

## CHAPTER 2

### ANALYZING TRANSACTIONS AND THEIR EFFECTS ON FINANCIAL STATEMENTS

#### SUMMARY OF QUESTION TYPES BY LEARNING OBJECTIVE AND LEVEL OF DIFFICULTY

Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD	Item	LO	LOD
<b>True-False Statements</b>														
1.	1	E	6.	2	E	11.	4	E	16.	5	E	21.	7	E
2.	1	E	7.	3	E	12.	4	E	17.	6	E			
3.	1	M	8.	4	E	13.	4	E	18.	6	E			
4.	2	H	9.	4	M	14.	4	M	19.	6	M			
5.	2	E	10.	4	M	15.	5	E	20.	7	E			
<b>Multiple Choice Questions</b>														
22.	2	M	29.	4	E	36.	4	H	43.	4	M	50.	6	E
23.	2	M	30.	4	M	37.	4	M	44.	4	H	51.	6	H
24.	2	M	31.	4	M	38.	4	E	45.	4	M	52.	6	M
25.	3	E	32.	4	E	39.	4	E	46.	4	M	53.	7	E
26.	3,4	E	33.	4	E	40.	4	H	47.	6	M	54.	7	M
27.	4	E	34.	4	M	41.	4	M	48.	6	M	55.	7	M
28.	4	E	35.	4	H	42.	4	M	49.	6	E	56.	7	H
<b>Exercises</b>														
57.	4	M	59.	4	M	61.	6	M	63.	6	H			
58.	4	H	60.	6	E	62.	6	M						
<b>Matching</b>														
64.	4	M	65.	4	M									
<b>Short-Answer Essay</b>														
66.	6	H	67.	7	M									
<b>Essay</b>														
68.	3	E												

Note: E = Easy M = Medium H = Hard

**SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE**

Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type	Item	Type
<b>Learning Objective 1</b>													
1.	TF	2.	TF	3.	TF								
<b>Learning Objective 2</b>													
4.	TF	5.	TF	6.	TF	22.	MC	23.	MC	24.	MC		
<b>Learning Objective 3</b>													
7.	TF	25.	MC	26.	MC	68.	Es						
<b>Learning Objective 4</b>													
8.	TF	13.	TF	29.	MC	34.	MC	39.	MC	44.	MC	59.	Ex
9.	TF	14.	TF	30.	MC	35.	MC	40.	MC	45.	MC	64.	Ma
10.	TF	26.	MC	31.	MC	36.	MC	41.	MC	46.	MC	65.	Ma
11.	TF	27.	MC	32.	MC	37.	MC	42.	MC	57.	Ex		
12.	TF	28.	MC	33.	MC	38.	MC	43.	MC	58.	Ex		
<b>Learning Objective 5</b>													
15.	TF	16.	TF										
<b>Learning Objective 6</b>													
17.	TF	19.	TF	48.	MC	50.	MC	52.	MC	61.	Ex	63.	Ex
18.	TF	47.	MC	49.	MC	51.	MC	60.	Ex	62.	Ex	66.	SAE
<b>Learning Objective 7</b>													
20.	TF	21.	TF	53.	MC	54.	MC	55.	MC	56.	MC	67.	SAE

Note:      TF = True-False                      Ex = Exercise                      SAE = Short-Answer Essay  
                  MC = Multiple Choice                Ma = Matching                      Es = Essay

## CHAPTER LEARNING OBJECTIVES

### **1. *Identify the accounting standards used by Canadian companies.***

- Canadian public companies (those whose shares trade on a public stock exchange) are required to prepare their financial statements using International Financial Reporting Standards (IFRS).
- Private companies in Canada generally follow Accounting Standards for Private Enterprises (ASPE), but have the option of following IFRS.

### **2. *Identify and explain the qualitative characteristics of useful financial information and how the cost constraint affects these.***

- Standards setters have developed conceptual frameworks (one for IFRS and another for ASPE) to assist them in determining what “useful information” is.
- Useful information has two fundamental qualitative characteristics. It must be relevant (it must matter to users’ decision-making) and it must be representationally faithful (it must represent transactions and balances as they took place or are at present).
- To be relevant, the information must be material and have a predictive value or a confirmatory value.
- To be representationally faithful, the information must be complete, neutral, and free from error.
- Four other enhancing qualitative characteristics have been identified that can increase the usefulness of financial information. These are comparability, verifiability, timeliness, and understandability. These characteristics increase usefulness, but they cannot make useless information useful.

### **3. *Explain the difference between the cash basis of accounting and the accrual basis of accounting.***

- Under the cash basis of accounting, revenues are only recorded when cash is received and expenses are recorded when cash is paid out.
- Under the accrual basis of accounting, revenues are recorded when they are earned and expenses are recorded when they are incurred.
- Accounting standard setters have determined that financial information prepared using the accrual basis of accounting is more useful than that resulting from the use of the cash basis.

### **4. *Analyze basic transactions and record their effects on the accounting equation.***

- Every transaction must affect at least two accounts when it is recorded.
- The accounting equation must remain in balance as transactions are recorded; total assets must equal the sum of total liabilities plus shareholders’ equity.
- Transactions affecting the Retained Earnings account (revenues, expenses, and the declaration of dividends) should be referenced to indicate the nature of the transaction.
- Revenues increase Retained Earnings, while expenses and the declaration of dividends decrease Retained Earnings.

