



FINANCIAL DERIVATIVES TRADERS CERTIFICATION

Study and Reference Guide (Outline)

OBJECTIVE OF THE EXAMINATION

This Certification Exam is specifically designed to meet the minimum qualification needs of the financial market participants trading in financial derivatives and to ensure that they are competent to provide buying & selling services of these to stock market investors.

TARGET AUDIENCE

This exam is by and large mandated for Brokers, Agents of Brokers, Derivative Traders and Sales Staff of Brokers and Brokerage Firms.

SYLLABUS STRUCTURE

The unit is divided into elements. These are broken down into a series of learning objectives. Each learning objective begins with one of the following prefixes: **know**, **understand**, **be able to calculate** and also **be able to apply**. These words indicate the different levels of skill to be tested. Learning objectives prefixed:

- **know** require the candidate to recall information such as facts, rules and principles
- **understand** require the candidate to demonstrate comprehension of an issue, fact, rule or principle
- **be able to calculate** require the candidate to be able to use formulae to perform calculations
- **be able to apply** require the candidate to be able to apply their knowledge to a given set of circumstances in order to present a clear and detailed explanation of a situation, rule or principle

EXAMINATION SPECIFICATIONS

Each examination paper is constructed from a specification that determines the weightings that will be given to each element. The specification is given below.

It is important to note that the numbers quoted may vary slightly from examination to examination as there is some flexibility to ensure that each examination has a consistent level of difficulty. However, the number of questions tested in each element will not change by more than plus or minus 2.

Examination Specification		
100 Multiple Choice Questions		
Element No.	Elements	Questions
1	Introduction to Derivatives	15
2	Forwards: Mechanics and Valuation	20
3	Interest Rate Swaps: Mechanics and Valuation	10
4	Cross Currency Swaps: Mechanics and Valuation	10
5	Options: Mechanics and Valuation	20
6	Accounting for Derivative Transactions	5
7	Regulatory Developments for Derivative Contracts	5
8	Risk Management of Derivative Transactions	15
Total		100

ASSESSMENT STRUCTURE

- This will be a 150 minutes examination of 100 Multiple Choice Questions (MCQs).
- All questions will carry equal marks.
- There will be no negative marking.

SUMMARY OF THE SYLLABUS

Element 1

INTRODUCTION TO DERIVATIVES

On completion, the candidate should:

- 1.1 know what a derivative instrument is
- 1.2 know the basic structure and features of
 - forwards
 - swaps
 - options
- 1.3 understand a basic application of the derivative contracts
- 1.4 understand how derivative transactions take place

Element 2

FORWARDS: MECHANICS AND VALUATION

On completion, the candidate should:

- 2.1 understand the basic mechanics of forward contracts
- 2.2 understand the application of forward contracts
- 2.3 know the regulatory requirements of forward contracts
- 2.4 understand basic valuation concepts for forward contracts
- 2.5 be able to calculate the value of a forward contract
- 2.6 be able to calculate the value of:
 - FX Forward
 - Gold Forward Contract

Element 3

INTEREST RATE SWAPS

On completion, the candidate should:

- 3.1 understand the basic mechanics of interest rate swaps
- 3.2 understand the application of interest rate swaps
- 3.3 know and understand the concept of comparative advantage

- 3.4 know the regulatory requirements of interest rate swaps
- 3.5 understand basic valuation concepts for interest rate swaps
- 3.6 be able to calculate the value of an interest rate swap
- 3.7 be able to apply this knowledge to create hedging strategies

Element 4

CROSS CURRENCY SWAPS

On completion, the candidate should:

- 4.1 understand the basic mechanics of cross currency swaps
- 4.2 understand the application of cross currency swaps
- 4.3 know and understand the concept of comparative advantage
- 4.4 know the regulatory requirements of cross currency swaps
- 4.5 understand basic valuation concepts for cross currency swaps
- 4.6 be able to calculate the value of an interest rate swap
- 4.7 be able to apply this knowledge to create hedging strategies

Element 5

OPTIONS: MECHANICS AND VALUATION

On completion, the candidate should:

- 5.1 understand the basic mechanics of an option contract
- 5.2 know the fundamental concept in option valuation
- 5.3 understand and be able to use the Black Scholes model for option valuation
- 5.4 understand and be able to use the Binomial model for option valuation
- 5.5 understand and be able to use the Monte Carlo method for option valuation
- 5.6 be able to apply Black Scholes, Binomial and Monte Carlo in MS Excel
- 5.7 be able to apply valuation techniques to value Employee Stock Option Contracts

Element 6

ACCOUNTING FOR DERIVATIVE TRANSACTIONS

On completion, the candidate should:

- 6.1 know IAS on derivatives
- 6.2 know hedge accounting rules
- 6.3 understand hedge effectiveness testing techniques
- 6.4 Case study: Hedge Accounting for Forwards, Swaps and Options

Element 7

REGULATORY DEVELOPMENTS FOR DERIVATIVE CONTRACTS

On completion, the candidate should:

- 7.1 know the Securities & Futures Advisers (Licensing & Operations) Regulations, 2017
- 7.2 Know the existing derivative products in the local market, and their regulations
- 7.3 Know the SBP regulations for trading in Foreign Exchange derivatives
- 7.4 know the regulatory environment of derivatives, including:
 - PSX Rule Book
 - Futures Market Act 2016
- 7.5 know Dodd Frank Act

Element 8

RISK MANAGEMENT OF DERIVATIVE TRANSACTION

On completion, the candidate should:

- 8.1 understand market risk
- 8.2 know Greeks for options
- 8.3 understand credit risk
- 8.4 understand operational risk