inventory was overstated, sales were understated, and cost of goods sold was understated.
 - B) Accounts receivable was understated, inventory was not affected, sales were understated, and cost of goods sold was understated.
 - C) Accounts receivable was understated, inventory was overstated, sales were understated, and cost of goods sold was overstated.
 - D) Accounts receivable was understated, inventory was overstated, sales were understated, and cost of goods sold was understated.

Answer: D Level: Easy LO: 3 Source: CMA, adapted

30. Data for Cost A and Cost B are as follows:

| | Number of Units | | |
|--------|--------------------|-----------|------------|
| | Produced | Unit Cost | Total Cost |
| Cost A | | | |
| | 1 | ? | \$10 |
| | 10 | ? | \$100 |
| | 100 | ? | \$1,000 |
| | 1,000 | ? | \$10,000 |
| Cost B | | | |
| | 1 | \$5,000 | ? |
| | 10 | \$500 | ? |
| | 100 | \$50 | ? |
| | 1,000 | \$5 | ? |

Which of the above best describes the behavior of Costs A and B?

- A) Cost A is fixed, Cost B is variable.
- B) Cost A is variable, Cost B is fixed.
- C) Both Cost A and Cost B are variable.
- D) Both Cost A and Cost B are fixed.

Answer: B Level: Medium LO: 5

- 31. Fixed costs expressed on a per unit basis:
 - A) will increase with increases in activity.
 - B) will decrease with increases in activity.
 - C) are not affected by activity.
 - D) should be ignored in making decisions since they cannot change.

Answer: B Level: Medium LO: 5

- 32. The costs of staffing and operating the accounting department at Central Hospital would be considered by the Department of Surgery to be:
 - A) direct costs.
 - B) indirect costs.
 - C) incremental costs.
 - D) opportunity costs.

Answer: B Level: Hard LO: 6,7

- 33. A cost incurred in the past that is not relevant to any current decision is classified as a(n):
 - A) period cost.
 - B) opportunity cost.
 - C) sunk cost.
 - D) differential cost.

Answer: C Level: Easy LO: 7

- 34. Differential costs can:
 - A) only be fixed costs.
 - B) only be variable costs.
 - C) be either fixed or variable.
 - D) be incremental but not decremental.

Answer: C Level: Easy LO: 7

- 35. John Johnson decided to leave his former job where he earned \$12 per hour to go to a new job where he will earn \$13 per hour. In the decision process, the former wage of \$12 per hour would be classified as a(n):
 - A) sunk cost.
 - B) direct cost.
 - C) fixed cost.
 - D) opportunity cost.

Answer: D Level: Easy LO: 7

- 36. The term that refers to costs incurred in the past that are not relevant to a decision is:
 - A) marginal cost.
 - B) indirect cost.
 - C) period cost.
 - D) sunk cost.

Answer: D Level: Easy LO: 7

- 37. Lathe operators at KF Manufacturing are hourly employees who are paid time and a half for hours worked in excess of 40 hours per week. Lester is a lathe operator who worked 45 hours during the current week and had no idle time. The correct accounting for the amounts paid to Lester would be:
 - A) charge only the overtime premium earned to the overhead account.
 - B) charge the hourly wage earned plus the overtime premium earned to the overhead account.
 - C) charge only the overtime premium earned to the direct labor cost for the project Lester was working on when the overtime was incurred.
 - D) charge the hourly wage earned plus the overtime premium earned to the direct labor cost for the project Lester was working on when the overtime was incurred.

Answer: A Level: Medium LO: 8 Appendix: 2A

- 38. The controller of the recently organized Crandall Company is considering the two methods listed below for accounting for labor fringe benefits. Which of the two methods is considered acceptable?
 - Method A: Treat all labor fringe benefits as indirect labor by adding them in total to manufacturing overhead.
 - Method B: Treat labor fringe benefits that relate to direct labor as additional direct labor cost and fringe benefits relating to indirect labor as part of manufacturing overhead.
 - A) Only Method A is acceptable.
 - B) Only Method B is acceptable.
 - C) Both Method A and Method B are acceptable.
 - D) Neither Method A nor Method B is acceptable; labor fringe benefits should be treated as period expenses and should be charged off as incurred.

Answer: C Level: Medium LO: 8 Appendix: 2A

- 39. Which of the following would be classified as a prevention cost on a quality cost report?
 - A) Disposal of defective products.
 - B) Net cost of spoilage.
 - C) Depreciation of test equipment.
 - D) Technical support provided to suppliers.

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 40. Which of the following would be classified as a prevention cost on a quality cost report?
 - A) Debugging software errors.
 - B) Quality training.
 - C) Test and inspection of incoming materials.
 - D) Cost of field servicing and handling complaints.

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 41. Which of the following would be classified as a prevention cost on a quality cost report?
 - A) Supplies used in testing and inspection.
 - B) Debugging software errors.
 - C) Quality improvement projects.
 - D) Lost sales arising from a reputation for poor quality.

Answer: C Level: Medium LO: 9,10 Appendix: 2B

- 42. Which of the following would be classified as an appraisal cost on a quality cost report?
 - A) Final product testing and inspection.
 - B) Net cost of spoilage.
 - C) Repairs and replacements beyond the warranty period.
 - D) Rework labor and overhead.

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 43. Which of the following would be classified as an appraisal cost on a quality cost report?
 - A) Quality improvement projects.
 - B) Supplies used in testing and inspection.
 - C) Audits of the effectiveness of the quality system.
 - D) Quality data gathering, analysis, and reporting.

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 44. Which of the following would be classified as an appraisal cost on a quality cost report?
 - A) Maintenance of test equipment.
 - B) Re-entering data because of keying errors.
 - C) Debugging software errors.
 - D) Warranty repairs and replacements.

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 45. Which of the following would be classified as an internal failure cost on a quality cost report?
 - A) Quality improvement projects.
 - B) Supervision of testing and inspection activities.
 - C) Debugging software errors.
 - D) Warranty repairs and replacements.

Answer: C Level: Medium LO: 9,10 Appendix: 2B

- 46. Which of the following would be classified as an internal failure cost on a quality cost report?
 - A) Final product testing and inspection.
 - B) Warranty repairs and replacements.
 - C) Depreciation of test equipment.
 - D) Debugging software errors.

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 47. Which of the following would be classified as an internal failure cost on a quality cost report?
 - A) Rework labor and overhead.
 - B) Cost of field servicing and handling complaints.
 - C) Technical support provided to suppliers.
 - D) Lost sales arising from a reputation for poor quality.

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 48. Which of the following would be classified as an external failure cost on a quality cost report?
 - A) Reentering data because of keying errors.
 - B) Customer returns arising from quality problems.
 - C) Test and inspection of in-process goods.
 - D) Rework labor and overhead.

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 49. Which of the following would be classified as an external failure cost on a quality cost report?
 - A) Repairs and replacements beyond the warranty period.
 - B) Technical support provided to suppliers.
 - C) Quality improvement projects.
 - D) Rework labor and overhead.

