

# Self-Study Summary Collection

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# Chapter 1

## Study Plan

There are several course topics summarized in this document. They are related in some ways but can be regarded as isolated and therefore have no correlation between topics. Each of the courses is summarized in its own chapter and is mostly based on a course from MIT, Yale, or Stanford. MIT in particular has a great selection of open courses in various scientific topics. Each of the chapters starts with a general info of the course it is based on and various relevant links for the course material. The chapters are in chronological order the courses were taken and as no relation to topics.

**1.1 Business****Financial Markets**



## **Chapter 2**

# **Auditing and Assurance**

This chapter is part of CPA course, the chapter is also known as AUD. Focus: Audit processes, internal controls, risk assessment, and attestation engagements.

### **2.1 Audit Engagements**

Types of audits: financial, compliance, operational. Planning and supervising audits.

### **2.2 Internal Controls**

COSO Internal Control Framework. IT systems and their role in internal controls.

### **2.3 Audit Procedures**

Substantive procedures (e.g., confirmations, observations). Analytical procedures and sampling techniques. Audit evidence and documentation.

### **2.4 Risk Assessment**

Identifying and responding to risks of material misstatement. Fraud risk factors (SAS 99).

### **2.5 Professional Responsibilities**

AICPA Code of Professional Conduct. Ethical responsibilities, independence, and due care.

### **2.6 Other Engagements**

Reviews, compilations, agreed-upon procedures. Reporting on internal controls over financial reporting (ICFR).

## **2.7 Reporting**

Types of audit opinions (unmodified, qualified, adverse, disclaimer). Special considerations for group audits.

## **Chapter 3**

# **Information and System Control**

This chapter is part of CPA course, the chapter is also known as ISC. Focus: Internal controls, IT governance, and risk management related to information systems.

### **3.1 Information Systems and Technology**

Understanding enterprise systems like ERP (e.g., SAP, Oracle). IT general controls and application controls.

### **3.2 IT Governance**

Aligning IT strategy with business objectives. COBIT (Control Objectives for Information and Related Technologies) framework. IT performance measurement and reporting.

### **3.3 Risk Management**

Identification, assessment, and mitigation of IT-related risks. Cybersecurity risks and controls.

### **3.4 Internal Control Frameworks**

COSO Internal Control Framework. Designing, implementing, and evaluating internal controls over financial reporting.

### **3.5 Data Integrity and Security**

Ensuring accuracy and reliability of financial data. Protection against unauthorized access or data breaches.

### **3.6 System Implementation and Audits**

Key considerations in implementing new IT systems. Auditing information systems for compliance and efficiency.



## Chapter 4

# Financial Accounting and Reporting

This chapter is part of CPA course, the chapter is also known as FAR. Focus: Financial accounting and reporting frameworks, rules, and practices for various entities.

### 4.1 Conceptual Framework and Standards

U.S. GAAP and IFRS. Conceptual framework for financial reporting.

### 4.2 Financial Statement Preparation

Balance sheet, income statement, cash flow statement, and statement of changes in equity. Comprehensive income and earnings per share (EPS).

### 4.3 Recognition, Measurement, Valuation

Revenue recognition (ASC 606). Lease accounting (ASC 842). Accounting for financial instruments (e.g., investments, derivatives, hedges).

### 4.4 Government and Nonprofit Accounting

Fund accounting and financial reporting for governmental entities. GASB (Governmental Accounting Standards Board) standards. Accounting for nonprofits under FASB.

### 4.5 Specialized Transactions

Business combinations (M&A) and consolidations. Foreign currency transactions and translations. Accounting changes, error corrections, and contingencies.

## 4.6 Other Topics

Pension and post-retirement benefits. Stock-based compensation. Asset impairments and fair value measurement.

## Chapter 5

# Business Analysis and Reporting

This chapter is part of CPA course, the chapter is also known as BAR. Focus: Business performance analysis, financial reporting, and strategic decision-making.

### 5.1 Financial Statement Analysis

Vertical and horizontal analysis. Ratio analysis (liquidity, profitability, solvency, and efficiency ratios). Advanced cash flow statement interpretation.

