SSC

SMIT SIR COMMERCE

GSEB | ENGLISH MEDIUM

ELEMENTS OF BOOK-KEEPING & ACCOUNTANCY

STANDARD 11

CHAPTER 5

Accounting Equation and Business Transactions

Assets = Capital + Liabilities | Transaction Effects | Equation Method | Deep Practice

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Learn the Concept. Understand the Logic. Write Better Answers.

Why the Accounting Equation Is Powerful

The accounting equation shows double-entry logic in a visual mathematical form. Instead of starting with account rules, we ask: Which asset, liability or capital element changed?

DEEP RESEARCH - CONCEPT ENRICHMENT

ICAI describes the dual-aspect concept as the core of double-entry bookkeeping. Modern terminology often writes the equation as Assets = Liabilities + Equity. GSEB writes it as Assets = Capital + Liabilities. Both express the same fundamental balance.

Chapter Roadmap

Part	Topic
A	Meaning of accounting equation
B	Assets, Capital and Liabilities
C	Four basic effect patterns
D	Purchases, sales, expenses, income and losses
E	Cash/credit and outstanding/receivable items
F	Equation method for a sequence of transactions
G	Relationship with journal and final accounts
H	Practice, MCQs and revision

1. Meaning of Accounting Equation

KEY TERM - ACCOUNTING EQUATION

A statement showing that total assets of a business are always equal to the owner's capital plus outside liabilities.

EXAM IMPORTANT

Assets = Capital + Liabilities
or
A = C + L

This equality remains balanced after every correctly analysed transaction.

2. What Each Side Means

Element	Meaning	Examples
Assets (A)	Resources of business	Cash, bank, stock, debtors, furniture, machine, land
Capital (C)	Owner's claim in business	Initial capital + profit - drawings - losses
Liabilities (L)	Claims of outsiders	Creditors, outstanding expenses, bank loan

REMEMBER THIS

Assets show what the business has. Capital and liabilities show who has claims on those assets.

3. Why the Equation Always Balances

Every resource must come from somewhere: either the owner provided it, outsiders financed it, or business activity generated profit.

Example: Owner brings cash Rs.50,000 -> Assets +50,000 and Capital +50,000. Both sides rise equally.

4. Four Basic Effect Patterns

Pattern	Typical Example
Asset increases + Capital increases	Owner introduces capital / income earned.
Asset decreases + Capital decreases	Expense paid / drawings / loss.
Asset increases + Liability increases	Credit purchase / loan borrowed.
Asset decreases + Liability decreases	Payment to creditor / repayment of liability.

5. Transactions That Change Only Assets

Transaction	Asset Increase	Asset Decrease
Cash deposited into bank	Bank	Cash
Furniture purchased for cash	Furniture	Cash
Goods purchased for cash	Stock/Goods	Cash
Asset sold for cash at book/cost value	Cash	Asset

REMEMBER THIS

One asset up + another asset down -> total assets may remain unchanged.

6. Asset and Liability Transactions

Transaction	Asset Effect	Liability Effect
Goods purchased on credit	Stock increases	Creditor increases
Machine purchased on credit	Machine increases	Supplier liability increases
Bank loan received	Cash/Bank increases	Bank loan increases
Creditor paid	Cash/Bank decreases	Creditor decreases

7. What Increases or Decreases Capital?

Increases Capital	Decreases Capital
Owner introduces capital	Drawings
Profit on sales	Expenses
Commission income	Losses
Dividend / interest income	Goods destroyed / bad loss

SMIT SIR'S NOTE

Income and profit increase the owner's claim. Expenses, losses and drawings reduce it.

8. Transaction Effect Master Table

Transaction	Assets	Capital	Liability
Owner introduces capital	Assets increase	Capital increases	-
Owner withdraws cash	Assets decrease	Capital decreases	-
Cash purchase of goods	One asset increases, another decreases	-	-
Credit purchase of goods	Assets increase	-	Liability increases
Cash sale at profit	Cash rises, stock falls	Capital rises by profit	-
Credit sale at profit	Receivable rises, stock falls	Capital rises by profit	-
Revenue expense paid	Assets decrease	Capital decreases	-
Expense outstanding	-	Capital decreases	Liability increases
Revenue income received	Assets increase	Capital increases	-
Income outstanding	Assets increase	Capital increases	-
Asset purchased for cash	One asset increases, another decreases	-	-
Asset purchased on credit	Assets increase	-	Liability increases
Asset sold for cash at book value	One asset increases, another decreases	-	-
Funds borrowed	Assets increase	-	Liability increases
Goods destroyed by fire	Assets decrease	Capital decreases	-

9. Sale of Goods - Why Profit Changes Capital

1. Stock/goods decrease at cost.
2. Cash or debtor increases at selling price.
3. The difference is profit or loss.
4. Profit increases capital; loss decreases capital.