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 50. Which of the following would be classified as an external failure cost on a quality cost report?
 - A) Final product testing and inspection.
 - B) Disposal of defective products.
 - C) Supervision of testing and inspection activities.
 - D) Cost of field servicing and handling complaints.

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 51. Inspection of products would be classified as a(n):
 - A) prevention cost.
 - B) appraisal cost.
 - C) internal failure cost.
 - D) external failure cost.

Answer: B Level: Medium LO: 9 Appendix: 2B

- 52. The cost of warranty repairs would be classified as a(n):
 - A) prevention cost.
 - B) appraisal cost.
 - C) internal failure cost.
 - D) external failure cost.

Answer: D Level: Easy LO: 9 Appendix: 2B

- 53. The cost of quality training would be classified as a(n):
 - A) prevention cost.
 - B) appraisal cost.
 - C) internal failure cost.
 - D) external failure cost.

Answer: A Level: Easy LO: 9 Appendix: 2B

- 54. The cost of labor time required to rework defective units would be classified as a(n):
 - A) prevention cost.
 - B) appraisal cost.
 - C) internal failure cost.
 - D) external failure cost.

Answer: C Level: Easy LO: 9 Appendix: 2B

- 55. Which of the following is (are) categorized as internal failure cost(s)?
 - I. Rework.
 - II. Responding to customer complaints.
 - III. Statistical quality control procedures.
 - A) I only.
 - B) II only.
 - C) III only.
 - D) I, II, and III.

Answer: A Level: Medium LO: 9 Source: CPA, adapted Appendix: 2B

56. Adolphson Corporation has provided the following summary of its quality cost report for the last two years:

Summary of Quality Cost Report (in thousands)

| | This Year | Last Year | % Change |
|------------------------|------------|-----------|----------|
| Prevention costs | \$ 300 | \$ 200 | +50 |
| Appraisal costs | 315 | 210 | +50 |
| Internal failure costs | 114 | 190 | -40 |
| External failure costs | <u>621</u> | 1,200 | -48 |
| Total quality costs | \$1,350 | \$1,800 | -25 |

On the basis of this report, which one of the following statements is most likely correct?

- A) An increase in prevention and appraisal costs resulted in fewer defects, and therefore, resulted in a decrease in internal and external failure costs.
- B) A decrease in internal and external failure costs resulted in less need for prevention and appraisal costs.
- C) Quality costs such as scrap and rework decreased by 48%.
- D) Quality costs such as returns and repairs under warranty decreased by 40%.

Answer: A Level: Medium LO: 10 Source: CMA, adapted Appendix: 2B

57. The following costs were incurred in January:

| Direct materials | \$33,000 |
|-------------------------|----------|
| Direct labor | \$28,000 |
| Manufacturing overhead | \$69,000 |
| Selling expenses | \$16,000 |
| Administrative expenses | \$21,000 |

Conversion costs during the month totaled:

- A) \$97,000
- B) \$167,000
- C) \$102,000
- D) \$61,000

Answer: A Level: Medium LO: 1,2

58. The following costs were incurred in February:

| Direct materials | \$43,000 |
|-------------------------|----------|
| Direct labor | \$16,000 |
| Manufacturing overhead | \$37,000 |
| Selling expenses | \$17,000 |
| Administrative expenses | \$26,000 |

Conversion costs during the month totaled:

- A) \$59,000
- B) \$80,000
- C) \$53,000
- D) \$139,000

Answer: C Level: Medium LO: 1,2

59. The following costs were incurred in March:

| Direct materials | \$21,000 |
|-------------------------|----------|
| Direct labor | \$17,000 |
| Manufacturing overhead | \$67,000 |
| Selling expenses | \$16,000 |
| Administrative expenses | \$15,000 |

Conversion costs during the month totaled:

- A) \$88,000
- B) \$38,000
- C) \$136,000
- D) \$84,000

Answer: D Level: Medium LO: 1,2

60. The following costs were incurred in January:

| Direct materials | \$39,000 |
|-------------------------|----------|
| Direct labor | \$26,000 |
| Manufacturing overhead | \$21,000 |
| Selling expenses | \$14,000 |
| Administrative expenses | \$27,000 |

Prime costs during the month totaled:

- A) \$86,000
- B) \$65,000
- C) \$47,000
- D) \$127,000

Answer: B Level: Medium LO: 1,2

61. The following costs were incurred in February:

| Direct materials | \$39,000 |
|-------------------------|----------|
| Direct labor | \$18,000 |
| Manufacturing overhead | \$14,000 |
| Selling expenses | \$13,000 |
| Administrative expenses | \$29,000 |

Prime costs during the month totaled:

- A) \$71,000
- B) \$32,000
- C) \$113,000
- D) \$57,000

Answer: D Level: Medium LO: 1,2

62. The following costs were incurred in March:

| Direct materials | \$39,000 |
|-------------------------|----------|
| Direct labor | \$24,000 |
| Manufacturing overhead | \$14,000 |
| Selling expenses | \$11,000 |
| Administrative expenses | \$19,000 |

Prime costs during the month totaled:

- A) \$63,000
- B) \$107,000
- C) \$38,000
- D) \$77,000

Answer: A Level: Medium LO: 1,2

- 63. Aable Company's manufacturing overhead is 20% of its total conversion costs. If direct labor is \$45,000 and if direct materials are \$53,000, the manufacturing overhead is:
 - A) \$11,250
 - B) \$13,250
 - C) \$180,000
 - D) \$24,500

Answer: A Level: Hard LO: 1

- 64. Abair Company's manufacturing overhead is 20% of its total conversion costs. If direct labor is \$38,000 and if direct materials are \$35,000, the manufacturing overhead is:
 - A) \$18,250
 - B) \$9,500
 - C) \$8,750
 - D) \$152,000

Answer: B Level: Hard LO: 1

- 65. Abbey Company's manufacturing overhead is 60% of its total conversion costs. If direct labor is \$35,000 and if direct materials are \$55,000, the manufacturing overhead is:
 - A) \$135,000
 - B) \$23,333
 - C) \$82,500
 - D) \$52,500

Answer: D Level: Hard LO: 1

- 66. During the month of January, direct labor cost totaled \$17,000 and direct labor cost was 60% of prime cost. If total manufacturing costs during January were \$82,000, the manufacturing overhead was:
 - A) \$11,333
 - B) \$53,667
 - C) \$28,333
 - D) \$65,000

Answer: B Level: Hard LO: 1

- 67. During the month of February, direct labor cost totaled \$13,000 and direct labor cost was 40% of prime cost. If total manufacturing costs during February were \$80,000, the manufacturing overhead was:
 - A) \$32,500
 - B) \$19,500
 - C) \$67,000
 - D) \$47,500

Answer: D Level: Hard LO: 1

- 68. During the month of March, direct labor cost totaled \$17,000 and direct labor cost was 70% of prime cost. If total manufacturing costs during March were \$88,000, the manufacturing overhead was:
 - A) \$24,286
 - B) \$71,000
 - C) \$63,714
 - D) \$7,286