**5. Explain the limitations of using the accounting equation template approach to record transactions.**

- One of the main limitations of the accounting equation template method is that the number of columns that can be used is limited, which means that the number of accounts is also limited. The information resulting from this system may lack the level of detail required by management and other users.
- The other main limitation of the accounting equation template method is the lack of specific accounts for recording revenues, expenses, and dividends declared. Instead, these are recorded in the Retained Earnings account. This makes it difficult and time-consuming for management to quantify revenue and expense information, which is critical for managing any business.

**6. Summarize the effects of transactions on the accounting equation and prepare and interpret a simple set of financial statements.**

- The statement of income is normally the first financial statement prepared. This statement, which includes all revenues and expenses, provides the net income figure that is required for all of the other financial statements.
- The statement of changes in equity is the next financial statement prepared. It illustrates any changes in the number of shares, changes in the dollar value of share capital, and changes to the Retained Earnings account (due to net income or loss or the declaration of dividends).
- The statement of financial position is a vertical presentation of the accounting equation. It includes all assets, liabilities, and shareholders' equity accounts. It is often prepared on a classified basis, meaning that asset and liability accounts are presented in order of liquidity. Current assets are presented separately from non-current assets, while current liabilities are presented separately from non-current liabilities.
- All assets expected to be received, realized, or consumed within the next 12 months are considered to be current assets. All liabilities expected to be settled or paid within the next 12 months are considered to be current liabilities.
- The final financial statement to be prepared is the statement of cash flows. This statement categorizes all transactions of a business that affect cash into three categories: operating activities, investing activities, and financing activities.

**7. Calculate and interpret three ratios used to assess the profitability of a company.**

- The profit margin ratio is calculated by dividing net income by sales revenue. It indicates the percentage of sales revenue that remains after all expenses, including income taxes, have been recorded.
- The return on equity ratio is calculated by dividing net income by average shareholders' equity. It compares profit relative to the amount invested by shareholders. It provides shareholders with a sense of the returns being generated on their equity in the company.
- The return on assets ratio is calculated by dividing net income by average total assets. It provides an indication of how effective management has been at generating a return given the assets at their disposal.

## TRUE-FALSE STATEMENTS

1. All public companies must follow IFRS.
2. The objective of both IFRS and ASPE is to allow financial reporting that is useful to the financial statement users.
3. Public companies are prohibited from being cross listed.
4. Relevance, faithful representation and cost constraint are examples of the fundamental qualitative characteristics.
5. Information is considered to be material if it would impact the decisions of a financial statement user.
6. Information has predictive value if it provides feedback to users on their previous assessments of the company.
7. Revenue recognition criteria are necessary to determine when to recognize revenue when using both accrual and cash accounting methods.
8. The sales of merchandise on credit will cause the retained earnings and long term liabilities accounts to increase.
9. The purchase of equipment costing \$19,500 for \$1,500 down and the balance on account will increase both sides of the Statement of Financial Position Statement of Financial Position equation by \$18,000.
10. The issuance of common shares with a value of \$9,000 to purchase land will increase the common share account.
11.  $\text{Straight-line depreciation} = (\text{cost} + \text{residual value}) \div \text{estimated useful life}$ .
12. Dividends are an expense of doing business.
13. The Classified Statement of Financial Position distinguishes between current and non current assets and liabilities.

14. NBV of an asset is the cost of the asset that has already been expensed.
15. A significant limitation of the template method is the lack of specific retained earnings and dividends declared accounts.
16. The template method can only be used by large companies.
17. Accumulated depreciation is deducted when calculating net income.
18. The purchase of a three-year insurance policy should be reflected on the Statement of Financial Position under current assets.
19. A declaration of dividends results in an increase in liabilities and a decrease in shareholders' equity.
20. The return on assets = net income  $\div$  average total assets.
21. The profit margin ratio = sales  $\div$  net income.

## ANSWERS TO TRUE-FALSE STATEMENTS

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
1.	T	7.	F	13.	T	19.	T
2.	T	8.	F	14.	F	20.	T
3.	F	9.	T	15.	T	21.	F
4.	F	10.	T	16.	F		
5.	T	11.	F	17.	F		
6.	F	12.	F	18.	T		

## MULTIPLE CHOICE QUESTIONS

22. All of the following are examples of enhancing qualitative characteristics EXCEPT
- a) verifiability.
  - b) understandability.
  - c) neutrality.
  - d) timeliness.
23. Information that has been determined based on the best information available using the correct process and with an adequate explanation provided is an example of which fundamental characteristic?
- a) neutral
  - b) free from bias
  - c) timeliness
  - d) verifiability
24. Which of the following enhancing characteristics is achieved if a third party, with sufficient understanding, would arrive at a similar result to that used by the company?
- a) comparability
  - b) understandability
  - c) timeliness
  - d) verifiability
25. Cost of goods sold should be matched up with the revenue generated on each year's Statement of Income because of the
- a) revenue recognition criteria.
  - b) cash basis of accounting.
  - c) actual basis of accounting.
  - d) accrual basis of accounting.
26. A company received a \$6,500 deposit from a customer for goods to be delivered the following month. Under the accrual and cash basis of accounting respectively, the deposit would be recorded as
- | Accrual basis  | Cash basis  |
|----------------|-------------|
| a) a liability | a liability |
| b) a liability | income      |
| c) income      | a liability |
| d) income      | income      |

Use the following information for questions 27–28.