### 5.2 Management Reporting

Budgeting and forecasting techniques. Variance analysis and cost control. Key Performance Indicators (KPIs) and dashboards.

### 5.3 Data Analytics and Visualization

Using tools like Power BI, Tableau, and Excel for data analysis. Interpreting trends, anomalies, and business insights. Scenario and sensitivity analysis.

### 5.4 IFRS and GAAP Standards

Key differences and updates in financial reporting standards. Application of IFRS/GAAP in complex scenarios (e.g., leases, revenue recognition, and financial instruments).

### 5.5 Valuation and Corporate Finance

Business valuation methods (DCF, market multiples, and asset-based approaches). Capital structure, cost of capital, and funding decisions.

### 5.6 Strategic Business Analysis

SWOT analysis, Porter's Five Forces, and balanced scorecard frameworks. Strategic alignment of financial goals with business objectives.





## Chapter 6

# Taxation and Regulation

This chapter is part of CPA course, the chapter is also known as REG. Focus: U.S. tax system, business law, ethics, and professional responsibilities.

### 6.1 Ethics and Professional Responsibilities

AICPA Code of Professional Conduct. Circular 230 rules for tax practitioners.

### 6.2 Federal Taxation

#### 6.2.1 Individual Taxation

Gross income, deductions, credits, and tax rates. Alternative minimum tax (AMT).

#### 6.2.2 Business Entity Taxation

Corporate income tax, partnership taxation, and S corporation rules. Special topics: net operating losses (NOLs), depreciation (MACRS).

#### 6.2.3 Property Transactions

Basis, gain/loss recognition, like-kind exchanges, and capital gains.

#### 6.2.4 Tax Exempt Organizations

Filing requirements and operational rules.

### 6.3 Business Law

Contracts: Formation, enforceability, and breach. Agency law and fiduciary duties. Bankruptcy and secured transactions (UCC Articles 2 and 9). Governance structures (corporations, partnerships, LLCs).

## **6.4 Tax Practice**

IRS practice and procedures. Taxpayer penalties, appeals, and tax court processes.

## Chapter 7

# Tax Compliance and Planning

This chapter is part of CPA course, the chapter is also known as TCP. Focus: Tax laws, compliance, and strategic planning for individuals and businesses.

### 7.1 Federal and State Tax Compliance

Filing requirements for individuals, corporations, and partnerships. Tax forms and schedules (e.g., Form 1040, 1120, 1065). Payroll taxes and employment tax compliance.

### 7.2 Income Taxation for Individuals and Businesses

Taxable income, deductions, exemptions, and credits. Corporate tax rules, including double taxation and dividends. Partnership and S-corporation taxation.

### 7.3 Tax Planning Strategies

Timing of income and deductions. Tax loss harvesting and deferral strategies. Estate and gift tax planning.

### 7.4 International Taxation

Taxation of cross-border transactions. Foreign tax credits, transfer pricing, and anti-deferral rules.

### 7.5 Tax Research and Compliance Tools

Use of authoritative sources (IRS publications, tax code, court rulings). Tax preparation software and research databases.

### 7.6 Ethics in Tax Practice

Responsibilities under Circular 230. Addressing conflicts of interest and ethical dilemmas in tax planning.

## 7.7 Advanced Topics

Deferred tax assets and liabilities under ASC 740. Tax implications of mergers, acquisitions, and divestitures. Managing audits, appeals, and disputes with tax authorities.

## Chapter 8

# Corporate Finance and Strategic Financial Management

### 8.1 Corporate Finance

#### 8.1.1 Capital Budgeting

- Investment decision-making processes:
  - Net Present Value (NPV).
  - Internal Rate of Return (IRR).
  - Payback period and discounted payback.
  - Profitability index.
- Cash flow estimation: incremental cash flows, sunk costs, and opportunity costs.
- Scenario and sensitivity analysis in project evaluation.