Answer: C Level: Hard LO: 1

- 69. Knowel Company's direct labor is 40 percent of its conversion cost. If the manufacturing overhead cost for the last period was \$60,000 and the direct materials cost was \$30,000, the direct labor cost was:
 - A) \$90,000
 - B) \$20,000
 - C) \$60,000
 - D) \$40,000

Answer: D Level: Hard LO: 1

- 70. In January direct labor was 40% percent of conversion cost. If the manufacturing overhead cost for the month was \$78,000 and the direct materials cost was \$22,000, the direct labor cost was:
 - A) \$14.667
 - B) \$52,000
 - C) \$33,000
 - D) \$117,000

Answer: B Level: Hard LO: 1

- 71. In February direct labor was 60% percent of conversion cost. If the manufacturing overhead cost for the month was \$78,000 and the direct materials cost was \$22,000, the direct labor cost was:
 - A) \$52,000
 - B) \$14,667
 - C) \$117,000
 - D) \$33,000

Answer: C Level: Hard LO: 1

- 72. In March direct labor was 60% percent of conversion cost. If the manufacturing overhead cost for the month was \$38,000 and the direct materials cost was \$32,000, the direct labor cost was:
 - A) \$21,333
 - B) \$48,000
 - C) \$25,333
 - D) \$57,000

Answer: D Level: Hard LO: 1

- 73. Crossland Company's direct labor cost is 30% of its conversion cost. If the manufacturing overhead cost for the last period was \$49,000 and the direct materials cost was \$20,000, the direct labor cost was:
 - A) \$6,000
 - B) \$14,700
 - C) \$21,000
 - D) \$34,000

Answer: C Level: Hard LO: 1

- 74. CF Company manufactures wooden rocking chairs. CF identified the following three material costs in its production process for July: \$100,000 for springs for the rocking mechanism; two springs at a cost of \$10 each are used in each chair; \$1,700 for glue used as needed from one gallon containers; and \$500 for stain used to touch up spots on the chairs. The total cost that should have been assigned to indirect material for July was:
 - A) \$102,200
 - B) \$500
 - C) \$2,200
 - D) \$1,700

Answer: C Level: Medium LO: 1

75. Fab Co. manufactures textiles. Fab's manufacturing costs last year included the following salaries and wages:

| Loom operators | \$120,000 |
|---------------------|-----------|
| Factory foremen | \$45,000 |
| Machinery repairmen | \$30,000 |

What is the amount of direct labor included in this list?

- A) \$195,000
- B) \$165,000
- C) \$150,000
- D) \$120,000

Answer: D Level: Medium LO: 1 Source: CPA, adapted

76. A manufacturing company has provided the following cost data for a recent period:

| Direct materials | \$8,000 |
|-----------------------------|----------|
| Manufacturing overhead | \$12,000 |
| Direct labor | \$10,000 |
| Increase in work-in-process | \$4,000 |

Prime cost for the period was:

- A) \$18,000
- B) \$26,000
- C) \$30,000
- D) \$34,000

Answer: A Level: Medium LO: 1 Source: CIMA, adapted

77. A manufacturing company prepays its insurance coverage for a three-year period. The premium for the three years is \$3,000 and is paid at the beginning of the first year. Three-fourths of the premium applies to factory operations and one-fourth applies to selling and administrative activities. What amounts should be considered product and period costs respectively for the first year of coverage?

| | Product | Period |
|----|---------|--------|
| A) | \$1,000 | \$0 |
| B) | \$250 | \$750 |
| C) | \$2,250 | \$750 |
| D) | \$750 | \$250 |

Answer: D Level: Hard LO: 2

78. Last month a manufacturing company had the following operating results:

| Beginning finished goods inventory | \$72,000 |
|------------------------------------|-----------|
| Ending finished goods inventory | \$66,000 |
| Sales | \$465,000 |
| Gross margin | \$88,000 |

What was the cost of goods manufactured for the month?

- A) \$371,000
- B) \$459,000
- C) \$383,000
- D) \$377,000

Answer: A Level: Hard LO: 3,4

79. Last month a manufacturing company had the following operating results:

| Beginning finished goods inventory | \$74,000 |
|------------------------------------|-----------|
| Ending finished goods inventory | \$50,000 |
| Sales | \$438,000 |
| Gross margin | \$63,000 |

What was the cost of goods manufactured for the month?

- A) \$375,000
- B) \$414,000
- C) \$399,000
- D) \$351,000

Answer: D Level: Hard LO: 3,4

- 80. Gabert Inc. is a merchandising company. Last month the company's merchandise purchases totaled \$68,000. The company's beginning merchandise inventory was \$17,000 and its ending merchandise inventory was \$13,000. What was the company's cost of goods sold for the month?
 - A) \$72,000
 - B) \$68,000
 - C) \$98,000
 - D) \$64,000

Answer: A Level: Easy LO: 3

- 81. Haag Inc. is a merchandising company. Last month the company's cost of goods sold was \$86,000. The company's beginning merchandise inventory was \$20,000 and its ending merchandise inventory was \$21,000. What was the total amount of the company's merchandise purchases for the month?
 - A) \$86,000
 - B) \$127,000
 - C) \$87,000
 - D) \$85,000

Answer: C Level: Medium LO: 3

- 82. During February, the cost of goods manufactured was \$83,000. The beginning finished goods inventory was \$14,000 and the ending finished goods inventory was \$13,000. What was the cost of goods sold for the month?
 - A) \$83,000
 - B) \$110,000
 - C) \$82,000
 - D) \$84,000

Answer: D Level: Easy LO: 3

- 83. During March, the cost of goods manufactured was \$62,000. The beginning finished goods inventory was \$11,000 and the ending finished goods inventory was \$19,000. What was the cost of goods sold for the month?
 - A) \$70,000
 - B) \$92,000
 - C) \$54,000
 - D) \$62,000

Answer: C Level: Easy LO: 3

84. The following information is taken from the records of CL Company for last year:

| Direct materials | \$5,000 |
|-------------------------------------|----------|
| Manufacturing overhead | \$6,000 |
| Total manufacturing costs | \$17,000 |
| Beginning work in process inventory | \$1,000 |
| Cost of goods manufactured | \$15,000 |

What are the correct amounts for direct labor and ending work in process inventory?

| | Direct | Ending Work |
|----|----------|--------------------|
| | Labor | in Process |
| A) | \$12,000 | \$2,000 |
| B) | \$11,000 | \$2,000 |
| C) | \$6,000 | \$1,000 |
| D) | \$6,000 | \$3,000 |

Answer: D Level: Hard LO: 4

85. The following information is taken from the records of DW Company for last year:

| Direct materials | \$8,000 |
|----------------------------------|----------|
| Direct labor | \$3,000 |
| Manufacturing overhead | \$11,000 |
| Ending work in process inventory | \$5,000 |
| Cost of goods manufactured | \$19,000 |

The amount of beginning work in process inventory is:

