



CENTRAL BANK OF EGYPT
Egyptian Banking Institute

ACI Operations Preparation Course

Investment and Treasury



5051-4



In-Class



48 hours

Course Description:

The ACI Operations Certificate (New Version) Exam has been designed to cover the basic competency skills for the new entrants in Back and Middle Office roles. A well-trained and efficiently organized Treasury Operations Department is essential to complete every financial market transaction. This Department provides a vital service to the Front Office by ensuring that all funds flow in a timely and correct manner and that all necessary documentation is completed. Taking into consideration the wider job function of staff in the Treasury Operations Department, the Syllabus has been designed to provide a benchmark for competency in all aspects of the operations and settlement processes. It aims to assess candidates' knowledge of the underlying instruments involved in the international financial markets, the processes for efficient settlements, and related basic financial calculations. Candidates should also be able to demonstrate an appreciation of the scope, importance, and role of the Treasury Operations Department, particularly in ensuring an autonomous and independent service to the Front Office.

The Syllabus and the respective exam have been designed with five topics covering the full range of foreign exchange, interest rates, and commodities instruments, as well as their related markets, with questions based on both theoretical and practical knowledge, as well as a financial markets environment and applications with questions based on theory.

Building upon the competence skills provided by the ACI Operations Certificate New Version, future financial market professionals will be expected to prove their knowledge and adherence to good market practices embedded in the FX Global Code and other relevant industry Codes and Regulations.

In addition to the topics outlined above, candidates will be expected to be up-to-date with the latest developments that impact the Treasury Operations Department.

Target Audience:

- Recent entrants to the Treasury Operations Department.
- Other support areas to the Treasury/Dealing Room.
- Internal and external auditors.
- Compliance and risk officers.
- Product control staff.
- Vendors.

Course Objectives:

The ACI Operations Certificate New Version is a precursor to the ACI Diploma New Version exam.

Course Outline

There are five core subject areas in the ACI Operations Certificate (New Version):

- Financial Markets Environment.
- Foreign Exchange.
- Rates (Money and Interest Rate Markets).
- FICC (Fixed Income, Currency, and Commodities) Derivatives.
- Financial Markets Applications.

1. Financial Markets Environment

Overall Objectives: The overall objective of this topic is for candidates to understand the structure of financial markets. Candidates will be able to explain the main phases of the life cycle of a typical financial market transaction. Candidates will be able to explain the payment and confirmation processes that follow deal capture and transaction entry. Candidates will be able to explain the importance of the different settlement and payment systems, as well as the use and handling of the correspondent network and accounts. Candidates will be able to explain the methodology used to match at least two different records, as well as identify, investigate differences, and correct them. Candidates will be able to explain the essentials of a treasury system, the data management for treasury operations, as well as the basic accounting of treasury operations. Candidates will be asked to explain the importance of codes and regulations in financial markets and to understand how regulation and regulatory reporting impact financial markets.

At the end of this topic, candidates will be able to:

- Define foreign exchange markets, money markets, capital markets, and commodities markets.
- Outline how financial markets can be segmented under different criteria: term to maturity, product phase (primary and secondary), trade dates and settlement dates, location, regulation, and dealing structures.
- Distinguish between cash/spot and derivatives/forward markets.
- Distinguish between regulated markets and OTC markets, and understand how both functions work.
- Identify the various types of regulated markets and their dealing structures.
- Outline and describe the roles of the main participants in financial markets.



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- Explain the workflow and key functions of every phase of a financial markets' transaction, from front office execution to management, exception reports, transaction confirmation, settlement (including events of missing and incorrect settlements), and reporting, distinguishing which steps are the responsibility of the front, middle, and back-office roles.
- Understand the reasons for segregation of duties, authorizations, and separate reporting lines in the various steps of a financial market's transaction, including trade generation and capture.
- Explain the importance of Straight Through Processing (STP) related to timely processing, risk, cost, and accuracy, as well as how STP is impacted.
- Understand the usefulness of confirmations, explain the importance of checking and confirmation matching processes, and describe the use of automation in the confirmation procedure.
- Understand SWIFT and its main objective, describe the different types of messages and their usage.
- Describe the different ways in which transaction information can be generated and how transaction information received from the front office must be validated.
- Understand the use of correspondent banks, nostro, and vostro accounts.
- Explain cut-off times for payment with good value and/or short dates.
- Define the different types of domestic and international payment systems.
- Describe different types of settlements such as delivery versus payment, delivery versus delivery, delivery free of payment, netting, Continuous Linked Settlement (CLS), and financial vs physical settlement.
- Outline the CLS system and parties involved.
- Understand the use, functioning, and advantages of bilateral and multilateral netting procedures.
- Explain the mechanism of a booking system, a processing system, and a reconciliation system.
- Distinguish and identify mismatched records and figures (importance of timely identification).
- Understand how to control incoming and outgoing flows of cash and securities.
- Calculate and agree on brokerage, including the verification of discounts.
- Identify the different processes to resolve an outstanding record of a