#### 8.1.2 Cost of Capital

- Weighted Average Cost of Capital (WACC).
- Cost of equity (CAPM, Dividend Discount Model).
- Cost of debt and preferred stock.
- Marginal cost of capital.

#### 8.1.3 Financing Decisions

- Sources of capital: equity, debt, and hybrid securities.
- Optimal capital structure and leverage:
  - Modigliani-Miller theorem (with and without taxes).
  - Trade-off theory, pecking order theory, and signaling theory.
- Dividend policy:
  - Dividend irrelevance theory (MM hypothesis).
  - Practical dividend policies and factors influencing them.

### **8.1.4 Working Capital Management**

- Cash management strategies.
- Inventory management models (e.g., EOQ).
- Accounts receivable management and credit policies.
- Financing working capital: trade credit, lines of credit, commercial paper.

### **8.1.5 Mergers, Acquisitions, and Restructuring**

- Types of mergers (horizontal, vertical, conglomerate).
- Valuation of M&A targets:
  - Comparable company analysis (CCA).
  - Precedent transaction analysis (PTA).
  - Discounted cash flow (DCF) analysis.
- Synergies, due diligence, and integration planning.
- Divestitures, spin-offs, and carve-outs.

### **8.1.6 Risk Management**

- Hedging strategies using derivatives:
  - Forward contracts, futures, options, and swaps.
- Managing interest rate, currency, and credit risk.
- Value at Risk (VaR) and other risk measures.

### **8.1.7 Corporate Governance**

- Role of the board of directors and executive management.
- Agency theory and resolving conflicts of interest.
- Corporate social responsibility (CSR) and stakeholder management.

## **8.2 Strategic Financial Management**

### **8.2.1 Strategic Planning and Financial Strategy**

- Aligning financial strategy with corporate objectives.
- SWOT analysis and Porter's Five Forces applied to financial planning.
- Long-term versus short-term financial strategies.

### 8.2.2 Business Valuation

- Methods of valuation:
  - DCF analysis (free cash flow to the firm, free cash flow to equity).
  - Comparable company multiples (EV/EBITDA, P/E).
  - Asset-based valuations.
- Adjustments for market conditions, control premiums, and minority discounts.

### 8.2.3 Performance Measurement and Evaluation

- Economic Value Added (EVA) and Market Value Added (MVA).
- Return on Invested Capital (ROIC) and its strategic implications.
- Balanced Scorecard and other performance measurement frameworks.

### 8.2.4 Financial Forecasting and Modeling

- Building financial models: assumptions, drivers, and outputs.
- Sensitivity analysis and scenario planning.
- Monte Carlo simulations for risk assessment.

### 8.2.5 Strategic Investment and Financing Decisions

- Evaluating and managing strategic investments in innovation, R&D, and technology.
- Real options analysis (e.g., abandonment, expansion, deferral).
- Optimal financing mix for strategic investments.

### 8.2.6 International Finance

- Foreign exchange risk management: translation, transaction, and economic risk.
- Cross-border financing and multinational capital budgeting.
- Country risk analysis and political risk management.

### 8.2.7 Behavioral Finance and Decision-Making

- Impact of psychological biases on financial decision-making.
- Overconfidence, loss aversion, and herd behavior in corporate finance.
- Strategies to mitigate cognitive biases.

### **8.3 Integration of Corporate Finance and Strategy**

- Financial strategies for competitive advantage.
- Linking corporate finance to corporate strategy and operations.
- Role of financial leadership in driving organizational success.
- Crisis management and financial turnaround strategies.



## Chapter 9

# Strategic Management and Business Policy

### 9.1 Strategic Management

#### 9.1.1 Introduction to Strategic Management

- Definition and importance of strategy.
- Levels of strategy: Corporate, Business, and Functional.
- Strategic management process:
  - Vision, mission, and objectives.
  - Environmental scanning.
  - Strategy formulation, implementation, and evaluation.

#### 9.1.2 External Environment Analysis

- PESTEL Analysis:
  - Political, Economic, Social, Technological, Environmental, Legal factors.
- Industry Analysis:
  - Porter's Five Forces:
    - \* Threat of new entrants.
    - \* Bargaining power of suppliers.
    - \* Bargaining power of buyers.
    - \* Threat of substitutes.
    - \* Industry rivalry.