- A) \$24,000
- B) \$2,000
- C) \$22,000
- D) \$3,000

Answer: B Level: Hard LO: 4

86. Using the following data for February, calculate the cost of goods manufactured:

| Direct materials | \$36,000 |
|-------------------------------------|----------|
| Direct labor | \$20,000 |
| Manufacturing overhead | \$19,000 |
| Beginning work in process inventory | \$10,000 |
| Ending work in process inventory | \$13,000 |

The cost of goods manufactured was:

- A) \$78,000
- B) \$85,000
- C) \$72,000
- D) \$75,000

Answer: C Level: Medium LO: 4

87. Using the following data for March, calculate the cost of goods manufactured:

| Direct materials | \$29,000 |
|-------------------------------------|----------|
| Direct labor | \$19,000 |
| Manufacturing overhead | \$27,000 |
| Beginning work in process inventory | \$11,000 |
| Ending work in process inventory | \$12,000 |

The cost of goods manufactured was:

- A) \$74,000
- B) \$86,000
- C) \$76,000
- D) \$75,000

Answer: A Level: Medium LO: 4

88. Jacobs is employed as a machinist for an aircraft manufacturer. She is paid \$15 per hour for regular time and time and a half for all work in excess of 40 hours per week. During the past week, Jacobs was idle for two hours due to machine breakdowns and was idle four hours due to materials shortages. Jacobs worked 40 hours last week with no overtime. The allocation of Jacobs' wages for the past week between direct labor cost and manufacturing overhead cost would be:

| | Direct | Manufacturing |
|----|--------|---------------|
| | Labor | Overhead |
| A) | \$600 | \$0 |
| B) | \$570 | \$30 |
| C) | \$540 | \$60 |
| D) | \$510 | \$90 |

Answer: D Level: Medium LO: 8 Appendix: 2A

89. Johnson is employed on the assembly line of a manufacturing company where he assembles a component part for one of the company's products. He is paid \$14 per hour for regular time and time and a half for all work in excess of 40 hours per week. During the past week, Johnson worked a total of 50 hours and had no idle time. The allocation of Johnson's wages for the past week between direct labor cost and manufacturing overhead cost would be:

| | | Manufacturing |
|----|--------------|---------------|
| | Direct Labor | Overhead |
| A) | \$770 | \$0 |
| B) | \$700 | \$70 |
| C) | \$560 | \$210 |
| D) | \$560 | \$0 |

Answer: B Level: Medium LO: 8 Appendix: 2A

Use the following to answer questions 90-91:

Clyde Company has provided the following data for the month of November:

| Inventories Raw materials Work in process | November 1 \$17,000 \$14,000 | November 30 ? \$12,000 |
|---|------------------------------------|------------------------------|
| Finished goods | ? | \$9,000 |
| Additional Data: | | |
| Sales revenue | | \$102,000 |
| Direct labor costs | | \$10,000 |
| Manufacturing overhead costs | s | \$12,000 |
| Selling expenses | | \$14,000 |
| Administrative expenses | | \$16,000 |
| Cost of goods manufactured | | \$40,000 |
| Raw materials purchases | | \$10,000 |

- 90. The ending raw materials inventory was:
 - A) \$11,000
 - B) \$23,000
 - C) \$10,000
 - D) \$12,000

Answer: A Level: Hard LO: 2,4

- 91. If the net operating income was \$40,000, then the beginning finished goods inventory was:
 - A) \$22,000
 - B) \$9,000
 - C) \$42,000
 - D) \$1,000

Answer: D Level: Hard LO: 2,3,4

Use the following to answer questions 92-95:

The following data (in thousands of dollars) have been taken from the accounting records of Karsen Corporation for the just completed year.

| Sales | \$930 |
|--------------------------------------|-------|
| Raw materials inventory, beginning | \$70 |
| Raw materials inventory, ending | \$40 |
| Purchases of raw materials | \$190 |
| Direct labor | \$150 |
| Manufacturing overhead | \$210 |
| Administrative expenses | \$90 |
| Selling expenses | \$120 |
| Work in process inventory, beginning | \$80 |
| Work in process inventory, ending | \$70 |
| Finished goods inventory, beginning | \$90 |
| Finished goods inventory, ending | \$140 |

Use these data to answer the following series of questions.

- 92. The cost of the raw materials used in production during the year (in thousands of dollars) was:
 - A) \$230
 - B) \$220
 - C) \$160
 - D) \$260

Answer: B Level: Medium LO: 2,3,4

- 93. The cost of goods manufactured (finished) for the year (in thousands of dollars) was:
 - A) \$590
 - B) \$650
 - C) \$660
 - D) \$570

Answer: A Level: Medium LO: 2,3,4

- 94. The cost of goods sold for the year (in thousands of dollars) was:
 - A) \$680
 - B) \$540
 - C) \$640
 - D) \$730

Answer: B Level: Medium LO: 2,3,4

- 95. The net operating income for the year (in thousands of dollars) was:
 - A) \$180
 - B) \$170
 - C) \$390
 - D) \$190

Answer: A Level: Medium LO: 2,3,4

Use the following to answer questions 96-99:

The following data (in thousands of dollars) have been taken from the accounting records of Karsten Corporation for the just completed year.

| Sales | \$990 |
|--------------------------------------|-------|
| Raw materials inventory, beginning | \$70 |
| Raw materials inventory, ending | \$30 |
| Purchases of raw materials | \$100 |
| Direct labor | \$200 |
| Manufacturing overhead | \$160 |
| Administrative expenses | \$180 |
| Selling expenses | \$150 |
| Work in process inventory, beginning | \$40 |
| Work in process inventory, ending | \$70 |
| Finished goods inventory, beginning | \$150 |
| Finished goods inventory, ending | \$130 |

Use these data to answer the following series of questions.

- 96. The cost of the raw materials used in production during the year (in thousands of dollars) was:
 - A) \$130
 - B) \$170
 - C) \$140
 - D) \$60

Answer: C Level: Medium LO: 2,3,4

- 97. The cost of goods manufactured (finished) for the year (in thousands of dollars) was:
 - A) \$530
 - B) \$540
 - C) \$470
 - D) \$570

Answer: C Level: Medium LO: 2,3,4

- 98. The cost of goods sold for the year (in thousands of dollars) was:
 - A) \$490
 - B) \$450
 - C) \$620
 - D) \$600

Answer: A Level: Medium LO: 2,3,4

- 99. The net operating income for the year (in thousands of dollars) was:
 - A) \$170
 - B) \$140
 - C) \$500
 - D) \$200

Answer: A Level: Medium LO: 2,3,4

Use the following to answer questions 100-103:

The following data (in thousands of dollars) have been taken from the accounting records of Karstone Corporation for the just completed year.

| Sales | \$880 |
|--------------------------------------|-------|
| Raw materials inventory, beginning | \$20 |
| Raw materials inventory, ending | \$30 |
| Purchases of raw materials | \$150 |
| Direct labor | \$180 |
| Manufacturing overhead | \$230 |
| Administrative expenses | \$100 |
| Selling expenses | \$130 |
| Work in process inventory, beginning | \$80 |
| Work in process inventory, ending | \$30 |
| Finished goods inventory, beginning | \$120 |
| Finished goods inventory, ending | \$100 |

Use these data to answer the following series of questions.