During a recent week, Emmy's Consulting received \$25,000 cash from clients for services performed with a total value of \$75,000. The balance is to be received within 30 days.



27. The effect of this transaction in the accounting records would be
- a) + \$75,000 revenue = + \$25,000 cash + \$50,000 accounts receivable.
  - b) + \$50,000 net income = + \$50,000 assets.
  - c) + \$25,000 revenue = + \$25,000 cash.
  - d) + \$75,000 revenue = + \$75,000 accounts receivable.
28. The effect on the Statement of Financial Position equation for this transaction would be
- a) + \$25,000 cash = – \$50,000 accounts payable + \$75,000 retained earnings.
  - b) + \$25,000 cash – \$50,000 accounts receivable = \$75,000 retained earnings.
  - c) + \$25,000 cash + \$50,000 accounts receivable = + \$75,000 retained earnings.
  - d) + \$25,000 cash = + \$25,000 retained earnings.
29. On July 1, 2017 Albacore Company paid \$5,200 for a 1-year insurance policy. To record this transaction Albacore Company should
- a) decrease cash and increase insurance expense.
  - b) decrease cash and increase prepaid insurance.
  - c) increase accounts payable and increase insurance expense.
  - d) increase cash and increase prepaid insurance.
30. How is cash invested by shareholders in exchange for shares initially recorded in the accounting records?
- a) as an increase in retained earnings, and an increase in cash
  - b) as an increase in long-term investments, and a decrease in cash
  - c) as an increase in common shares, and a decrease in cash
  - d) as an increase in common shares, and an increase in cash
31. The following costs are initially expressed as assets but are then reclassified as expenses when they are used up, EXCEPT for the following:
- a) inventory.
  - b) prepaid insurance.
  - c) prepaid rent.
  - d) short term investments.
32. A new company signed a lease for office space during their first month of business. At that time they paid a total of \$12,000 for first and last months' rent. At the end of the first month, the effect on the financial statements would be
- a) \$12,000 rent expense.
  - b) \$6,000 rent expense and \$6,000 prepaid rent on the Statement of Financial Position.
  - c) \$12,000 prepaid rent on the Statement of Financial Position.
  - d) Nothing recorded because the company has not made any sales yet.
33. A company paid \$22,000 for goods it had purchased last month for resale. What is

the effect of the payment?

- a) a decrease in inventory
- b) a decrease in accounts payable
- c) an increase in cost of goods sold
- d) an increase in inventory

34. A company sold available for resale inventory for cash. What is the effect of this sale?

- a) increase in revenue, increase in COGS, decrease in inventory
- b) increase in revenue, decrease in COGS, increase in inventory
- c) increase in revenue, increase in COGS, increase in inventory
- d) increase in revenue, decrease in COGS, decrease in inventory

35. A piece of equipment was recently purchased for \$10,600 on June 30. It is estimated that it will last for 10 years and have a residual value of \$400. The depreciation expense to be recognized in the year of acquisition, assuming a December year-end, would be

- a) \$1,020.00.
- b) \$510.00.
- c) \$318.75.
- d) \$637.50.

36. If a vehicle was purchased for \$6,500 and has a residual value of \$500, the annual depreciation expense will be \$1,000 if the estimated useful life is

- a) 6 years.
- b) 6.5 years.
- c) 7 years.
- d) 13 years.

37. When \$10,000 of inventory is purchased with a six-month note payable bearing 4% interest, the inventory has a total cost of

- a) \$10,400.
- b) \$10,000.
- c) \$10,200.
- d) \$9,800.

38. The asset that results when a customer buys goods or services on credit is

- a) Accounts receivable.
- b) Accounts payable.
- c) Notes receivable.
- d) Cash.

39. The asset that results from the payment of expenses in advance is

- a) Accounts receivable.
- b) Short term investments.
- c) Inventory.

d) Prepaids.

40. On Oct. 1, 2017 Bonita, Inc. signed a 1-year \$75,000 note payable from First National Bank. The loan plus 6% interest is to be repaid on Sept. 30, 2018. Bonita's year-end is December 31. In its 2017 financial statements Bonita will record interest expense of

- a) \$375.
- b) \$1,125.
- c) \$4,500.
- d) \$75,000.

41. If dividends are declared and paid in the same accounting period, what is the net effect on the accounting equation?

- a) a decrease in retained earnings and an increase in expenses
- b) a decrease in cash and an increase expenses
- c) a decrease in cash and an increase in retained earnings
- d) a decrease in cash and a decrease in retained earnings

42. The purchase of land for a combination of cash and issuance of shares would require which of the following?

- a) increase in Land, increase in Common shares, increase in Cash
- b) increase in Cash, decrease in Common shares, decrease in Land
- c) increase in Land, increase in Common shares
- d) increase in Land, increase in Common shares, decrease in Cash

43. The sale of merchandise to a customer partly for cash and partly on account would require which of the following?

- a) increase in Accounts receivable, increase in Cash, increase in Sales revenue
- b) increase in Cash, decrease in Accounts payable, increase in Sales revenue
- c) increase in Cash, increase in Sales revenue
- d) decrease in Accounts payable, increase in Accounts receivable, increase in Sales revenue

44. When the board of directors declares a \$500 dividend, which of the following would be included in recording the transaction?