#### 9.1.3 Internal Environment Analysis

- Resource-Based View (RBV) of the firm.
- VRIO Framework:

- Value, Rarity, Imitability, Organization.
- SWOT Analysis:
  - Strengths, Weaknesses, Opportunities, Threats.
- Value Chain Analysis (Porter’s Value Chain).

#### **9.1.4 Strategy Formulation**

- Corporate-Level Strategies:
  - Growth strategies: Expansion, Diversification.
  - Stability and retrenchment strategies.
- Business-Level Strategies:
  - Cost Leadership.
  - Differentiation.
  - Focus (Cost focus and Differentiation focus).
- Functional-Level Strategies:
  - Marketing, operations, human resources, finance.

#### **9.1.5 Strategy Implementation**

- Organizational structure and design.
- Leadership and corporate culture.
- Resource allocation and policy changes.
- Balanced Scorecard for performance measurement.

#### **9.1.6 Strategy Evaluation and Control**

- Strategic control and feedback loops.
- Measuring performance against strategic goals.
- Corrective actions and continuous improvement.

### **9.2 Business Policy**

#### **9.2.1 Introduction to Business Policy**

- Definition and scope of business policy.
- Relationship between business policy and strategic management.
- Characteristics of effective business policies.

### **9.2.2 Policy Formulation**

- Role of policies in achieving strategic objectives.
- Types of policies:
  - General and specific policies.
  - Operational policies.

### **9.2.3 Policy Implementation and Control**

- Aligning policies with organizational goals.
- Communicating policies across the organization.
- Monitoring and updating policies.

## **9.3 Integrative Concepts in Strategic Management and Business Policy**

- Corporate Governance:
  - Role of the board of directors.
  - Ethical decision-making.
- Strategic Leadership:
  - Role of top management in strategy.
  - Leadership styles and strategic vision.
- Change Management:
  - Strategies for managing organizational change.
  - Resistance to change and overcoming barriers.
- Global Strategic Management:
  - Strategies for internationalization.
  - Managing multinational corporations.

## **9.4 Emerging Trends in Strategic Management**

- Digital transformation and strategy.
- Sustainability and corporate social responsibility (CSR).
- Innovation-driven strategies.
- Agile and adaptive strategic management.



## Chapter 10

# Operations and Supply Chain Management

### 10.1 Introduction to Operations and Supply Chain Management

- Definition and importance of operations management.
- Objectives of operations management: efficiency, effectiveness, and adaptability.
- Key concepts in supply chain management (SCM).

### 10.2 Operations Management

#### 10.2.1 Operations Strategy

- Alignment with business strategy.
- Competitive priorities: cost, quality, delivery, flexibility, and innovation.
- Product and process design decisions.

#### 10.2.2 Process Analysis and Design

- Types of processes: job shop, batch, assembly line, and continuous flow.
- Process mapping and flowcharts.
- Lean processes and Six Sigma principles.
- Capacity planning and bottleneck analysis.

#### 10.2.3 Production Planning and Control

- Forecasting methods:
  - Time series analysis.
  - Causal models and qualitative forecasting.

- Aggregate planning:
  - Strategies: chase, level, and hybrid.
- Master production scheduling (MPS).
- Material requirements planning (MRP).
- Scheduling and sequencing methods:
  - Gantt charts, critical path method (CPM), and program evaluation review technique (PERT).

#### 10.2.4 Quality Management

- Total Quality Management (TQM).
- Statistical process control (SPC) and control charts.
- ISO standards (e.g., ISO 9000).
- Quality improvement tools: Pareto charts, fishbone diagrams.

### 10.3 Supply Chain Management

#### 10.3.1 Introduction to Supply Chains

- Components of a supply chain: suppliers, manufacturers, distributors, retailers, and customers.
- Supply chain flows: material, information, and financial.