Example: Goods costing Rs.7,000 sold for Rs.10,000 cash -> Cash +10,000; Stock -7,000; Capital +3,000.

10. Sale at Loss

If selling price is below cost, the difference is a loss and reduces capital.

Example: Goods costing Rs.5,000 sold for Rs.4,000 -> Cash +4,000; Stock -5,000; Capital -1,000.

11. Revenue Expense Paid

When an expense is paid in cash: Asset decreases + Capital decreases.

Example: Salary paid Rs.2,000 -> Cash -2,000; Capital -2,000.

12. Outstanding Expense

When expense is incurred but not yet paid: Capital decreases + Liability increases.

Example: Salary outstanding Rs.1,000 -> Capital -1,000; Outstanding Salary liability +1,000.

REMEMBER THIS

No cash leaves at that moment.

13. Income Received

When revenue income is received: Asset increases + Capital increases.

Example: Commission received Rs.4,000 -> Cash +4,000; Capital +4,000.

14. Income Outstanding / Receivable

When income is earned but not received: Asset (receivable) increases + Capital increases.

Example: Dividend receivable Rs.2,000 -> Receivable asset +2,000; Capital +2,000.

15. Asset Purchase

Cash Purchase: One asset increases and another asset decreases.

Credit Purchase: Asset increases and liability increases.

Transaction	Equation Effect
Machine Rs.8,000 for cash	Machine +8,000; Cash -8,000
Land Rs.25,000 from Radha on credit	Land +25,000; Liability to Radha +25,000

16. Borrowing a Loan

Borrowing does not create income. It creates an asset and an equal liability.

Example: Bank loan Rs.20,000 received -> Cash +20,000; Bank Loan +20,000.

COMMON MISTAKE

Loan received increases cash but does not increase capital/profit.

17. Drawings

Owner's personal withdrawal reduces business assets and capital.

Cash drawings: Cash decreases; Capital decreases.

Goods drawings: Stock/goods decrease; Capital decreases.

18. Goods Destroyed / Lost

Goods destroyed by fire or accident reduce assets and create a loss, so capital decreases.

Example: Goods Rs.1,000 destroyed -> Stock -1,000; Capital -1,000.

19. How to Solve Accounting Equation Problems

1. Create three main blocks: Assets | Capital | Liabilities.
2. Break Assets into sub-columns such as Cash, Bank, Stock, Debtors, Furniture etc.
3. Read one transaction at a time.
4. Identify the two effects.
5. Update only affected columns.
6. Recalculate totals after each transaction.
7. Verify: Total Assets = Capital + Total Liabilities.

20. Worked Equation - Starting Business

Owner starts with Cash Rs.20,000 and Furniture Rs.10,000.

Assets	Amount	Capital	Amount	Liabilities	Amount
Cash	20,000	Capital	30,000	-	0
Furniture	10,000				
Total	30,000	Total	30,000	Total	0

21. Add Credit Purchase

Goods Rs.8,000 purchased from Rajesh on credit.

Stock +8,000; Rajesh liability +8,000.

EXAM IMPORTANT

Assets become Rs.38,000; Capital Rs.30,000 + Liability Rs.8,000 = Rs.38,000.

22. Add Cash Sale with Profit

Goods costing Rs.5,000 sold for Rs.9,000 cash.

Cash +9,000; Stock -5,000; Profit +4,000 -> Capital +4,000.

EXAM IMPORTANT

Profit is the difference between selling price and cost, not the full sales amount.

23. Add Expense and Outstanding Expense

Salary paid Rs.2,000 -> Cash -2,000; Capital -2,000.

Salary outstanding Rs.1,000 -> Capital -1,000; Liability +1,000.