- 100. The cost of the raw materials used in production during the year (in thousands of dollars) was:
 - A) \$180
 - B) \$140
 - C) \$160
 - D) \$170

Answer: B Level: Medium LO: 2,3,4

- 101. The cost of goods manufactured (finished) for the year (in thousands of dollars) was:
 - A) \$580
 - B) \$600
 - C) \$500
 - D) \$630

Answer: B Level: Medium LO: 2,3,4

- 102. The cost of goods sold for the year (in thousands of dollars) was:
 - A) \$620
 - B) \$580
 - C) \$720
 - D) \$700

Answer: A Level: Medium LO: 2,3,4

- 103. The net operating income for the year (in thousands of dollars) was:
 - A) \$260
 - B) \$30
 - C) \$90
 - D) (\$30)

Answer: B Level: Medium LO: 2,3,4

Use the following to answer questions 104-105:

The manufacturing operations of QC Company had the following inventory balances for the month of March:

| Inventories | March 1 | March 31 |
|-----------------|----------|----------|
| Raw materials | \$10,000 | \$12,000 |
| Work in process | \$6,000 | \$7,000 |
| Finished goods | \$30,000 | \$22,000 |

- 104. If the company purchased \$18,000 of raw materials during March, what was the cost of raw materials used in production?
 - A) \$16,000
 - B) \$20,000
 - C) \$41,000
 - D) \$19,000

Answer: A Level: Medium LO: 4

- 105. If the company transferred \$38,000 of completed goods from work in process to finished goods during March, what was the amount of the cost of goods sold?
 - A) \$38,000
 - B) \$43,000
 - C) \$30,000
 - D) \$46,000

Answer: D Level: Medium LO: 3

Use the following to answer questions 106-107:

Servix, Inc., produces water pumps. Each water pump contains a small valve that costs \$5. During May, 600 valves were drawn from the supply room and installed in water pumps in the production process. Eighty percent of these units were completed and transferred into finished goods warehouses. Of the units completed, thirty percent were still unsold at the end of the month. There were no beginning inventories.

- 106. The cost of valves in work in process at the end of May would be:
 - A) \$2,400
 - B) \$3,000
 - C) \$600
 - D) \$720

Answer: C Level: Easy LO: 4

- 107. The cost of valves in cost of goods sold for May would be:
 - A) \$1,680
 - B) \$2,100
 - C) \$900
 - D) \$720

Answer: A Level: Easy LO: 3

Use the following to answer questions 108-109:

The manufacturing operations of Jones Company had the following inventory balances for the month of March:

| Inventories | March 1 | March 31 |
|-----------------|----------|----------|
| Raw materials | \$12,000 | \$14,000 |
| Work in process | \$8,000 | \$9,000 |
| Finished goods | \$32,000 | \$25,000 |

- 108. If the company purchased \$20,000 of raw materials during March, what was the cost of raw materials used in production?
 - A) \$24,000
 - B) \$22,000
 - C) \$32,000
 - D) \$18,000

Answer: D Level: Medium LO: 4

- 109. If the company transferred \$40,000 of completed goods from work in process to finished goods during March, what was the amount of the cost of goods sold?
 - A) \$47,000
 - B) \$40,000
 - C) \$33,000
 - D) \$44,000

Answer: A Level: Medium LO: 4

Use the following to answer questions 110-111:

At a sales volume of 30,000 units, Carne Company's total fixed costs are \$30,000 and total variable costs are \$45,000. The relevant range is 20,000 to 40,000 units.

- 110. If Carne Company were to sell 32,000 units, the total expected cost would be:
 - A) \$75,000
 - B) \$78,000
 - C) \$80,000
 - D) \$77,000

Answer: B Level: Easy LO: 5

- 111. If Carne Company were to sell 40,000 units, the total expected cost per unit would be:
 - A) \$2.50
 - B) \$2.25
 - C) \$2.13
 - D) \$1.88

Answer: B Level: Easy LO: 5

Use the following to answer questions 112-115:

Marrell is employed on the assembly line of a manufacturing company where she assembles a component part for one of the company's products. She is paid \$16 per hour for regular time and time and a half for all work in excess of 40 hours per week.

112. Marrell works 45 hours during a week in which there was no idle time. The allocation of Marrell's wages for the week as between direct labor cost and manufacturing overhead cost would be:

| | | Manufacturing |
|----|--------------|---------------|
| | Direct Labor | Overhead |
| A) | \$760 | \$0 |
| B) | \$720 | \$40 |
| C) | \$640 | \$80 |
| D) | \$610 | \$40 |

Answer: B Level: Medium LO: 8 Appendix: 2A

113. Marrell works 50 hours in a given week but is idle for 4 hours during the week due to equipment breakdowns. The allocation of Marrell's wages for the week as between direct labor cost and manufacturing overhead cost would be:

| | | Manufacturing |
|----|--------------|---------------|
| | Direct Labor | Overhead |
| A) | \$816 | \$64 |
| B) | \$800 | \$80 |
| C) | \$736 | \$144 |
| D) | \$640 | \$160 |

Answer: C Level: Medium LO: 8 Appendix: 2A

114. Marrell's employer offers fringe benefits that cost the company \$4 for each hour of employee time (either regular or overtime). During a given week, Marrell works 48 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits as part of manufacturing overhead. The allocation of Marrell's wages for the week between the direct labor cost and manufacturing overhead would be:

| | | Manufacturing |
|----|--------------|---------------|
| | Direct Labor | Overhead |
| A) | \$960 | \$64 |
| B) | \$768 | \$256 |
| C) | \$720 | \$304 |
| D) | \$640 | \$320 |

Answer: C Level: Medium LO: 8 Appendix: 2A

115. Marrell's employer offers fringe benefits that cost the company \$4 for each hour of employee time (either regular or overtime). During a given week, Marrell works 48 hours but is idle for 3 hours due to material shortages. The company treats all fringe benefits relating to direct labor as added direct labor cost. The allocation of Marrell's wages for the week between direct labor cost and manufacturing overhead would be:

| | | Manufacturing |
|----|--------------|---------------|
| | Direct Labor | Overhead |
| A) | \$832 | \$128 |
| B) | \$900 | \$124 |
| C) | \$912 | \$112 |
| D) | \$960 | \$64 |

Answer: B Level: Medium LO: 8 Appendix: 2A

Use the following to answer questions 116-119:

Eakle Company's quality cost report is to be based on the following data:

| Supervision of testing and inspection activities | \$29,000 |
|--|----------|
| Warranty repairs and replacements | \$12,000 |
| Net cost of scrap | \$53,000 |
| Test and inspection of incoming materials | \$23,000 |
| Technical support provided to suppliers | \$71,000 |
| Disposal of defective products | \$94,000 |
| Quality data gathering, analysis, and reporting | \$47,000 |
| Liability arising from defective products | \$75,000 |
| Depreciation of test equipment | \$22,000 |

