## 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 | LOL | LOD | Item | LO | LOD | Item |  | LOD |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| True-False Statements |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |  |
| Multiple Choice Questions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Exercises |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 57. | 4 | M | 59. | 4 | M | 61. | 6 | M | 63. | 6 | H |  |  |  |
| 58. | 4 | H | 60. | 6 | E | 62. | 6 | M |  |  |  |  |  |  |
| Matching |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 64. | 4 | M | 65. | 4 | M |  |  |  |  |  |  |  |  |  |
| Short-Answer Essay |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 66. | 6 | H | 67. | 7 | M |  |  |  |  |  |  |  |  |  |
| Essay |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 68. | 3 | E |  |  |  |  |  |  |  |  |  |  |  |  |
| Note: | $E=$ | Easy |  | Med | ium |  | Hard |  |  |  |  |  |  |  |

## SUMMARY OF LEARNING OBJECTIVES BY QUESTION TYPE

| Item | Type | \|tem | Type | Item | Type | Item | Type | Item | Type | Item | Type\| | Item | Type |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Learning Objective 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. | TF | 2. | TF | 3. | TF |  |  |  |  |  |  |  |  |
| Learning Objective 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. | TF | 5. | TF | 6. | TF | 22. | MC | 23. | MC | 24. | MC |  |  |
| Learning Objective 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. | TF | 25. | MC | 26. | MC | 68. | Es |  |  |  |  |  |  |
| Learning Objective 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |  |  |
| Learning Objective 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15. | TF | 16. | TF |  |  |  |  |  |  |  |  |  |  |
| Learning Objective 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 |
| Learning Objective 7 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20. | TF | 21. | TF | 53. | MC | 54. | MC | 55. | MC | 56. | MC | 67. | SAE |
| Note: | $\begin{aligned} & \text { TF = True-False } \\ & \text { MC = Multiple Choice } \end{aligned}$ |  |  |  |  | $\begin{aligned} & \text { Ex }=\text { Exercise } \\ & \mathrm{Ma}=\text { Matching } \end{aligned}$ |  |  |  | $\begin{aligned} & \text { SAE }=\text { Short-Answer Essay } \\ & \text { Es }=\text { Essay } \end{aligned}$ |  |  |  |

## 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 timeconsuming 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. Straight-line depreciation $=($ cost + residual value $) \div$ 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:
a) Bought land with an estimated fair value of $\$ 250,000$ by issuing 100,000 shares.
b) Issued 10,000 common shares for $\$ 25,000$ cash
c) Purchased a 2-year insurance policy for $\$ 4,800$.
d) Bought a building for $\$ 100,000$. Paid one-fourth in cash and the balance on a 10year, $10 \%$ interest note payable.
e) Purchased \$9,000 of merchandise inventory on credit.
f) Paid utilities bill for $\$ 750$.
g) Sold $\$ 8,000$ of merchandise inventory for $\$ 16,000$ cash.
h) Paid $\$ 2,500$ on merchandise inventory previously purchased.
i) Declared a $\$ 1,000$ dividend.
j) 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 |
| i) |  |  |  | -200 |  |  |  |  |  |  | -200 |
|  | +7,950 |  | +1,000 | +4,600 | +250,000 | +100,000 | +6,500 | +1,000 | +75,000 | +275,000 | +6,050 |
|  | =363,550 |  |  |  |  |  |  |  |  |  |  |

58. Consider the following independent transactions:
59. On January 1, paid, in advance, $\$ 6,000$ for first and last month's rent.
60. On Januray 1, paid, in advance, $\$ 3,000$ for 12 months insurance.
61. 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 $\$ 3,000$.
62. Sold goods worth $\$ 25,000$ on credit, that had an inventory cost $\$ 15,000$.
63. Bought $\$ 5,000$ of inventory on account.

## Instructions

For each transaction indicate:
a) which accounts are immediately affected and how they are affected,
b) 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.
6. 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 | +Equipment | $=$ | 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.
Accounts receivable
Inventory
Building $\qquad$Accumulated depreciation-building

Accounts payable $\qquad$
\$ 10,475
16,640
98,220
188,600
Accounts payable .............................
72,600

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
a) Statement of Income,
b) Statement of Changes in Equity, and
c) classified Statement of Financial Position.

Solution (20 min.)
a)

## Nobles Corporation <br> Statement of Income <br> 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....................................................... 1,970
Total operating expense
226,260
Net income.
\$38,740
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.
$(7,500)$
Retained earnings, July 31, 2017
\$71,960
c)

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

Assets
Current Assets
Cash ............................................ \$ 10,475
Accounts receivable ...................... 16,640
Inventory 98,220
\$125,335
Non-current Assets
Building ........................................ 188,600
Accumulated depreciation ............. $\quad(72,600)$
116,000

Liabilities
Current Liabilities
Accounts payable ....... $\$ 14,850$

Shareholders' Equity
Common shares......... 154,525
Retained earnings ...... $\quad \underline{71,960}$
Total shareholders' equity $\$ \underline{26,485}$

| Total Assets .............................. | \$241,335 | Total Liabilities and Shareholders' Equity . | \$241,335 |
| :---: | :---: | :---: | :---: |
| 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:
a) An Statement of Income
b) Statement of Changes in Equity
c) Classified Statement of Financial Position