#### 10.3.2 Supply Chain Strategy

- Responsive vs. efficient supply chains.
- Bullwhip effect and how to mitigate it.
- Outsourcing, offshoring, and reshoring decisions.

#### 10.3.3 Inventory Management

- Types of inventory: raw materials, work-in-process (WIP), and finished goods.
- Inventory models:
  - Economic order quantity (EOQ).
  - Reorder point and safety stock.
  - Just-In-Time (JIT) and Kanban systems.
- ABC analysis and inventory classification.

#### **10.3.4 Logistics Management**

- Transportation modes and their trade-offs.
- Warehousing and distribution strategies.
- Reverse logistics and returns management.
- Global logistics and trade regulations.

### **10.4 Emerging Trends in Operations and Supply Chain Management**

- Digital supply chains and Industry 4.0.
- Artificial intelligence and machine learning in operations.
- Blockchain for supply chain transparency.
- Sustainability and green supply chain practices.
- Risk management in global supply chains.

### **10.5 Performance Measurement and Metrics**

- Key performance indicators (KPIs) for operations:
  - Cycle time, throughput, and utilization.
  - Overall Equipment Effectiveness (OEE).
- KPIs for supply chain management:
  - Fill rate, order accuracy, and on-time delivery.
  - Cash-to-cash cycle time.
  - Inventory turnover ratio.

### **10.6 Decision-Making Tools in Operations and Supply Chain Management**

- Linear programming and optimization models.
- Decision trees and simulation modeling.
- Multi-criteria decision-making (MCDM).





## Chapter 11

# Global Business and International Management

### 11.1 Introduction to Global Business

- Definition and scope of global business.
- Drivers of globalization:
  - Technological advancements.
  - Trade liberalization and economic integration.
  - Growth of multinational corporations (MNCs).
- Globalization vs. regionalization.

### 11.2 International Trade Theories

- Classical trade theories:
  - Absolute Advantage (Adam Smith).
  - Comparative Advantage (David Ricardo).
- Modern trade theories:
  - Heckscher-Ohlin Theory.
  - Product Life Cycle Theory.
  - Porter's Diamond Model of National Competitive Advantage.

### 11.3 Global Business Environment

#### 11.3.1 Economic Environment

- Differences in economic systems: capitalism, socialism, and mixed economies.
- Emerging markets and developing economies.
- Role of international organizations: World Trade Organization (WTO), International Monetary Fund (IMF), World Bank.

### 11.3.2 Political and Legal Environment

- Political systems: democracy, authoritarianism, and totalitarianism.
- Legal systems: common law, civil law, and religious law.
- International trade regulations and sanctions.
- Intellectual property rights and patents.

### 11.3.3 Cultural Environment

- Understanding cultural differences:
  - Hofstede's Cultural Dimensions.
  - Trompenaars' Seven Dimensions of Culture.
- Cross-cultural communication and negotiation.
- Managing cultural diversity in international business.

## 11.4 Global Strategic Management

### 11.4.1 Global Strategy Formulation

- Global, multi-domestic, and transnational strategies.
- Competitive advantage in global markets.
- Strategic alliances, mergers, and acquisitions.

### 11.4.2 Market Entry Strategies

- Exporting and importing.
- Licensing and franchising.
- Joint ventures and wholly-owned subsidiaries.
- Greenfield investments vs. acquisitions.

### 11.4.3 Global Supply Chain Management

- Managing global logistics and distribution networks.
- Risks and challenges in global supply chains.
- Sustainable global supply chain practices.

## 11.5 International Financial Management

- Exchange rates and currency markets.
- Foreign exchange risk management:
  - Transaction, translation, and economic risks.
- International financing options:
  - Foreign direct investment (FDI).
  - International capital markets.
- Role of multinational financial institutions.

## 11.6 Global Marketing and Branding

- Global vs. local marketing strategies.
- Adapting products and services for global markets.
- Branding in international markets.
- Digital marketing in a global context.

## 11.7 Global Human Resource Management

- Recruitment and selection in international businesses.
- Expatriate management and cultural adjustment.
- Training and development for global managers.
- International compensation and labor relations.