- a) increase in Retained Earnings, increase in Dividends Declared
- b) decrease in Cash, decrease in Dividends Payable
- c) increase in Dividends Declared, increase in Dividends Payable
- d) decrease in Dividends Payable, increase in Cash

45. If the company had a loan outstanding, which of the following would be used to record accrued interest at the end of the accounting period?

- a) increase Interest Expense, decrease Cash
- b) increase Interest Expense, increase Interest Payable
- c) decrease Interest Payable, increase Interest Income

d) decrease Interest Payable, decrease Cash

46. Which of the following would be the effect of a transaction to expense prepaid rent for the period?

- a) increase Prepaid Rent, decrease Rent Expense
- b) increase Rent Expense, decrease Cash
- c) increase Prepaid Rent, decrease Cash
- d) increase Rent Expense, decrease Prepaid Rent

47. How are goods purchased for sale at a later date recorded in the financial statements?

- a) as inventory
- b) as prepaid expenses
- c) as cost of goods sold
- d) as operating expenses

48. Which of the following expenses has NO effect on the cash flow of a firm?

- a) salaries expense
- b) interest expense
- c) depreciation expense
- d) cost of goods sold

49. Which of the following assets is NEVER expensed on the Statement of Income?

- a) land
- b) building
- c) inventory
- d) equipment

50. Which of the following will NOT appear on the Statement of Income?

- a) depreciation
- b) interest
- c) cost of goods sold
- d) dividends

51. Which of the following would be the most useful in determining if a company has sufficient resources to continue operations in the short-term?

- a) the profit margin ratio
- b) the return on assets ratio
- c) the cash from operating activities
- d) the cash from financing activities

52. Which of the following transactions would decrease the cash from operating activities?

- a) the payment of dividends

- b) the sale of goods on account
- c) the purchase of goods on account
- d) the payment of wages

53. The accounting basis that attempts to measure performance in the period in which it occurred is the

- a) approval basis.
- b) cash basis.
- c) matching basis.
- d) accrual basis.

Use the following information for questions 54–56.

Revenues .....	\$ 50,000
Cost of goods sold.....	35,000
Operating expenses .....	5,500
Beginning assets .....	350,000
Beginning liabilities .....	245,000
Ending assets.....	450,000
Ending liabilities.....	255,000

54. The profit margin is closest to

- a) 2%.
- b) 19%.
- c) 30%.
- d) 89%.

55. The return on assets is closest to

- a) 2.1%.
- b) 2.4%.
- c) 3.75%.
- d) 11.13%.

56. The return on equity is

- a) 1.0%.
- b) 6.3%.
- c) 7.6%.
- d) 9.0%.

## ANSWERS TO MULTIPLE CHOICE QUESTIONS

Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.	Item	Ans.
22.	c	28.	c	34.	a	40.	b	46.	d	52.	d
23.	b	29.	b	35.	b	41.	d	47.	a	53.	d
24.	d	30.	d	36.	a	42.	d	48.	c	54.	b
25.	d	31.	d	37.	b	43.	a	49.	a	55.	b
26.	b	32.	b	38.	a	44.	c	50.	d	56.	b
27.	a	33.	b	39.	d	45.	b	51.	c		

## EXERCISES

57. Analyze the effect of the following transactions using the basic accounting equation:

- Bought land with an estimated fair value of \$250,000 by issuing 100,000 shares.
- Issued 10,000 common shares for \$25,000 cash
- Purchased a 2-year insurance policy for \$4,800.
- Bought a building for \$100,000. Paid one-fourth in cash and the balance on a 10-year, 10% interest note payable.
- Purchased \$9,000 of merchandise inventory on credit.
- Paid utilities bill for \$750.
- Sold \$8,000 of merchandise inventory for \$16,000 cash.
- Paid \$2,500 on merchandise inventory previously purchased.
- Declared a \$1,000 dividend.
- Recognized that 1 month of the insurance coverage had expired.

**Solution** (12 min.)

ASSETS =							LIABILITIES +			SHAREHOLDERS' EQUITY	
Trans.	Cash	A/R	Inv.	Prepaid expense	Land	Building	A/P	Dividend Payable	Long-term debt	CS	R/E
a)					+250,000					+250,000	
b)	+25,000									+25,000	
c)	-4,800			+4,800							
d)	-25,000					+100,000			+75,000		
e)			+9,000				+9,000				
f)	-750										-750
g)	+16,000										+16,000
g)			-8,000								+8,000
h)	-2,500						-2,500				
i)								+1,000			-1,000
j)				-200							-200
	+7,950		+1,000	+4,600	+250,000	+100,000	+6,500	+1,000	+75,000	+275,000	+6,050
	=363,550						= 363,550				

58. Consider the following independent transactions:

- On January 1, paid, in advance, \$6,000 for first and last month's rent.
- On January 1, paid, in advance, \$3,000 for 12 months insurance.
- Bought a truck to use for delivery purposes for \$45,000 and paid for it with \$10,000 cash and with a loan from the bank of \$35,000 at 8%. The company expects to use the truck for 7 years after which they estimate the residual value will be \$3,000.
- Sold goods worth \$25,000 on credit, that had an inventory cost \$15,000.
- Bought \$5,000 of inventory on account.

