

DISCUSSION QUESTIONS

1. (a) Explain the meanings of the terms "cost" and "expense" as used for financial reporting in conformity with generally accepted accounting principles. The explanation should indicate distinguishing characteristics of the terms, their similarities and interrelationships.
(b) Classify each of the following items as a cost, expense, or other category, with an explanation of how the classification of each item may change: (1) cost of goods sold; (2) uncollectible accounts expense; (3) depreciation expense for plant machinery; (4) organization costs; (5) spoiled goods.
2. Define a cost system.
3. Enumerate the requirements of a good information system.
4. What is the purpose of a chart of accounts?
5. What are the advantages of an electronic data processing system?
6. Enumerate the various classifications of costs.
7. (a) What is a service department? Name a few.
(b) What are some characteristics of a service department in connection with the establishment of a product cost?
8. Expenditures may be divided into two general categories: capital expenditures and revenue expenditures.
(a) Distinguish between these two categories of expenditures and their treatment in the accounts.
(b) Discuss the impact on both present and future balance sheets and income statements of improperly distinguishing between capital and revenue expenditures.
(c) What criteria do firms generally use in establishing a policy for classifying expenditures under these two general categories?
9. Enumerate the five parts of the cost of goods sold section of the income statement.
10. Discuss the complementary relationship between the balance sheet and the income statement.
11. A corporation's annual financial statements and reports were criticized because it was claimed that the income statement does not by any means give a clear picture of annual earning power, and the balance sheet does not disclose the true value of the plant assets. Considering the criticism made, offer an explanation of the nature and purpose of the income statement and of the balance sheet, together with comments on their limitations.

EXERCISES

1. Journal entries for the cost accounting cycle. The following transactions pertain to manufacturing operations:
 - (a) Materials were issued as follows: direct, \$24,500; indirect, \$4,500.
 - (b) A payroll of \$44,000 was recorded. Income tax withheld, \$7,000; FICA tax rate, 7%.
 - (c) The payroll consisted of \$30,000 direct labor, \$6,000 indirect factory labor, and \$8,000 sales salaries. State unemployment insurance is 5.4%, and federal is .8%. The employer's FICA tax rate was 7%.
 - (d) Miscellaneous factory expenses incurred will require a cash expenditure of \$7,500. (Do not journalize the cash payment.)
 - (e) Factory overhead of \$15,000 was charged to production.
 - (f) Cost of production completed during the period totaled \$60,000.
 - (g) Materials purchased totaled \$50,000.

(h) Goods costing \$20,000 were shipped to customers at a sales price of \$26,000.

Required: Prepare journal entries for the above transactions.

2. Cost of goods manufactured statement. Mason Company manufactures special machines made to customer specifications. The following information was available at the beginning of October:

Materials inventory	\$16,200
Work in process inventory.....	3,600

During October, direct materials costing \$20,000 were purchased, direct labor cost totaled \$16,500, and factory overhead was \$8,580.

October 31 inventories were:

Materials inventory	\$17,000
Work in process inventory.....	8,120

Required. Prepare a cost of goods manufactured statement for October, 19A.

(AICPA adapted)

3. Manufacturing costs; cost of goods manufactured; cost of goods sold. The December 31, 19B trial balance of Menges Company showed:

Sales.....	\$14,000,500	Sales returns and allowances.....	\$ 25,200
Purchases (net)	2,400,000	Factory overhead.....	1,885,600
Transportation in	32,000	Advertising expense	155,000
Direct labor	3,204,000	Delivery expense	65,000
Sales salaries.....	200,000		

Inventories:	December 31, 19B	December 31, 19A
Finished goods.....	\$467,400	\$620,000
Work in process.....	136,800	129,800
Materials	196,000	176,000

Required: Determine the (1) total manufacturing cost, the (2) cost of goods manufactured, and the (3) cost of goods sold. (CGAA adapted)

4. Cost of goods sold statement; income statement. The accounting department of Michaelson Company provided the following data for May: sales, \$72,000; marketing expenses, \$3,600; administrative expenses, \$720; other expenses, \$350; purchases, \$36,000; factory overhead, \$10,000; direct labor, \$15,000.