transaction step by step, as well as the processes to resolve and close outstanding records of transactions.

- Explain the different ways of financial communication related to transactions and the transfer of transactions.
- Explain position keeping and its importance to the processing of transactions.
- Understand the FX Global Code, the Global Precious Metals Code, and the United Kingdom Money Markets Code.
- Describe and outline the development of the FX Global Code, the Global Precious Metals Code, and the United Kingdom Money Markets Code.
- Explain the scope, applications, and objectives of the FX Global Code, the Global Precious Metals Code, and the United Kingdom Money Markets Code.
- Define and identify the Market Participants of the FX Global Code, the Global Precious Metals Code, and the United Kingdom Money Markets Code.
- Explain the leading principles of the FX Global Code and of the Global Precious Metals Code, as well as explain the underpinning principles of the United Kingdom Money Markets Code.
- Understand the Statement of Commitment to the FX Global Code, the Global Precious Metals Code, and the United Kingdom Money Markets Code, and how the respective Statements outline the objectives of each of those Codes.
- Understand what are the main regulations applicable to financial markets and their products, as well as their scope, applications and objectives: Markets in Financial Instruments Directive II (MiFID II, including its Regulation MiFIR), Market Abuse Regulation (MAR), Benchmarks Regulation (BMR), Dodd-Frank Wall Street Reform and Consumer Protection Act, European Market Infrastructure Regulation (EMIR), Basel I, Basel II and Basel III.
- Understand the key role of reporting financial markets' transactions for regulatory compliance.
- Understand how the quality and accuracy of data capture processes are important for regulatory compliance.

2. Foreign Exchange

Overall Objective: The overall objective of this topic is for candidates to explain the characteristics of the main instruments in foreign exchange (including Non-Deliverable Forwards) and precious metals, their features, responsibilities, and associated settlement processes. Candidates will be able to explain the main phases of the Lifecycle of a typical foreign exchange transaction and a typical precious metals transaction. Candidates



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will be able to describe the process for setting benchmark fixings for foreign exchange and precious metals instruments.

At the end of this topic, candidates will be able to:

- Define the features and characteristics of foreign exchange instruments (FX spot, FX outright forward, FX swap, and forward-forward FX swap) and explain their settlement processes.
- Describe relevant responsibilities, transaction Lifecycle processes, and controls for foreign exchange instruments.
- Outline the characteristics of value today and value tomorrow.
- Understand the concepts of historic rate rollovers, and early or late settlement in FX transactions.
- Calculate settlement and close-out amounts correctly.
- Outline the mechanics and roles of benchmark fixings for FX rates.
- Understand the concepts of deliverable and non-deliverable currencies.
- Define the features and characteristics of Non-Deliverable Forwards (NDF) and explain their settlement processes.
- Define the features and characteristics of commodities referred to as precious metals.
- Describe relevant responsibilities, transaction life cycle processes, and controls for precious metals instruments.
- Distinguish between financial and physical delivery in precious metals markets.
- Outline the mechanics and roles of benchmark fixings for precious metals.

3. Rates

Overall Objective: The overall objective of this topic is for candidates to explain the characteristics of the main instruments in money markets and interest rate capital markets (including Islamic money market instruments, short-term securities instruments, notes and bonds, repos and Securities Financing Transactions), their features, responsibilities, and associated settlement processes. Candidates will be able to explain the processes for issuing securities. Candidates will be able to explain the concepts of collateral, its importance for liquidity management, and associated haircuts. Candidates will be able to

explain the process of setting benchmark fixings for money markets and interest rate instruments.