### Instructions

For each transaction indicate:

- which accounts are immediately affected and how they are affected,
- which accounts will be affected in the future as a result of the transaction.

**Solution** (15 min.)

1. a) Immediate: Increase in Prepaid Rent of \$6,000 and decrease in Cash of \$6,000.  
b) Future effect: At the end of the month \$3,000 in Rent Expense will be recognized; Prepaid Rent Expense will decrease and Rent Expense will increase which decreases Retained Earnings.
2. a) Immediate: Increase in Prepaid Insurance of \$3,000 and decrease in Cash of \$3,000.  
b) Future effect: Every month a portion of the Prepaid Expense will need to be recognized as Insurance Expense. Prepaid Insurance will decrease \$250/month and Insurance Expense will increase, which decreases Retained Earnings.
3. a) Immediate: Increase in capital assets: truck for \$45,000 and decrease in cash of \$10,000 and increase in loan payable by \$35,000.  
b) Future: The truck will need to be depreciated at a rate of  $(\$45,000 - \$3,000)/7 = \$6,000$  per year. The truck account will decrease (or Accumulated Depreciation will increase) and Depreciation Expense will increase which Decreases Retained Earnings. Increase in Interest Expense and decrease in Cash. Interest Expense is  $(\$35,000 * .08) = \$2,800$  annually. (Answers may vary if students make assumptions about when the interest is paid). The increase in Interest Expense will decrease Retained Earnings.
4. a) Immediate: Accounts Receivable increases \$25,000 and Sales increases \$25,000 which increases retained earnings. Increase in Cost Of Goods Sold expense of \$15,000 and decrease in Inventory of \$15,000. The increase in Cost Of Goods Sold decreases Retained Earnings \$15,000.  
b) Future: When the payments are received on account, the Accounts Receivable will decrease and Cash will increase.
5. a) Immediate: Inventory increases by \$5,000 and Accounts Payable increases by \$5,000.  
b) Future: When the inventory is sold the Inventory account will decrease and the Cost Of Goods Sold account will increase which will decrease retained earnings, all by \$5,000. When payments are made on account, Accounts Payable will decrease and Cash will decrease.

59. Swizzle, Inc. began operations in November of the current year with the following transactions occurring during the month:

- |     |    |   |
|-----|----|---|
| Sep | 1  | Sold 15,000 common shares for \$13 per share.   |
|     | 2  | Paid \$6,300 for three months' rent in advance.   |
|     | 5  | Purchased \$25,000 of equipment paying 25% down and agreeing to pay the balance in two years. |
|     | 6  | Purchased inventory for \$19,000 on credit.   |
|     | 10 | Sold on account \$16,000 of inventory for \$23,000.   |
|     | 15 | Paid wages of \$1,200.  |
|     | 20 | Collected \$8,000 from customers on account.  |
|     | 25 | Paid suppliers \$3,000 on account.  |



- 31     Paid wages of \$1,100.
- 31     Recognized one month's rent expense.
- 31     Recognized one month's equipment depreciation expense. The estimated salvage value is \$4,000 and the estimated useful life is 5 years.

**Instructions**

Indicate the effects of these transactions on the balance sheet equation.

**Solution (20 min.)**

Assets =							Liabilities +		Shareholders' Equity	
Date	Cash	+A/R	+Inv	+Prepaid Rent	+Equip-ment	=	A/P	+N/P	+CS	+R/E
1	+195,000								+195,000	
2	-6,300			+6,300						
5	-6,250				+25,000			+18,750		
6			+19,000				+19,000			
10		+23,000								+23,000
10			-16,000							-16,000
15	-1,200									-1,200
20	+8,000	- 8,000								
25	-3,000						-3,000			
31	-1,100									-1,100
31				-2,100						-2,100
31					-350					-350
Total	+185,150	+15,000	+3,000	+4,200	+24,650	=	+16,000	+18,750	+195,000	+2,250
	232,000						232,000			

60. Shown below are the account balances for Nobles Corp. for their year-end July 31, 2017:

Cash.....	\$ 10,475
Accounts receivable .....	16,640
Inventory .....	98,220
Building .....	188,600
Accumulated depreciation—building	72,600
Accounts payable .....	14,850
Common shares .....	\$154,525
Retained earnings, beginning.....	40,720
Dividends declared.....	7,500
Sales revenue .....	265,000
Cost of goods sold.....	143,600
Salaries and wages expense.....	64,540
Depreciation expense.....	12,850
Utilities expense .....	3,300
Supplies expense .....	1,970

**Instructions**

Given the above information, prepare the

- Statement of Income,
- Statement of Changes in Equity, and
- classified Statement of Financial Position.