Inventories:	Beginning	Ending
Finished goods.....	\$7,000	\$10,200
Work in process.....	8,000	15,000
Materials	8,000	8,500

Required: Prepare the (1) cost of goods sold statement, and the (2) income statement. (CGAA adapted)

5. Cost of goods sold statement. The following data are provided by the controller of Metaxen Corporation:

Cash.....	\$240,000
Accounts receivable.....	348,000

Inventories:	January 1	December 31	
Finished goods	\$44,200	\$86,000	
Work in process	29,800	38,800	
Materials	88,000	64,000	
Materials purchased			\$ 386,000
Sales discount			8,000
Factory overhead (excluding depreciation)			488,400
Marketing and administrative expenses (excluding depreciation)			344,200
Depreciation (90% manufacturing, 10% marketing and administrative expenses)			116,000
Sales			1,244,000
Direct labor			523,800
Freight on materials purchased			6,600
Rental income			64,000
Interest on bonds payable			16,000

Required: Prepare a cost of goods sold statement.

(CGAA adapted)

6. *Fixed and variable costs.* In 19A, the Mercaldo Company had sales of \$19,950,000, with \$11,571,000 variable and \$7,623,000 fixed costs. 19B sales are expected to decrease 15% and the cost relationship is expected to remain constant (the fixed costs will not change).

Required: Determine Mercaldo Company's expected operating income or loss for 19B.

PROBLEMS

2-1. *Journal entries for the cost accounting cycle.* Selected transactions of the Young Company for February are as follows:

- Materials requisitioned: \$18,500 for production and \$2,800 for indirect use.
- Work completed and transferred to finished goods amounted to \$51,800.
- Materials purchased and received, \$32,000.
- The payroll, after deducting 7% FICA tax, 18% federal income tax, and 5% state income tax, was \$35,000. The wages due the employees were paid.
- Of the total payroll, 55% was direct labor, 18% indirect factory labor, 17% marketing salaries, and 10% administrative salaries.
- An additional 13.2% is entered for employer's payroll taxes, representing 7% FICA tax, .8% federal unemployment tax, and 5.4% state unemployment tax. Payroll taxes related to factory production are charged to the factory overhead control account.
- Factory overhead of \$22,000 was charged to production.
- Other factory overhead consisted of \$9,450 depreciation on the factory building and equipment, \$600 expired insurance, and \$1,250 other unpaid bills.
- Sales on account totaled \$92,120, with a markup of 40% on the cost of goods sold.
- Cash collections from accounts receivable totaled \$76,000.

Required: Prepare journal entries for these transactions.

2-2. Cost of goods manufactured statement. The following data are from the accounts of Millville Company:

Inventories:	July 1, 19A	June 30, 19B	
Finished goods	\$20,000	\$28,000	
Work in process	60,000	36,000	
Materials	40,000	48,000	
Sales discounts			\$ 8,000
Purchase discounts			3,200
Sales			1,800,000
Purchase returns and allowances			20,000
Depreciation—factory machinery			160,000
Factory insurance			50,000
Freight out			8,000
Other factory expenses			16,000
Bond interest expense			50,000
Sales salaries			100,000
Freight in			12,000
Direct factory labor			800,000
Materials purchases			400,000
Advertising expense			12,000

Required: Prepare a cost of goods manufactured statement for the year ended June 30, 19B. (CGAA adapted)

2-3. Cost of goods sold statement. The following information has been taken from the records of Maxwell Company:

Inventories:	January 1	December 31	
Finished goods	\$ 5,000	\$ 7,000	
Work in process	15,000	9,000	
Materials	10,000	12,000	
Materials purchases			\$100,000
Direct labor			200,000
Freight in			3,000
Sales salaries and expenses			25,000
Other factory expenses			4,000
Freight out			2,000
Factory insurance			12,500
Depreciation—machinery			40,000
Purchase returns and allowances			5,000
Sales			350,000
Purchase discounts			800
Sales discounts			2,000

Required: Prepare a cost of goods sold statement for the year. (CGAA adapted)

2-4. Manufacturing costs. The payroll records of the Maher Company show payments for labor of \$400,000, of which \$80,000 is indirect labor. Materials requisitions show \$300,000 for materials used, of which \$280,000 represents direct materials. Other manufacturing expenses total \$124,000. Finished goods on hand at the end of the period are stated at cost, \$176,000, of which \$40,000 is direct materials cost. Factory overhead is allocated on the basis of direct labor cost.