## 11.8 Ethics and Corporate Social Responsibility in Global Business

- Ethical dilemmas in global business.
- Corporate social responsibility (CSR) in international contexts.
- Sustainable business practices in global operations.
- Role of global organizations in promoting ethical standards.

## 11.9 Emerging Trends in Global Business

- Impact of digitalization and e-commerce.
- Global impact of artificial intelligence and automation.
- Role of regional trade blocs and agreements:
  - European Union (EU), ASEAN, NAFTA/USMCA, etc.
- Challenges in global risk management:
  - Geopolitical risks, pandemics, and natural disasters.

# Chapter 12

## Contract Law

### 12.1 Introduction to Contract Law

- Definition and essentials of a valid contract.
- Types of contracts:
  - Written and oral contracts.
  - Express and implied contracts.
  - Bilateral and unilateral contracts.

### 12.2 Formation of a Contract

- Offer and acceptance.
- Intention to create legal relations.
- Consideration:
  - Rules of consideration.
  - Adequacy and sufficiency of consideration.
- Capacity to contract:
  - Minors, mental incapacity, intoxication.
- Legality of purpose.

### 12.3 Terms of a Contract

- Express and implied terms.
- Conditions, warranties, and innominate terms.
- Exclusion clauses and limitation clauses.
- Rules of interpretation.

## 12.4 Performance and Discharge of Contracts

- Performance of a contract.
- Discharge by agreement or consent.
- Discharge by frustration.
- Discharge by breach of contract.

## 12.5 Breach of Contract and Remedies

- Types of breaches:
  - Actual breach.
  - Anticipatory breach.
- Remedies for breach of contract:
  - Damages: compensatory, punitive, nominal, and liquidated.
  - Specific performance.
  - Injunctions.
  - Rescission.

## 12.6 Vitiating Factors in a Contract

- Misrepresentation.
- Mistake.
- Duress and undue influence.
- Illegality and public policy.

## 12.7 Special Types of Contracts

- Contracts of agency.
- Contracts of guarantee and indemnity.
- Contracts of bailment and pledge.
- Electronic contracts and digital agreements.

## 12.8 Consumer Protection in Contract Law

- Unfair contract terms.
- Consumer rights and remedies.
- Sale of goods and services regulations.
- Distance selling and e-commerce laws.

## 12.9 Case Law and Precedents

- Landmark cases in contract law.
- Application of case law to real-world scenarios.





## Chapter 13

# Patent Law and Policy

### 13.1 Introduction to Patent Law

- Definition and purpose of patents.
- History and evolution of patent law.
- International patent systems and harmonization.

### 13.2 Patentability Requirements

- Novelty.
- Inventive step (non-obviousness).
- Industrial applicability (utility).
- Subject matter eligibility.

### 13.3 Patent Application Process

- Preparing a patent application.
- Filing procedures:
  - National applications.
  - International applications (PCT system).
- Examination and prosecution.
- Patent grant and registration.

### 13.4 Patent Specifications and Claims

- Structure of a patent document:
  - Title, abstract, and drawings.

- Detailed description of the invention.
- Drafting patent claims:
  - Independent and dependent claims.
  - Functional and means-plus-function claims.

### 13.5 Patent Rights and Enforcement

- Exclusive rights granted by patents.
- Term of patent protection.
- Infringement of patent rights:
  - Direct, indirect, and contributory infringement.
- Remedies for patent infringement:
  - Injunctions.
  - Damages and accounting for profits.

### 13.6 Patent Policy and Economics

- Role of patents in promoting innovation.
- Balancing incentives for inventors and public access.
- Patent thickets and anti-commons.
- Debate on software patents and business method patents.

### 13.7 International Patent Systems and Agreements

- Paris Convention for the Protection of Industrial Property.
- Patent Cooperation Treaty (PCT).
- TRIPS Agreement (Trade-Related Aspects of Intellectual Property Rights).
- Regional patent systems:
  - European Patent Office (EPO).
  - African Regional Intellectual Property Organization (ARIPO).

