

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
B) Yes 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			
00012	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	<u>\$1,350</u>	<u>\$1,800</u>	-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 Finished goods	November 1 \$17,000 \$14,000 ?	November 30 ? \$12,000 \$9,000
Additional Data: Sales revenue Direct labor costs Manufacturing overhead costs Selling expenses Administrative expenses Cost of goods manufactured Raw materials purchases	S	\$102,000 \$10,000 \$12,000 \$14,000 \$16,000 \$40,000 \$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.

	Variable	Fixed	Direct	Direct	Manufact-uring	Period	Oppor-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	Fixed	Direct	Direct	Manufact-uring	Period	Oppor-tunity	Sunk
	Cost	Cost	Materials	Labor	Overhead	Cost	Cost	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	<u>\$580</u>
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	610
	Gross margin	340
	Less: Administrative expenses	180
	Less. Administrative expenses	100
	Less: Selling expenses Net operating income	140

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:	
	Raw materials inventory, beginning	\$ 10
	Add: Purchases of raw materials	190
	Raw materials available for use	200
	Deduct: Raw materials inventory, ending	40
	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
	<u> </u>	
b.	Computation of cost of goods sold	
	Finished goods inventory, beginning	\$ 90
	Add: Cost of goods manufactured	560
		500
	Goods available for sale	650
	Goods available for sale Deduct: Finished goods inventory, ending	
	Deduct: Finished goods inventory, ending	650
		650 130
c.	Deduct: Finished goods inventory, ending	650 130
c.	Deduct: Finished goods inventory, ending Cost of goods sold Income statement	650 130 \$520
c.	Deduct: Finished goods inventory, ending	650 130 \$520 \$870
c.	Deduct: Finished goods inventory, ending	650 130 \$520 \$870 520
c.	Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold Gross margin	\$870 520 350
c.	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.	Deduct: Finished goods inventory, ending Cost of goods sold Income statement Sales Less: Cost of goods sold Gross margin	\$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.

Δ	n	swer.	
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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	<u>\$514,000</u>

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

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:

Test and inspection of incoming materials	\$71,000
Supplies used in testing and inspection	\$51,000
Re-entering data because of keying errors	\$60,000
Statistical process control activities	\$82,000
Technical support provided to suppliers	\$91,000
Disposal of defective products	\$60,000
Lost sales due to poor quality	\$87,000
Net cost of scrap	\$85,000
Warranty repairs and replacements	\$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:

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	
Statistical process control activities	\$ 26,000
Quality data gathering, analysis, and reporting	48,000
Total	74,000
Appraisal costs	
Supervision of testing and inspection activities	12,000
Depreciation of test equipment	16,000
Total	28,000
Internal failure costs	
Re-entering data because of keying errors	86,000
Rework labor and overhead	75,000
Debugging software errors	55,000
Total	216,000
External failure costs	
Lost sales due to poor quality	11,000
Warranty repairs and replacements	75,000
Total	86,000
Total quality cost	<u>\$404,000</u>

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.

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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>