24. Add Income

Commission received Rs.4,000 -> Cash +4,000; Capital +4,000.

Dividend receivable Rs.2,000 -> Receivable asset +2,000; Capital +2,000.

25. Add Computer Bought on Credit

Computer Rs.8,000 from supplier -> Computer +8,000; Supplier liability +8,000.

This changes assets and liabilities, not capital.

Deep Research - Modern Equation Form

DEEP RESEARCH - CONCEPT ENRICHMENT

Modern financial reporting commonly writes the equation as Assets = Liabilities + Equity. GSEB uses Assets = Capital + Liabilities. For a sole proprietor, Capital is the owner's equity. Income increases equity/capital; expenses and drawings decrease it.

Journal Method vs Accounting Equation Method

Basis	Journal Method	Equation Method
Focus	Debit and credit accounts	Assets, Capital, Liabilities
Format	Journal entry	Equation/table
Best For	Formal recording	Understanding transaction effect
Common Principle	Dual effect	Dual effect
Final Check	Debit = Credit	Assets = Capital + Liabilities

Link with Final Accounts

The source explains that the accounting process eventually produces Trading Account, Profit & Loss Account and Balance Sheet.

The equation is closely connected with the Balance Sheet because it explains why assets equal capital plus liabilities.

20 Equation Effect Drills

Transaction	Effect Pattern
Capital introduced in cash	A + ; C +
Cash drawings	A - ; C -
Cash purchase of goods	One A + ; another A -
Credit purchase	A + ; L +
Cash sale at profit	A changes; C + profit
Credit sale at profit	Receivable +; Stock -; C + profit
Expense paid	A - ; C -
Expense outstanding	C - ; L +
Income received	A + ; C +
Income receivable	A + ; C +
Asset purchased for cash	One A + ; another A -
Asset purchased on credit	A + ; L +
Loan borrowed	A + ; L +
Creditor paid	A - ; L -
Goods destroyed	A - ; C -
Goods withdrawn	A - ; C -
Debtor pays cash	Cash + ; Debtor -
Cash deposited in bank	Bank + ; Cash -
Bank charges	Bank - ; C -
Bank interest received	Bank + ; C +

Common Mistakes

COMMON MISTAKE

Wrong idea: Loan received increases capital.
Correct idea: Loan increases asset and liability, not capital.

COMMON MISTAKE

Wrong idea: Credit purchase decreases cash.
Correct idea: No cash moves; stock/asset and liability increase.

COMMON MISTAKE

Wrong idea: Sale increases capital by full selling price.
Correct idea: Only profit increases capital.

COMMON MISTAKE

Wrong idea: Outstanding expense decreases cash.
Correct idea: No payment yet; capital decreases and liability increases.

COMMON MISTAKE

Wrong idea: Income outstanding increases cash.
Correct idea: It increases a receivable asset, not cash.

COMMON MISTAKE

Wrong idea: Cash purchase increases total assets.
Correct idea: One asset increases while cash decreases.

COMMON MISTAKE

Wrong idea: Drawings are business expense.
Correct idea: Drawings reduce capital but are not operating expense.

COMMON MISTAKE

Wrong idea: Goods destroyed create liability.
Correct idea: They reduce stock and capital through loss.

COMMON MISTAKE

Wrong idea: A correct transaction can leave the equation unbalanced.
Correct idea: A complete correctly analysed transaction preserves equality.

Board-Style Question Bank

- Define accounting equation.
- State the accounting equation formula.
- Explain four basic effects on assets, capital and liabilities.
- Explain effects of cash and credit purchases.
- Explain effect of sale at profit and sale at loss.
- Explain revenue expense and outstanding expense.
- Explain income received and income outstanding.
- Explain purchase of asset for cash and on credit.
- Explain loan transaction in accounting equation.
- Prepare accounting equation for a series of transactions.
- Write journal entries and explain equation effects.