Solution (20 min.)
a)

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

Sales revenue
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....................................................... 10,000
Total operating expense
580,000
Net operating income
20,000
Other Income-Interest
15,000
Earnings before taxes 35,000

Income tax expense
10,000
Net income
\$25,000
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.
$(10,000)$
Retained earnings, December 31, 2017
\$55,000
c)

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

| Assets |  | Liabilities |  |
| :---: | :---: | :---: | :---: |
| Current Assets |  | Current Liabilities |  |
| Cash ....................................... | \$ 5,000 | Accounts payable ....... | \$ 12,000 |
| Short-term investments | 5,000 | Note payable ............ | 10,000 |
| Accounts receivable | 15,000 |  |  |
| Prepaid insurance | 2,000 |  |  |
| Inventory | 20,000 |  |  |
| Total Current Assets.................... | \$47,000 | Total Current Liabilities | 22,000 |
| Non-current Assets |  | Non-current Liabilities |  |
| Land. | 25,000 | Mortgage ................... | 80,000 |
| Buildings (net) | 100,000 |  |  |
| Total Long term Assets ................ | \$125,000 | Total Liabilities........... | \$102,000 |
|  |  | Shareholders' Equity |  |
|  |  | Common shares ......... | 15,000 |
|  |  | Retained earnings ...... | 55,000 |
|  |  | Total shareholders' equity | \$ $\mathbf{7 0 , 0 0 0}$ |
|  | \$172,000 | Total Liabilities and |  |
| Total Assets .............................. |  | Shareholders' Equity .. | \$172,000 |

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.
I) Sold a piece of land for proceeds of $\$ 150,000$
$\mathrm{m})$ 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
Payments to employees ............................................. $(110,000)$
Payments for interest ( $06 \times \$ 90,000 \times$.5) .................. ( 2,700 )
Total cash flows from operating activities $\qquad$ \$ 199,800
Cash flows from investing activities:
Purchase of equipment.
$(225,000)$
Proceeds on sale of land
150,000
Purchase of long-term investment
$(55,000)$
Total cash flows from investing activities
$(130,000)$
Cash flows from financing activities: 90,000
Issued common shares 187,500
Dividends paid $(13,500)$
Total cash flows from financing activities 264,000

Net change in cash during the period
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. | 2,100 | 269,700 |
| Earnings before taxes |  | \$56,300 |
| Income tax expense. |  | 26,000 |
| Net income. |  | \$30,300 |

## 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................................................................
30,300
Retained earnings, December 31, 2017
$\$ 168,500$

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

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

## 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 <br> 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 | 2,100 | 246,900 |
| Earnings before taxes |  | \$79,100 |
| Income tax expense |  | 26,000 |
| Net income... |  | \$53,100 |

## 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
Deduct: Dividends declared Retained earnings, December 31, 2017

53,100
191,300
$(5,000)$
\$186,300

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

$\frac{\text { Assets }}{\text { Current Assets }}$
Cash ........................................... $\$ 22,450$

Liabilities
Current Liabilities
Accounts payable

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

## MATCHING

64. For each of the following transactions, indicate if total assets would I increase, D decrease, or NE for no effect.
$\qquad$ a) Sale of common shares for cash
$\qquad$ b) Purchase of inventory for cash
$\qquad$ c) Collection of accounts receivable
$\qquad$ d) Payment of dividends
$\qquad$ e) Sale of merchandise to customers on account
$\qquad$ f) Recording of depreciation expense
$\qquad$ g) Payment of accounts payable
$\qquad$ h) Recording the cost of goods sold
$\qquad$ i) Receipt of cash and signed long-term note payable
$\qquad$ j) Purchase of machinery for cash

Solution (7 min.)
a) 1
b) NE
c) NE
d) $D$
e) 1
f) $D$
g) $D$
h) $D$
i) 1
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.
$\qquad$ a) Sale of goods for cash
$\qquad$ b) Payment of operating expenses
$\qquad$ c) Sale of goods on credit
$\qquad$ d) Payment of dividends previously declared
$\qquad$ e) Payment of accounts payable
$\qquad$ f) Payment of income taxes.
$\qquad$ g) Prepayment of expenses.
$\qquad$ h) Recognizing depreciation expense.

Solution (5 min.)
a) 1
b) $D$
c) 1
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:

|  | $\underline{2017}$ | $\underline{2016}$ |
| :--- | ---: | ---: |
| 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 $\div$ Sales Revenue $=\$ 3,500 \div \$ 40,000=8.75 \%$ 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 $\div$ Average total assets

$$
\begin{aligned}
& =\$ 3,500 \div[(120,000+150,000) / 2] \\
& =2.6 \%
\end{aligned}
$$

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 $\div$ Average total shareholders' equity

$$
\begin{aligned}
& =\$ 3,500 \div[(60,000+70,000) \div 2] \\
& =5.4 \%
\end{aligned}
$$

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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