**Solution** (20 min.)

a)

**Nobles Corporation  
Statement of Income  
For the year ended July 31, 2017**

Sales revenue .....		\$265,000
Cost of goods sold .....	\$143,600	
Gross Profit .....	121,400	
Expenses		
Salaries and wage expense .....	56,900	
Depreciation expense .....	12,850	
Utilities expense .....	3,300	
Supplies expense .....	<u>1,970</u>	
Total operating expense .....		<u>226,260</u>
Net income .....		<u>\$ 38,740</u>

b)

**Nobles Corporation  
Statement of Changes in Equity  
July 31, 2017**

Retained earnings, August 1, 2017 .....	\$ 40,720
Add: Net income .....	38,740
Deduct: Dividends declared .....	<u>(7,500)</u>
Retained earnings, July 31, 2017 .....	<u>\$71,960</u>

c)

**Nobles Corporation  
Statement of Financial Position  
As at July 31, 2017**

<u>Assets</u>		<u>Liabilities</u>	
<u>Current Assets</u>		<u>Current Liabilities</u>	
Cash .....	\$ 10,475	Accounts payable .....	\$ 14,850
Accounts receivable .....	16,640		
Inventory .....	<u>98,220</u>		
	<u>\$125,335</u>		
<u>Non-current Assets</u>		<u>Shareholders' Equity</u>	
Building .....	188,600	Common shares .....	154,525
Accumulated depreciation .....	<u>(72,600)</u>	Retained earnings .....	<u>71,960</u>
	<u>116,000</u>	Total shareholders' equity	<u>\$226,485</u>

Total Assets .....	<u>\$241,335</u>	Total Liabilities and Shareholders' Equity ..	<u>\$241,335</u>
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61. Leduc Appliances has the following balances in the company ledgers for the year ending 2017:

Mortgage .....	\$80,000	Interest Expense .....	\$10,000
Prepaid Insurance .....	\$ 2,000	Land .....	\$25,000
Short-term invest. ....	\$ 5,000	Office salaries.....	\$70,000
Common Shares .....	\$15,000	Sales Salaries .....	\$100,000
Cash .....	\$ 5,000	Supplies .....	\$20,000
Advertising .....	\$50,000	Insurance .....	\$10,000
Accounts Receivable.....	\$15,000	Depreciation .....	\$20,000
Sales .....	\$600,000	Income tax.....	\$10,000
Accounts Payable .....	\$12,000	Dividend Payments....	\$10,000
Buildings (Net).....	\$100,000	Interest Income.....	\$15,000
Cost of Goods Sold .....	\$300,000	Inventory .....	\$20,000
Note Payable (due in 9 months) ....	\$10,000		
Retained Earnings (Dec 31, 2016)	\$40,000		

Using the above information prepare the following:

- An Statement of Income
- Statement of Changes in Equity
- Classified Statement of Financial Position

**Solution** (20 min.)

a)

**Leduc Appliances  
Statement of Income  
For the year ended December 31, 2017**

Sales revenue .....		\$600,000
Cost of goods sold .....	300,000	
Gross Profit .....	300,000	
Expenses		
Advertising .....	50,000	
Office salaries .....	70,000	
Sales salaries .....	100,000	
Insurance .....	10,000	
Depreciation expense.....	20,000	
Supplies expense .....	20,000	
Interest expense.....	<u>10,000</u>	
Total operating expense .....		<u>580,000</u>
Net operating income .....		20,000
Other Income—Interest .....		<u>15,000</u>
Earnings before taxes .....		35,000

Income tax expense .....	<u>10,000</u>
Net income .....	<u>\$ 25,000</u>

b)

**Leduc Appliances**  
**Statement of Changes in Equity**  
**December 31, 2017**

Retained earnings, January 1, 2017 .....	\$ 40,000
Add: Net income.....	25,000
Deduct: Dividends declared.....	<u>(10,000)</u>
Retained earnings, December 31, 2017 .....	<u>\$55,000</u>

c)

**Leduc Appliances**  
**Statement of Financial Position**  
**December 31, 2017**

<u>Assets</u>		<u>Liabilities</u>	
<u>Current Assets</u>		<u>Current Liabilities</u>	
Cash .....	\$ 5,000	Accounts payable .....	\$ 12,000
Short-term investments .....	5,000	Note payable .....	<u>10,000</u>
Accounts receivable .....	15,000		
Prepaid insurance .....	2,000		
Inventory .....	<u>20,000</u>		
Total Current Assets.....	<u>\$47,000</u>	Total Current Liabilities	22,000
<u>Non-current Assets</u>		<u>Non-current Liabilities</u>	
Land.....	25,000	Mortgage .....	<u>80,000</u>
Buildings (net) .....	<u>100,000</u>		
Total Long term Assets .....	<u>\$125,000</u>	Total Liabilities.....	<u>\$102,000</u>
		<u>Shareholders' Equity</u>	
		Common shares .....	15,000
		Retained earnings .....	<u>55,000</u>
		Total shareholders' equity	<u>\$70,000</u>
Total Assets .....	<u>\$172,000</u>	Total Liabilities and Shareholders' Equity ..	<u>\$172,000</u>

62. Tabele Corporation had the following transactions during the fiscal year ended August 2017:

- a) Purchased inventory costing \$325,000 on account.
- b) Sold inventory to customers for \$725,000; of these sales, \$125,000 were cash sales.
- c) Borrowed \$90,000 from the bank on March 1 at 6% interest payable annually at year-end.
- d) Paid employees \$110,000 in cash.
- e) Purchased equipment costing \$225,000 in cash.
- f) Collected \$520,000 from customers on account.

- g) Purchased \$55,000 of another company's shares as a long term investment.
- h) Issued 50,000 common shares for \$3.75 per share.
- i) Paid suppliers \$340,000.
- j) Collected a \$7,500 cash dividend on the share investment.
- k) Declared and paid a \$13,500 dividend during the year.
- l) Sold a piece of land for proceeds of \$150,000
- m) Paid the interest due on the loan from the bank in part c.