At the end of this topic, candidates will be able to:

- Define the characteristics of the main instruments in money markets and interest rate capital markets.
- Describe relevant responsibilities, transaction life cycle processes, and controls for money markets and interest rate capital markets instruments.
- Define and calculate interest rate benchmark indices, describe their methodologies and usage, and outline the most internationally used benchmark indices in the rates markets (€STR, EURIBOR, SONIA, SARON, SOFR, EFR, TONA, TORF, and JBA TIBOR).
- Explain the settlement process for the main money markets and interest rate capital markets instruments.
- Calculate settlement and close-out amounts for the main instruments in money markets and interest rate capital markets, as well as the related penalty fees.
- Define the main characteristics of Islamic money market instruments (Mudharabah and Murabahah) and their settlement process.
- Define the main characteristics of short-term securities instruments and their settlement process.
- Describe relevant responsibilities, transaction life cycle processes, and controls for short-term securities instruments.
- Define the main characteristics of bond instruments.
- Describe relevant responsibilities, transaction life cycle processes, and controls for bond instruments.
- Describe the main settlement procedures of bond instruments (at maturity, early settlement, and default) and calculate settlement/close-out amounts correctly.
- Distinguish between coupon bonds, zero coupon bonds, covered bonds, sukuk bonds, junk bonds, bond indentures, callable bonds, convertible bonds, and floating rate bonds.
- Understand the price/yield relationship in bond instruments.
- Explain the securities issuing process by corporates.
- Describe the reconciliation of securities held, the use of custodians, as well as the delivery of securities.
- Define the main characteristics of repos.



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- Describe relevant responsibilities, transaction life cycle processes, and controls for repos.
- Understand the use of repos in a bank's liquidity management.
- Define general collateral (GC) and specials.
- Define haircuts and calculate the present and future cash flows of a repo given the value of the collateral and the usage of haircuts.
- Define the main characteristics of Securities Financing Transactions (SFTs).
- Identify the collateral types and their role in SFTs.
- Explain the importance of collateral management for bank liquidity.

4. FICC Derivatives

Overall Objective: The overall objective of this topic is for candidates to explain the characteristics of the main Exchange-Traded and Over-The-Counter (OTC) Derivatives, their features, responsibilities, and associated settlement processes. Candidates will also be able to explain the characteristics of optional and non-optional Derivatives, their features, responsibilities, and associated settlement processes. Candidates will be able to collect collateral definitions and processes in Money Market Futures. Candidates will be able to explain and identify the usage of benchmark fixings for Derivatives. Candidates will be able to explain the importance of mark-to-market calculations for Derivatives.

At the end of this topic, candidates will be able to:

- Distinguish the differences between Exchange-Traded and OTC Derivatives.
- Explain the features and characteristics of Plain Vanilla Interest Rate Derivatives (FRAs, Interest Rate Swaps, Basis Swaps, and Money Market Futures) and their settlement processes.
- Calculate reset/fixing rates and margins for FRAs, Interest Rate Swaps, Basis Swaps, and Money Market Futures.
- Outline the contract specifications of the main Money Market Futures (Euro Overnight Rate Index Future, Euribor Futures, SOFR Index Futures on ICE and CME, SONIA Index Futures on ICE, SARON Index Futures, and JBA Euro Yen TIBOR Futures) and their settlement processes.
- Define collateral procedures in Money Market Futures such as initial margin, margin call, and margin maintenance.
- Understand the correct reconciliation of financial futures positions and margin calls with the clearing agent.

- Explain the features and characteristics of Interest Rate Options and their settlement processes.
- Explain the features and characteristics of Currency Options and their settlement processes, including financial settlement and physical settlement.
- Identify benchmark fixing rates and margins for Currency Options.
- Explain the basic concepts of mark-to-market calculation for Derivatives.

5. Financial Markets Applications

Overall Objective: The overall objective of this topic is for candidates to understand the importance of risk in defining the financial institutions' business models. Candidates will understand and be able to explain and identify major risk groups: market, credit, operational, legal, regulatory, and reputational risk. Candidates will be able to understand how Treasury Trading and Sales, Middle-Office, and Operations have to be structured in the risk management context. Candidates will be able to explain the importance of having strict procedures and controls in place to ensure that no unauthorized or incorrect payments are made and to protect the business from related risks. Candidates will be able to describe the purpose of documentation in settling financial transactions.