- 116. What would be the total prevention cost appearing on the quality cost report?
 - A) \$118,000
 - B) \$93,000
 - C) \$76,000
 - D) \$59,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 117. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$45,000
 - B) \$52,000
 - C) \$74,000
 - D) \$76,000

Answer: C Level: Medium LO: 9,10 Appendix: 2B

- 118. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$106,000
 - B) \$147,000
 - C) \$75,000
 - D) \$128,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 119. What would be the total external failure cost appearing on the quality cost report?
 - A) \$426,000
 - B) \$234,000
 - C) \$106,000
 - D) \$87,000

Answer: D Level: Medium LO: 9,10 Appendix: 2B

Use the following to answer questions 120-123:

Ealsy Company's quality cost report is to be based on the following data:

| Maintenance of test equipment | \$95,000 |
|---|----------|
| Cost of field servicing and handling complaints | \$17,000 |
| Statistical process control activities | \$77,000 |
| Net cost of scrap | \$62,000 |
| Downtime caused by quality problems | \$23,000 |
| Technical support provided to suppliers | \$93,000 |
| Depreciation of test equipment | \$81,000 |
| Supplies used in testing and inspection | \$33,000 |
| Warranty repairs and replacements | \$24,000 |

- 120. What would be the total prevention cost appearing on the quality cost report?
 - A) \$172,000
 - B) \$170,000
 - C) \$174,000
 - D) \$94,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 121. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$114,000
 - B) \$95,000
 - C) \$128,000
 - D) \$209,000

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 122. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$85,000
 - B) \$143,000
 - C) \$40,000
 - D) \$86,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 123. What would be the total external failure cost appearing on the quality cost report?
 - A) \$41,000
 - B) \$505,000
 - C) \$126,000
 - D) \$40,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

Use the following to answer questions 124-127:

Eames Company's quality cost report is to be based on the following data:

| Technical support provided to suppliers | \$20,000 |
|--|----------|
| Test and inspection of in-process goods | \$67,000 |
| Depreciation of test equipment | \$68,000 |
| Quality data gathering, analysis, and reporting | \$46,000 |
| Warranty repairs and replacements | \$97,000 |
| Debugging software errors | \$22,000 |
| Downtime caused by quality problems | \$95,000 |
| Returns arising from quality problems | \$12,000 |
| Supervision of testing and inspection activities | \$24,000 |

- 124. What would be the total prevention cost appearing on the quality cost report?
 - A) \$44,000
 - B) \$66,000
 - C) \$32,000
 - D) \$113,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 125. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$163,000
 - B) \$135,000
 - C) \$159,000
 - D) \$92,000

Answer: C Level: Medium LO: 9,10 Appendix: 2B

- 126. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$162,000
 - B) \$34,000
 - C) \$117,000
 - D) \$192,000

Answer: C Level: Medium LO: 9,10 Appendix: 2B

- 127. What would be the total external failure cost appearing on the quality cost report?
 - A) \$226,000
 - B) \$451,000
 - C) \$109,000
 - D) \$34,000

Answer: C Level: Medium LO: 9,10 Appendix: 2B

Use the following to answer questions 128-131:

Factoria Company's quality cost report is to be based on the following data:

| Disposal of defective products | \$41,000 |
|---|----------|
| Statistical process control activities | \$29,000 |
| Test and inspection of in-process goods | \$65,000 |
| Net cost of spoilage | \$23,000 |
| Test and inspection of incoming materials | \$22,000 |
| Warranty repairs and replacements | \$14,000 |
| Downtime caused by quality problems | \$56,000 |
| Quality training | \$42,000 |
| Product recalls | \$32,000 |

- 128. What would be the total prevention cost appearing on the quality cost report?
 - A) \$71,000
 - B) \$51,000
 - C) \$107,000
 - D) \$43,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 129. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$63,000
 - B) \$87,000
 - C) \$88,000
 - D) \$158,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 130. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$120,000
 - B) \$88,000
 - C) \$70,000
 - D) \$55,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 131. What would be the total external failure cost appearing on the quality cost report?
 - A) \$88,000
 - B) \$166,000
 - C) \$324,000
 - D) \$46,000

Answer: D Level: Medium LO: 9,10 Appendix: 2B

Use the following to answer questions 132-135:

Fadden Company's quality cost report is to be based on the following data:

| Statistical process control activities | \$97,000 |
|---|----------|
| Depreciation of test equipment | \$87,000 |
| Supplies used in testing and inspection | \$48,000 |
| Re-entering data because of keying errors | \$12,000 |
| Debugging software errors | \$73,000 |
| Quality circles | \$84,000 |
| Net cost of spoilage | \$85,000 |
| Returns arising from quality problems | \$28,000 |
| Cost of field servicing and handling complaints | \$65,000 |

- 132. What would be the total prevention cost appearing on the quality cost report?
 - A) \$184,000
 - B) \$125,000
 - C) \$132,000
 - D) \$181,000

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 133. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$133,000
 - B) \$135,000
 - C) \$99,000
 - D) \$316,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 134. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$150,000
 - B) \$170,000
 - C) \$101,000
 - D) \$133,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

- 135. What would be the total external failure cost appearing on the quality cost report?
 - A) \$138,000
 - B) \$93,000
 - C) \$263,000
 - D) \$579,000

Answer: B Level: Medium LO: 9,10 Appendix: 2B

Use the following to answer questions 136-139:

Fado Company's quality cost report is to be based on the following data:

| Net cost of scrap | \$18,000 |
|---|----------|
| Quality circles | \$84,000 |
| Depreciation of test equipment | \$32,000 |
| Returns arising from quality problems | \$59,000 |
| Systems development | \$45,000 |
| Supplies used in testing and inspection | \$68,000 |
| Product recalls | \$34,000 |
| Disposal of defective products | \$62,000 |
| Debugging software errors | \$56,000 |

- 136. What would be the total prevention cost appearing on the quality cost report?
 - A) \$129,000
 - B) \$116,000
 - C) \$143,000
 - D) \$113,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 137. What would be the total appraisal cost appearing on the quality cost report?
 - A) \$100,000
 - B) \$124,000
 - C) \$229,000
 - D) \$50,000

Answer: A Level: Medium LO: 9,10 Appendix: 2B

- 138. What would be the total internal failure cost appearing on the quality cost report?
 - A) \$121,000
 - B) \$90,000
 - C) \$124,000
 - D) \$136,000

Answer: D Level: Medium LO: 9,10 Appendix: 2B

- 139. What would be the total external failure cost appearing on the quality cost report?
 - A) \$458,000
 - B) \$96,000
 - C) \$93,000
 - D) \$229,000

Answer: C Level: Medium LO: 9,10 Appendix: 2B

Essay Questions

140. The Plastechnics Company began operations several years ago. The company purchased a building and, since only half of the space was needed for operations, the remaining space was rented to another firm for rental revenue of \$20,000 per year. The success of Plastechnics Company's product has resulted in the company needing more space. The renter's lease will expire next month and Plastechnics will not renew the lease in order to use the space to expand operations and meet demand.