**Instructions**

Prepare a statement of cash flow for 2017.

**Solution** (20 min.)

**Tabele Corporation  
Statement of Cash Flow  
For the Year Ended December 31, 2017**

Cash flows from operating activities:

Receipts from customers ( $\$125,000 + \$520,000$ ) .....	\$645,000	
Dividend from investment .....	7,500	
Payments to suppliers .....	(340,000)	
Payments to employees .....	(110,000)	
Payments for interest ( $.06 \times \$90,000 \times .5$ ) .....	<u>( 2,700)</u>	
Total cash flows from operating activities.....		\$ 199,800

Cash flows from investing activities:

Purchase of equipment.....	(225,000)	
Proceeds on sale of land .....	150,000	
Purchase of long-term investment .....	<u>( 55,000)</u>	
Total cash flows from investing activities .....		(130,000)

Cash flows from financing activities:.....

Issued common shares .....	187,500	
Dividends paid.....	<u>( 13,500)</u>	
Total cash flows from financing activities .....		<u>264,000</u>

Net change in cash during the period .....		<u><u>\$ 333,800</u></u>
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63. Due to the sudden resignation of the accountant at Mason's Mechanics Inc., the sales manager had prepared the annual financial statements, shown below:

**Mason's Mechanics Inc.**  
**Statement of Income**  
**December 31, 2017**

Sales Revenue.....		\$326,000
Cost of goods sold .....	\$ 182,000	
Gross Profit .....	144,000	
Operating expenses:		
Salaries & Wages expense .....	\$24,600	
Rent expense .....	24,000	
Prepaid rent.....	3,600	
Dividends .....	5,000	
Accumulated Depreciation.....	28,400	
Supplies expense .....	<u>2,100</u>	<u>269,700</u>
Earnings before taxes .....		\$56,300
Income tax expense .....		<u>26,000</u>
Net income .....		<u>\$30,300</u>

**Mason's Mechanics Inc.**  
**Statement of Changes in Equity**  
**For the Year Ended December 31, 2017**

Retained earnings, January 1, 2017 .....	\$138,200
Add: Net income.....	<u>30,300</u>
Retained earnings, December 31, 2017 .....	<u>\$168,500</u>

**Mason's Mechanics Inc.**  
**Statement of Financial Position**  
**For Year Ended December 31, 2017**

<u>Assets</u>		<u>Liabilities</u>	
<u>Current Assets</u>		<u>Current Liabilities</u>	
Cash .....	\$ 22,450	Accounts payable .....	\$ 9,600
Accounts receivable .....	11,250	<u>Non-current Liabilities</u>	
Inventory .....	<u>92,000</u>	Long-term debt .....	<u>32,000</u>
.....	<u>125,700</u>	Total Liabilities.....	41,600
<u>Non-current Assets</u>		<u>Shareholders' Equity</u>	
Building .....	172,000	Common shares .....	\$45,000
Less depreciation expense .....	<u>(14,200)</u>	Retained earnings .....	<u>168,500</u>
.....	<u>157,800</u>	Total shareholders' equity	213,500
Total assets.....	<u>\$283,500</u>	Total liabilities and	
		Shareholders' Equity ..	<u>\$255,100</u>

**Instructions**

- a) Identify the errors in the financial statements.
- b) Prepare corrected financial statements for Mason's Mechanics Inc.

**Solution (25 min.)**

a) The errors are:

- The Statement of Financial Position is not classified.
- The Statement of Financial Position is not balanced (Total Assets do not equal Liabilities + Shareholders' Equity).
- Prepaid rent is recorded on the Statement of Income; it should be a current asset.
- Dividends are recorded on the Statement of Income; they should be deducted and shown in the Statement of Changes in Equity. (This is just a presentation error and would not affect the Statement of Financial Position from balancing).
- Depreciation expense should be recorded on the Statement of Income and not deducted from the asset. The accumulated depreciation should be reflected on the Statement of Financial Position and deducted from the related asset.

b)

**Mason's Mechanics Inc.  
Statement of Income  
For the Year Ended December 31, 2017**

Sales Revenue.....		\$326,000
Cost of goods sold .....	\$ 182,000	
Gross Profit .....	144,000	
Operating expenses:		
Salaries & Wages expense .....	\$24,600	
Depreciation expense.....	14,200	
Rent expense .....	24,000	
Supplies expense .....	<u>2,100</u>	<u>246,900</u>
Earnings before taxes .....		\$79,100
Income tax expense .....		<u>26,000</u>
Net income.....		<u><u>\$53,100</u></u>

**Mason's Mechanics Inc.  
Statement of Changes in Equity  
For the Year Ended December 31, 2017**

Retained earnings, January 1, 2017.....	\$138,200
Add: Net income.....	<u>53,100</u>
	191,300
Deduct: Dividends declared.....	<u>( 5,000)</u>
Retained earnings, December 31, 2017 .....	<u><u>\$186,300</u></u>

**Mason's Mechanics Inc.  
Statement of Financial Position  
December 31, 2017**

<u>Assets</u>		<u>Liabilities</u>	
<u>Current Assets</u>		<u>Current Liabilities</u>	
Cash .....	\$ 22,450	Accounts payable .....	\$ 9,600