### 13.8 Patent Litigation and Dispute Resolution

- Pre-litigation strategies: licensing and settlement.
- Litigation process:
  - Jurisdiction and choice of forum.
  - Patent validity challenges.
- Alternative dispute resolution (ADR) mechanisms.

## **13.9 Emerging Issues in Patent Law and Policy**

- Artificial intelligence and patents.
- Biotechnology and pharmaceutical patents.
- Patents in clean technology and sustainability.
- Open innovation and patent pools.

## **13.10 Ethics and Controversies in Patent Law**

- Ethical considerations in patenting life forms and genes.
- Access to essential medicines and compulsory licensing.
- Patent trolls and abusive litigation practices.
- Public interest and patent waivers during global crises.

## **13.11 Landmark Cases in Patent Law**

- Key cases shaping patent jurisprudence.
- Interpretation of patent claims and scope.
- Cases on patent eligibility and policy impact.



# Chapter 14

## Macroeconomics

### 14.1 Introduction to Macroeconomics

- Definition and scope of macroeconomics.
- Microeconomics vs. macroeconomics.
- Objectives of macroeconomic policy:
  - Economic growth.
  - Price stability.
  - Full employment.
  - Balance of payments stability.

### 14.2 National Income Accounting

- Measurement of national income:
  - Gross Domestic Product (GDP).
  - Gross National Product (GNP).
  - Net National Product (NNP).
- Methods of calculating GDP:
  - Production approach.
  - Expenditure approach.
  - Income approach.
- Nominal vs. real GDP.
- GDP deflator and price indices.

### 14.3 Aggregate Demand and Aggregate Supply

- Components of aggregate demand:
  - Consumption, investment, government spending, net exports.
- Aggregate supply and its determinants.
- Short-run vs. long-run aggregate supply.
- Equilibrium in the AD-AS model.

### 14.4 Economic Growth and Development

- Factors affecting economic growth:
  - Human capital, physical capital, technology, institutions.
- Theories of economic growth:
  - Classical theory.
  - Solow growth model.
  - Endogenous growth theory.
- Economic development vs. economic growth.
- Sustainable development.

### 14.5 Unemployment and Inflation

- Types of unemployment:
  - Frictional, structural, cyclical, seasonal.
- Measurement of unemployment: unemployment rate.
- Types of inflation:
  - Demand-pull inflation.
  - Cost-push inflation.
- Measurement of inflation: Consumer Price Index (CPI), Producer Price Index (PPI).
- Phillips curve: relationship between inflation and unemployment.

### 14.6 Money and Banking

- Functions of money.
- Money supply and its measurement.
- Role of central banks:
  - Monetary policy tools: open market operations, reserve requirements, discount rate.
- Commercial banking system.
- Creation of credit and the money multiplier.

## 14.7 Fiscal Policy

- Definition and objectives of fiscal policy.
- Tools of fiscal policy:
  - Government expenditure.
  - Taxation.
- Budget deficits and public debt.
- Fiscal policy and its impact on aggregate demand.
- Crowding-out effect.

## 14.8 Monetary Policy

- Definition and objectives of monetary policy.
- Types of monetary policy:
  - Expansionary and contractionary policies.
- Monetary policy instruments:
  - Interest rates, open market operations, quantitative easing.
- Inflation targeting and central bank independence.
- Monetary policy transmission mechanism.

## 14.9 International Economics and Open Economy Macroeconomics

- Balance of payments: current account, capital account.
- Exchange rate systems:
  - Fixed, floating, and managed exchange rates.
- Purchasing power parity and interest rate parity.
- International trade theories:
  - Comparative advantage.
  - Heckscher-Ohlin theory.
- Globalization and its impact on economies.

### 14.10 Macroeconomic Schools of Thought

- Classical economics.
- Keynesian economics.
- Monetarist school.
- New classical and real business cycle theory.
- New Keynesian economics.

### 14.11 Macroeconomic Issues and Challenges

- Economic cycles and stabilization policies.
- Income inequality and poverty.
- Global financial crises.
- Climate change and its macroeconomic impact.
- Digital currencies and the future of money.