The company's product requires materials that cost \$25 per unit. The company employs a production supervisor whose salary is \$2,000 per month. Production line workers are paid \$15 per hour to manufacture and assemble the product. The company rents the equipment needed to produce the product at a rental cost of \$1,500 per month. Additional equipment will be needed as production is expanded and the monthly rental charge for this equipment will be \$900 per month. The building is depreciated on the straight-line basis at \$9,000 per year.

The company spends \$40,000 per year to market the product. Shipping costs for each unit are \$20 per unit.

The company plans to liquidate several investments in order to expand production. These investments currently earn a return of \$8,000 per year.

Required:

Complete the answer sheet above by placing an "X" under each heading that identifies the cost involved. The "Xs" can be placed under more than one heading for a single cost, e.g., a cost might be a sunk cost, an overhead cost, and a product cost. An "X" can thus be placed under each of these headings opposite the cost.

| | | | | | Manufact- | | Oppor- | |
|--------------|----------|-------|-----------|--------|-----------|--------|--------|------|
| | Variable | Fixed | Direct | Direct | uring | Period | tunity | Sunk |
| | Cost | Cost | Materials | Labor | Overhead | Cost | Cost | Cost |
| Rental | | | | | | | | |
| revenue | | | | | | | | |
| Materials | | | | | | | | |
| costs | | | | | | | | |
| Production | | | | | | | | |
| supervisor | | | | | | | | |
| salary | | | | | | | | |
| Production | | | | | | | | |
| line workers | | | | | | | | |
| wages | | | | | | | | |
| Equipment | | | | | | | | |
| rental | | | | | | | | |
| Building | | | | | | | | |
| depreciation | | | | | | | | |
| Marketing | | | | | | | | |
| costs | | | | | | | | |
| Shipping | | | | | | | | |
| costs | | | | | | | | |
| Return on | | | | | | | | |
| present | | | | | | | | |
| investments | | | | | | | | |

Level: Medium LO: 1,2,5,7

| | Variable Cost | Fixed Cost | Direct Materials | Direct Labor | Manufact- uring Overhead | Period Cost | Oppor- tunity Cost | Sunk Cost |
|-------------------------------------|------------------|---------------|---------------------|-----------------|--------------------------------|----------------|--------------------------|--------------|
| Rental revenue | | | | | | | X | |
| Materials costs | X | | X | | | | | |
| Production supervisor salary | | X | | | X | | | |
| Production line workers wages | X | | | X | | | | |
| Equipment rental | | X | | | X | | | |
| Building depreciation | | X | | | X | | | |
| Marketing costs | | X | | | | X | | |
| Shipping costs | X | | | | | X | | |
| Return on present investments | | | | | | | X | |

141. The following data (in thousands of dollars) have been taken from the accounting records of Larder Corporation for the just completed year.

| Sales | \$950 |
|--------------------------------------|-------|
| Purchases of raw materials | \$170 |
| Direct labor | \$210 |
| Manufacturing overhead | \$200 |
| Administrative expenses | \$180 |
| Selling expenses | \$140 |
| Raw materials inventory, beginning | \$70 |
| Raw materials inventory, ending | \$80 |
| Work in process inventory, beginning | \$30 |
| Work in process inventory, ending | \$20 |
| Finished goods inventory, beginning | \$100 |
| Finished goods inventory, ending | \$70 |

Required:

- a. Prepare a Schedule of Cost of Goods Manufactured in good form.
- b. Compute the Cost of Goods Sold.
- c. Using data from your answers above as needed, prepare an Income Statement in good form

Level: Medium LO: 1,3,4

| a. | Schedule of cost of goods manufactured | |
|----|---|--------------|
| | Direct materials: | |
| | Raw materials inventory, beginning | \$ 70 |
| | Add: Purchases of raw materials | <u>170</u> |
| | Raw materials available for use | 240 |
| | Deduct: Raw materials inventory, ending | _80 |
| | Raw materials used in production | 160 |
| | Direct labor | 210 |
| | Manufacturing overhead | 200 |
| | Total manufacturing cost | 570 |
| | Add: Work in process inventory, beginning | _30 |
| | | 600 |
| | Deduct: Work in process inventory, ending | 20 |
| | Cost of goods manufactured | \$580 |
| | - | |
| b. | Computation of cost of goods sold | |
| | Finished goods inventory, beginning | \$100 |
| | Add: Cost of goods manufactured | _580 |
| | Goods available for sale | 680 |
| | Deduct: Finished goods inventory, ending | 70 |
| | Cost of goods sold | <u>\$610</u> |
| | | |
| c. | Income statement | |
| | Sales | \$950 |
| | Less: Cost of goods sold | <u>610</u> |
| | Gross margin | 340 |
| | Gross margin | 340 |
| | Less: Administrative expenses | 180 |
| | Less: Administrative expenses | |
| | | 180 |

142. The following data (in thousands of dollars) have been taken from the accounting records of Larop Corporation for the just completed year.

| Sales | \$870 |
|--------------------------------------|-------|
| Purchases of raw materials | \$190 |
| Direct labor | \$200 |
| Manufacturing overhead | \$230 |
| Administrative expenses | \$150 |
| Selling expenses | \$140 |
| Raw materials inventory, beginning | \$10 |
| Raw materials inventory, ending | \$40 |
| Work in process inventory, beginning | \$20 |
| Work in process inventory, ending | \$50 |
| Finished goods inventory, beginning | \$90 |
| Finished goods inventory, ending | \$130 |

Required:

- a. Prepare a Schedule of Cost of Goods Manufactured in good form.
- b. Compute the Cost of Goods Sold.
- c. Using data from your answers above as needed, prepare an Income Statement in good form

Level: Medium LO: 1,3,4

| a. | Schedule of cost of goods manufactured | |
|----|--|--|
| | Direct materials: | Φ 10 |
| | Raw materials inventory, beginning | \$ 10 |
| | Add: Purchases of raw materials | <u>190</u> |
| | Raw materials available for use | 200 |
| | Deduct: Raw materials inventory, ending | <u>40</u> |
| | Raw materials used in production | 160 |
| | Direct labor | 200 |
| | Manufacturing overhead | 230 |
| | Total manufacturing cost | 590 |
| | Add: Work in process inventory, beginning | _20 |
| | | 610 |
| | Deduct: Work in process inventory, ending | 50 |
| | Cost of goods manufactured | \$560 |
| | | |
| b. | Computation of cost of goods sold | |
| | Finished goods inventory, beginning | \$ 90 |
| | Add. Cost of soods manufactured | |
| | Add: Cost of goods manufactured | 560 |
| | Add: Cost of goods manufactured | <u>560</u> 650 |
| | Goods available for sale | 650 |
| | Goods available for sale Deduct: Finished goods inventory, ending | 650 130 |
| | Goods available for sale | 650 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending | 650 130 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold | 650 130 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales | 650 130 \$520 \$870 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold | 650 130 \$520 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold Gross margin | \$870 520 \$520 \$870 520 350 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold Gross margin Less: Administrative expenses | \$870 520 350 150 |
| c. | Goods available for sale Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold Gross margin | \$870 520 \$520 \$870 520 350 |