Practice MCQs - 25

1. Accounting equation is:

- A. Assets = Capital + Liabilities
- B. Assets = Sales
- C. Cash = Profit
- D. Capital = Expenses

2. Owner introduces capital:

- A. Assets and capital increase
- B. liabilities only
- C. capital decreases
- D. assets decrease

3. Cash drawings:

- A. Assets and capital decrease
- B. both increase
- C. liability increases
- D. income rises

4. Cash purchase of goods:

- A. one asset rises, another falls
- B. liability rises
- C. capital rises
- D. no effect

5. Credit purchase:

- A. Asset and liability increase
- B. cash decreases
- C. capital increases
- D. asset decreases

6. Expense paid:

- A. Asset and capital decrease
- B. liability increases only
- C. capital increases
- D. asset increases

7. Outstanding expense:

- A. Capital decreases, liability increases

- B. cash decreases
- C. asset increases
- D. capital increases

8. Income received:

- A. Asset and capital increase
- B. liability rises
- C. capital falls
- D. asset falls

9. Income receivable:

- A. Asset and capital increase
- B. cash always increases
- C. liability decreases
- D. capital decreases

10. Asset bought for cash:

- A. One asset up, another down
- B. liability up
- C. capital down
- D. income

11. Asset bought on credit:

- A. Asset + liability increase
- B. cash decreases
- C. capital increases
- D. expense

12. Loan borrowed:

- A. Asset + liability increase
- B. income
- C. capital only
- D. expense

13. Creditor paid:

- A. Asset and liability decrease
- B. both increase
- C. capital increases
- D. income

14. Goods destroyed:

- A. Asset and capital decrease

- B. liability increase
- C. cash increase
- D. profit

15. Profit on sale:

- A. Capital increases
- B. liability decreases
- C. capital decreases
- D. no effect

16. Loss on sale:

- A. Capital decreases
- B. capital increases
- C. liability increases
- D. no effect

17. Receivable is:

- A. Asset
- B. Liability
- C. Capital
- D. Drawings

18. Outstanding salary is:

- A. Liability
- B. Asset
- C. Capital
- D. Revenue

19. Stock is:

- A. Asset
- B. Liability
- C. Capital
- D. Drawings

20. Bank loan is:

- A. Liability
- B. Revenue
- C. Asset
- D. Profit

21. Modern form is commonly:

- A. Assets = Liabilities + Equity

- B. Assets = Income
- C. Cash = Capital
- D. Profit = Sales

22. GSEB uses:

- A. A = C + L
- B. A = C - L
- C. L = A + C
- D. C = A + L

23. Correct transaction should:

- A. keep equation balanced
- B. make assets greater always
- C. make liabilities zero
- D. increase capital always

24. Drawings are:

- A. Reduction in capital
- B. Income
- C. Liability income
- D. Sales

25. Best check after each step:

- A. Assets = Capital + Liabilities
- B. Cash = Sales
- C. Expenses = Capital
- D. Stock = Profit

MCQ Answer Key

Q	Ans	Q	Ans	Q	Ans	Q	Ans	Q	Ans
1	A	2	A	3	A	4	A	5	A
6	A	7	A	8	A	9	A	10	A
11	A	12	A	13	A	14	A	15	A
16	A	17	A	18	A	19	A	20	A
21	A	22	A	23	A	24	A	25	A

5-Minute Revision

Equation: Assets = Capital + Liabilities.

Capital Introduced: A+ C+.

Drawings: A- C-.

Credit Purchase: A+ L+.

Creditor Paid: A- L-.

Expense Paid: A- C-.

Expense Outstanding: C- L+.

Income Received: A+ C+.

Income Outstanding: A+ C+.

Goods Destroyed: A- C-.

EXAM IMPORTANT

Ultra-short memory: Every transaction moves at least two parts but the equation must still balance.

Master Revision Sheet

Transaction	Assets	Capital	Liabilities
Capital introduced	+	+	-
Drawings	-	-	-
Cash purchase	+/-	-	-
Credit purchase	+	-	+
Expense paid	-	-	-
Expense outstanding	-	-	+
Income received	+	+	-
Income receivable	+	+	-
Asset on credit	+	-	+
Loan borrowed	+	-	+
Liability paid	-	-	-
Loss of goods	-	-	-

CHAPTER 5 COMPLETE

Accounting Equation and Business Transactions

SMIT SIR'S FINAL MESSAGE

Accounts becomes easy when every entry is understood as a logical financial effect, not a memorised format. First understand the transaction, then apply the rule.

Concept Enrichment Sources Consulted:
GSEB Std. 11 Elements of Accounts Chapter 5 (primary exam source)
ICAI - Dual Aspect / Accounting Equation concepts

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