At the end of this topic, candidates will be able to:

- Understand the main risk relevance characteristics of the Basel Accords.
- Describe and outline the main risk factors for: Market, Credit, Operational, Legal, Regulatory, and Reputational risk.
- Understand and explain the following aspects of Market Risk:
 - Counterparty, settlement, and delivery risk.
- Understand and explain the following aspects of Credit Risk:
 - Categories, management, and mitigation techniques.
- Understand and explain the following aspects of Operational Risk:
 - Systems, people, processes, and external events.
- Understand and explain the following aspects of Legal, Regulatory, and Reputational Risk:
 - Definition of Legal Risk.
 - Definition of Regulatory Risk.
 - Compliance and changes in legislation, ethical conduct, and disclosure.
 - Definition of Reputational Risk.
- Understand the main risk models.



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- Understand the dangers involved with third-party payments and describe the controls that can minimize those risks.
- Describe the Disaster Recovery (DR) and Business Continuity Plan (BCP) principles.
- Describe the different types of static data and outline the standing data files and tables.
- Define the Standard Settlement Instructions (SSI) management (usage, maintenance, and advantages).
- Understand the management of customer data within the different systems, as well as the basic due diligence procedures to ensure the “Know Your Customer (KYC)” principles applicable to account opening.
- Understand the need to maintain up-to-date records of holiday and settlement files.
- Describe the major types of documentation agreements for financial markets’ transactions.
- Identify key documentation issues and common practices.

Examination Procedures

Format: The examination lasts two hours and consists of seventy multiple-choice questions with four alternative answers. The overall pass level is 60% (forty-two correct answers), assuming that the minimum score criteria for each Topic Basket is met. There is a minimum score criterion of 50% for each Topic Basket. One mark is given for each correctly answered question.

Calculators: Some questions will require the use of a calculator. A basic one will be provided on the computer screen. You may also use your own hand-held calculator, provided it is neither text-programmable nor capable of displaying graphics with a size larger than 2 lines.

| | Topic Basket (5) | Types of Questions | Number of Questions | Total Number of Questions | Minimum of Correct Answers | Minimum Score Level |
|--------------|--------------------------------|------------------------------------|---------------------|---------------------------|----------------------------|---------------------|
| 1 | Financial Markets Environment | Theory | 26 | 26 | 13 | 50% |
| 2 | Foreign Exchange | Theory | 4 | 8 | 4 | 50% |
| | | Practical Exercises / Calculations | 4 | | | |
| 3 | Rates | Theory | 5 | 10 | 5 | 50% |
| | | Practical Exercises / Calculations | 5 | | | |
| | | Theory | 5 | | | |
| 4 | FICC Derivatives | Practical Exercises / Calculations | 5 | 10 | 5 | 50% |
| 5 | Financial Markets Applications | Theory | 16 | 16 | 8 | 50% |
| Total | | | 70 | 70 | | |

Grades

- Pass = 60% - 69.99%
- Merit = 70% - 79.99%
- Distinction = 80% and above

Assessment Strategy:

No final evaluation is required, as the participants will be directly examined through ACI.

Course Language:

English

Prerequisites:

There are no specified entry requirements. However, you need to be satisfied with your ability to study in English at Level 3.



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Instructors' Bio:

Mr. Ibrahim Barie holds a B.Sc. degree in Economics from Cairo University, and he is a banking and finance professional with a demonstrated history of working in the treasury sector. He has ten years of experience, skilled in Securities valuation, Asset management, Treasury, Trading, and Asset & Liability Management. He holds a Graduate Diploma in Banking from the London School of Economics and an MSc in Finance from the University of York, UK. He has extensive experience in training through which he introduced the Chartered Financial Analyst Program "CFA" at Misr International University "MIU", and he is an adjunct faculty member at both the American University in Cairo "AUC" and London School of Economics "LSE" international program at Arab Academy for Science and Technology. He is a certified instructor at the Egyptian Banking Institute (EBI) for treasury courses and the Credit Certificate Program. He is now the Head of Fixed Income & Money Market at Arab Investment Bank and specializes in trading local and international fixed income securities.