143. Gagnon Company's quality cost report is to be based on the following data:

| Maintenance of test equipment | \$18,000 |
|--|----------|
| Test and inspection of incoming materials | \$73,000 |
| Systems development | \$29,000 |
| Product recalls | \$91,000 |
| Quality training | \$25,000 |
| Disposal of defective products | \$55,000 |
| Supervision of testing and inspection activities | \$24,000 |
| Warranty repairs and replacements | \$58,000 |
| Net cost of scrap | \$23,000 |

Required:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

Level: Medium LO: 9,10 Appendix: 2B

| Prevention costs | |
|--|------------------|
| Systems development | \$ 29,000 |
| Quality training | 25,000 |
| Total | 54,000 |
| Appraisal costs | |
| Test and inspection of incoming materials | 73,000 |
| Supervision of testing and inspection activities | 24,000 |
| Maintenance of test equipment | 18,000 |
| Total | 115,000 |
| Internal failure costs | |
| Disposal of defective products | 55,000 |
| Net cost of scrap | 23,000 |
| Total | 78,000 |
| External failure costs | |
| Warranty repairs and replacements | 58,000 |
| Product recalls | 91,000 |
| Total | 149,000 |
| Total quality cost | <u>\$396,000</u> |
| | |

144. Gagnet Company's quality cost report is to be based on the following data:

| Liability arising from defective products | \$82,000 |
|---|----------|
| Final product testing and inspection | \$40,000 |
| Returns arising from quality problems | \$24,000 |
| Technical support provided to suppliers | \$52,000 |
| Disposal of defective products | \$98,000 |
| Maintenance of test equipment | \$53,000 |
| Systems development | \$67,000 |
| Depreciation of test equipment | \$11,000 |
| Debugging software errors | \$87,000 |

Required:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

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| Prevention costs | |
| Technical support provided to suppliers | \$ 52,000 |
| Systems development | 67,000 |
| Total | 119,000 |
| Appraisal costs | |
| Depreciation of test equipment | 11,000 |
| Maintenance of test equipment | 53,000 |
| Final product testing and inspection | 40,000 |
| Total | 104,000 |
| Internal failure costs | |
| Debugging software errors | 87,000 |
| Disposal of defective products | 98,000 |
| Total | 185,000 |
| External failure costs | |
| Liability arising from defective products | 82,000 |
| Returns arising from quality problems | 24,000 |
| Total | 106,000 |
| Total quality cost | \$514,000 |
| | |

145. Gaffney Company's quality cost report is to be based on the following data:

| Final product testing and inspection | \$60,000 |
|--|----------|
| Rework labor and overhead | \$60,000 |
| Statistical process control activities | \$78,000 |
| Quality data gathering, analysis, and reporting | \$24,000 |
| Returns arising from quality problems | \$77,000 |
| Liability arising from defective products | \$89,000 |
| Depreciation of test equipment | \$62,000 |
| Downtime caused by quality problems | \$80,000 |
| Supervision of testing and inspection activities | \$11,000 |

Required:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

| Answer: | |
|--|------------------|
| Prevention costs | |
| Statistical process control activities | \$ 78,000 |
| Quality data gathering, analysis, and reporting | 24,000 |
| Total | 102,000 |
| Appraisal costs | |
| Supervision of testing and inspection activities | 11,000 |
| Final product testing and inspection | 60,000 |
| Depreciation of test equipment | 62,000 |
| Total | 133,000 |
| Internal failure costs | |
| Downtime caused by quality problems | 80,000 |
| Rework labor and overhead | 60,000 |
| Total | 140,000 |
| External failure costs | |
| Returns arising from quality problems | 77,000 |
| Liability arising from defective products | 89,000 |
| Total | 166,000 |
| Total quality cost | <u>\$541,000</u> |

146. Harvold Company's quality cost report is to be based on the following data:

| \$71,000 |
|----------|
| \$51,000 |
| \$60,000 |
| \$82,000 |
| \$91,000 |
| \$60,000 |
| \$87,000 |
| \$85,000 |
| \$70,000 |
| |

Required:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

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|---|------------------|
| Prevention costs | |
| Technical support provided to suppliers | \$ 91,000 |
| Statistical process control activities | 82,000 |
| Total | 173,000 |
| Appraisal costs | |
| Supplies used in testing and inspection | 51,000 |
| Test and inspection of incoming materials | 71,000 |
| Total | 122,000 |
| Internal failure costs | |
| Net cost of scrap | 85,000 |
| Re-entering data because of keying errors | 60,000 |
| Disposal of defective products | 60,000 |
| Total | 205,000 |
| External failure costs | |
| Lost sales due to poor quality | 87,000 |
| Warranty repairs and replacements | 70,000 |
| Total | 157,000 |
| Total quality cost | <u>\$657,000</u> |
| | |

147. Hartlie Company's quality cost report is to be based on the following data:

| Lost sales due to poor quality | \$11,000 |
|--|----------|
| Rework labor and overhead | \$75,000 |
| Statistical process control activities | \$26,000 |
| Depreciation of test equipment | \$16,000 |
| Re-entering data because of keying errors | \$86,000 |
| Debugging software errors | \$55,000 |
| Quality data gathering, analysis, and reporting | \$48,000 |
| Supervision of testing and inspection activities | \$12,000 |
| Warranty repairs and replacements | \$75,000 |

Required:

Answer:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

Level: Medium LO: 9,10 Appendix: 2B

| \$ 26,000 |
|-----------|
| 48,000 |
| 74,000 |
| |
| 12,000 |
| 16,000 |
| 28,000 |
| |
| 86,000 |
| 75,000 |
| 55,000 |
| 216,000 |
| |
| 11,000 |
| 75,000 |
| 86,000 |
| |

Total quality cost.....

\$404,000

148. Hartness Company's quality cost report is to be based on the following data:

| Depreciation of test equipment | \$75,000 |
|---|----------|
| Rework labor and overhead | \$11,000 |
| Quality circles | \$46,000 |
| Quality training | \$94,000 |
| Test and inspection of incoming materials | \$64,000 |
| Product recalls | \$71,000 |
| Net cost of scrap | \$12,000 |
| Re-entering data because of keying errors | \$52,000 |
| Cost of field servicing and handling complaints | \$25,000 |

Required:

Prepare a Quality Cost Report in good form with separate sections for prevention costs, appraisal costs, internal failure costs, and external failure costs.

| Answer: | |
|---|------------------|
| Prevention costs | |
| Quality training | \$ 94,000 |
| Quality circles | 46,000 |
| Total | 140,000 |
| Appraisal costs | |
| Depreciation of test equipment | 75,000 |
| Test and inspection of incoming materials | 64,000 |
| Total | 139,000 |
| Internal failure costs | |
| Rework labor and overhead | 11,000 |
| Net cost of scrap | 12,000 |
| Re-entering data because of keying errors | 52,000 |
| Total | 75,000 |
| External failure costs | |
| Product recalls | 71,000 |
| Cost of field servicing and handling complaints | 25,000 |
| Total | 96,000 |
| Total quality cost | <u>\$450,000</u> |