Required: Determine the amount of direct labor and the amount of factory overhead in Finished Goods.

2-5. Profit planning via income statement. The controller of Moffatt Products, Inc. presented the following income statement for the year ended June 30, 19A, to the board of directors:

Sales		\$12,000,000
Cost of goods sold:		
Direct materials	\$3,800,000	
Direct labor	2,900,000	
Factory overhead	<u>2,450,000</u>	<u>9,150,000</u>
Gross profit		\$ 2,850,000
Commercial expenses:		
Marketing expenses	\$1,350,000	
Administrative expenses	<u>1,000,000</u>	<u>2,350,000</u>
Operating income		<u>\$ 500,000</u>

The board discussed the ratio of operating income to sales and decided that for the year ending June 30, 19B, an increase of at least 25% of the present profit is desirable. An expected sales volume increase of 20% will cause all costs except marketing and administrative expenses to increase accordingly. In addition to this increase resulting from the volume change, costs are expected to increase as follows: direct materials, 8%; direct labor, 10%; factory overhead, 3%; marketing expenses, 4%; administrative expenses, 2%. The 3% increase in factory overhead applies to the variable factory overhead only. Fixed factory overhead is considered to remain at the present level of \$1,250,000. Ignore income tax.

Required: Prepare a forecast income statement for the year ending June 30, 19B, incorporating all cost increases as well as management's goal for a higher operating income.

2-6. Income statement relationships. The following information is available for three companies at the end of their fiscal years:

Company A: Finished goods, January 1	\$ 600,000
Cost of goods manufactured	3,800,000
Sales	4,000,000
Gross profit on sales	20%
Finished goods inventory, December 31	?
Company B: Freight in	\$ 20,000
Purchases returns and allowances	80,000
Marketing expenses	200,000
Finished goods, December 31	90,000
Cost of goods sold	1,400,000
Cost of goods available for sale	?
Company C: Gross profit	\$ 96,000
Cost of goods manufactured	340,000
Finished goods, January 1	45,000
Finished goods, December 31	52,000
Work in process, January 1	28,000
Work in process, December 31	38,000
Sales	?

Required: Determine the amounts indicated by the question marks for each company.
(AICPA adapted)

Problem 12-2

DM for the year ended

RM. op. 90000

Purchase 90000

(-) P. return 20000

(-) P. dis. 3200 23200
376800

(+) Freight. in 12000

RM available for use 388800

(-) Ending RM 428800
48600

DM consumed

DL

PC

F. o/H

Dep. Factory machine 160000

Factory Insurance 50000

Other factory exp. 16000

Total F. o/H 226000

Total Mfg Cost

(+) Op. WIP

(-) Cl. WIP

COGM

380000

800000

1180000

1408800

60000

1466800

36000

1430800

P-2-3

M Co.
COGS Statement
For the year ended --

	<u>TK</u>	<u>TK</u>
<u>DM</u>		
Op. RM		10000
(+) Purchase	100000	
(-) G) P. Return	5000	
P. disc	<u>800</u>	
	5800	
	<u>94200</u>	
(+) Freight in	<u>3000</u>	
		97200
RM available for use		<u>107200</u>
(-) Cl. RM		12000
		<u>95200</u>
DM consumed		200000
DL		<u>295200</u>
	Prime cost	
<u>F. O/H</u>		
F. Insurance	12500	
Dep. Machinery	40000	
Other F. exp.	<u>4000</u>	
Total F. O/H		56500
(+) Total mfg. cost		<u>351700</u>

Total mfg. cost	
(+) Op. WIP	
(-) Cl. WIP	
	COGM
(+) Op. FG	
(-) Cl. FG	
	COGS

357700
15000
(9000)
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357700
5000
7000
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355700
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