Accounts receivable .....	11,250	<u>Non-current Liabilities</u>	
Inventory .....	92,000	Long-term debt .....	<u>32,000</u>
Prepaid rent .....	<u>3,600</u>	Total Liabilities.....	<u>41,600</u>
Total Current Assets.....	<u>129,300</u>	<u>Shareholders' Equity</u>	
<u>Non-current Assets</u>		Common shares .....	\$45,000
Building .....	172,000	Retained earnings .....	<u>186,300</u>
Less: Accumulated depreciation....	<u>(28,400)</u>	Total shareholders' equity	<u>231,300</u>
.....	<u>143,600</u>		
		Total liabilities and	
Total assets.....	<u>\$272,900</u>	shareholders' equity ...	<u>\$272,900</u>



## MATCHING

64. For each of the following transactions, indicate if total assets would I increase, D decrease, or NE for no effect.

- \_\_\_\_\_ a) Sale of common shares for cash
- \_\_\_\_\_ b) Purchase of inventory for cash
- \_\_\_\_\_ c) Collection of accounts receivable
- \_\_\_\_\_ d) Payment of dividends
- \_\_\_\_\_ e) Sale of merchandise to customers on account
- \_\_\_\_\_ f) Recording of depreciation expense
- \_\_\_\_\_ g) Payment of accounts payable
- \_\_\_\_\_ h) Recording the cost of goods sold
- \_\_\_\_\_ i) Receipt of cash and signed long-term note payable
- \_\_\_\_\_ j) Purchase of machinery for cash

**Solution** (7 min.)

- a) I
- b) NE
- c) NE
- d) D
- e) I
- f) D
- g) D
- h) D
- i) I
- j) NE

65. For each of the following transactions, indicate the effect on shareholders' equity. Use I to indicate an increase, D to indicate a decrease, or NE for no effect.

- \_\_\_\_\_ a) Sale of goods for cash
- \_\_\_\_\_ b) Payment of operating expenses
- \_\_\_\_\_ c) Sale of goods on credit
- \_\_\_\_\_ d) Payment of dividends previously declared
- \_\_\_\_\_ e) Payment of accounts payable
- \_\_\_\_\_ f) Payment of income taxes.
- \_\_\_\_\_ g) Prepayment of expenses.
- \_\_\_\_\_ h) Recognizing depreciation expense.

**Solution** (5 min.)

- a) I
- b) D
- c) I
- d) NE
- e) NE
- f) D
- g) NE
- h) D

## SHORT-ANSWER ESSAY QUESTIONS

66. Identify which statements dividends declared and paid affect and explain why.

**Solution** (5 min.)

Dividends paid are a distribution of a portion of the company's earnings to the shareholders of the company. As such they are not an expense but are deducted from Retained Earnings when declared. When declared, a liability for Dividends Payable (on the Statement of Financial Position) is created and it is reduced when the dividends are paid, a short time later. The payment of the dividends reduces Cash on the Statement of Financial Position. Dividends Paid appear in the financing activities section of the statement of cash flow as a cash outflow representing a return on the amount invested by shareholders.

67. Behnke Pharmaceuticals accounting system provided the following data for the last two years:

	<u>2017</u>	<u>2016</u>
Revenues.....	\$ 40,000	\$ 25,000
Cost of goods sold .....	22,500	6,000
Operating expenses .....	10,000	5,000
Interest expense.....	1,500	750
Income tax .....	2,500	1,500
Total assets.....	150,000	120,000
Total liabilities.....	80,000	60,000
Total equity .....	70,000	60,000

### Instructions

Calculate the profit margin, return on assets, and return on equity for 2017. Explain what each ratio measures in general, and what each specifically indicates for Behnke Pharmaceuticals.

**Solution** (15 min.)

- a) Profit margin = Net income ÷ Sales Revenue = \$3,500 ÷ \$40,000 = 8.75%  
 Net income = 40,000 – 22,500 – 10,000 – 1,500 – 2,500 = 3,500

This ratio measures how much profit is made on each sales dollar. For Behnke Pharmaceuticals, this means 8.75 cents of every sales dollar is profit.

- b) Return on assets = Net income ÷ Average total assets  
 = \$3,500 ÷ [(120,000 + 150,000)/2]  
 = 2.6%

This ratio measures the profit earned on the average amount invested in the company's assets. For Behnke Pharmaceuticals, each dollar invested in assets earns 2.6 cents.

- c) Return on equity = Net income ÷ Average total shareholders' equity  
 = \$3,500 ÷ [(60,000 + 70,000) ÷ 2]  
 = 5.4%

This ratio measures the profit earned on the average shareholders' investment. For Behnke Pharmaceuticals each dollar invested by the shareholders earns 5.4 cents.

## ESSAY QUESTIONS

68. Explain both the accrual basis and the cash basis of accounting and indicate why most companies use the accrual basis.

**Solution** (8 min.)

The accrual basis of accounting recognizes revenues in the period in which they are earned and expenses in the period in which they are incurred. This basis, coupled with the matching concept, provides a meaningful measure of performance (net income) for each period. It is meaningful because all of the profit generating activity incurred during a period is captured on the Statement of Income.

The cash basis of accounting only recognizes revenues when the related cash is received. Expenses are only recognized when the related cash is paid out. With this basis, if a revenue or expense transaction is incurred in one period, but the relating revenue or expense transaction is not recognized until a later period, then each period's performance is distorted.

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