



Risk Management Certification

Summary of the Syllabus

OBJECTIVE OF THE STUDY GUIDE

The objective of this study guide is to provide in-depth knowledge of risk management and surveillance in capital markets to candidates wishing to take Institute of Financial Markets of Pakistan (IFMP) Risk Management and Surveillance certification. The candidates are expected to gain risk management and surveillance knowledge for capital market with some knowledge of banking system and regulations governing the banking system. Significance of various risks is different for banking sector and capital markets and therefore our emphasize will remain on market, operational and liquidity risks, which are of more concern to institutions in capital markets instead of credit risk, which has greater significance for banking sector. At the end of this course, the candidate should be able to;

- Explain risk, history of risk management, development in risk management, Holistic risk management, ways to identify, measure and classify risks, the management process of risk, various sources from which risk emanates and risks that participants of capital markets are exposed to.
- Explain nature of various financial markets in Pakistan, liquidity drivers in the market, various products that are being traded in those markets specifically with respect to Pakistani markets, risks associated with those products and dependency of financial markets on each other that all together forms a systemic risk.
- Understand the importance of capital in financial institutions, Basel I & Basel II with their pros and cons, economic and regulatory capital, three pillars of Basel II, regulations that govern capital markets in Pakistan.
- Understand credit ratings and their meanings, concepts in measuring credit risk including probability of default, loss given default, recovery rates, default rates, KMV-Merton approach to credit risk. Candidates should be able to understand key concepts of VaR, measurement of market risk using all three methodologies of VaR and limitations of VaR model. Candidates should be able to calculate and interpret interest rate risk using duration gap methodology. Understanding of stress test and scenario analysis, quantification of liquidity risk.
- Understand the management of credit, market and liquidity risks. Various steps that needs to be taken in management of these risks at board and senior management level as well as on operational levels. Should understand fund managers' hedging strategies for market risk.
- Understand the procedure of formulation and implementation of operational risk framework. Identification, assessment and monitoring of operational risk. Management of operational risk, supervisory guidelines on operational risk and operational risk under Basel II.
- Understand the nature of derivatives, understanding forward, future, swaps and options with their use in hedging as external technique for managing risks, pricing and revaluation of forwards and swap contracts.

- Understand surveillance and its importance for the systemic risk, the requirements for effective surveillance and operational structure of surveillance departments with its functions in capital markets of Pakistan.
- Understand techniques that are being used for surveillance in Pakistan, market manipulation, investigating market manipulation, insider trading, its significance and regulations governing insider trading in Pakistan, surveillance procedure to identify insider trading and investigation of insider trading.

TARGET AUDIENCE

This exam is by and large mandated for the people working at Risk Management Companies.

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 Risk Management	20
2	Introduction to Financial Markets	5
3	Regulatory Framework	15
4	Risk Management Models	15
5	Management of Risks	10
6	Operational Risks	10
7	Derivatives and Risk Management	10
8	Introduction to Surveillance	5
9	Operational Scope of Surveillance	10
	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 Risk Management

- What is Risk
- Sources of Risk
- The Perception of Risk
- Role of Risk Management
- The Risk Management Process
- Risk Management and Corporate Governance
- Risk Identification
- Risk Measurement
- Issues in Risk Measurement
- Risk Control
- Risks in Capital Markets

ELEMENT 2

Introduction to Financial Markets

- Liquidity Drivers in Market
- Different Types of Market
- The Money Market

ELEMENT 3

Regulatory Framework

- Financial Regulations in Financial Industry
- Role of Regulatory Capital
- Regulations in Capital Market

ELEMENT 4

Risk Measurement Models

- Measurement of Credit Risk
- Measurement of Market Risk
- Quantification of Liquidity Risk
- Problems in Risk Quantification and Forecasting

ELEMENT 5

Management of Risks

- What Does Exposure Management Aim To Achieve?
- Management of Credit Risk
- Management of Market Risk
- Management of Liquidity Risk

ELEMENT 6

Operational Risk

- Operational Risk Strategy
- Operational Risk Identification and Assessment
- Operational Risk Monitoring and Mitigation
- Operational Risk and Supervisory Guidelines
- Final Thoughts on Operational Risk

ELEMENT 7

Derivatives and Risk Management

- Introduction
- Uses of Derivatives
- Types of Derivative Contracts
- Closing Thoughts on Derivatives

ELEMENT 8

Introduction to Surveillance

- Why surveillance is required at stock Exchange level
- Know the structure of surveillance organization

ELEMENT 9

Operational Scope of Surveillance

- Function and operations
- Market Manipulation
- Insider Trading

RECOMMENDED READINGS

The next section of this study guide covers a brief extract from some of the below mentioned documents. Candidates are advised to study the respective documents (in detail and original) which are available free-to-download from IFMP's website and / or the respective organization's websites.

1. Anti-Money Laundering Act, 2010
2. Anti-Money Laundering Ordinance, 2009
3. Anti-Money Laundering Regulations, 2008
4. Anti-Money Laundering Rules, 2008
5. Bond Automated Trading System (BATS) Regulations, 2009
6. Broker Agents Registration Rules, 2001
7. CDC Act, 1997
8. CDC Regulations
9. Code of Corporate Governance, 2012
10. Companies Ordinance, 1984
11. Debt Securities Trustee Regulations, 2012
12. Directive to Brokers on Conduct of Business (February 7, 2003)
13. Income Tax Ordinance, 2001
14. ISE/ KSE/ LSE Listing Regulations
15. KSE Investor Protection Fund Regulations
16. KSE Cash Settled Future Contract Regulations (October, 2008)
17. KSE Members Default Management Regulations (September, 2009)
18. KSE Deliverable Future Contract Regulations (April, 2009)
19. General Regulations of KSE Amended (August 20, 2009)
20. Karachi Automated Trading System (KATS) Regulations (March, 1998)
21. KSE Investor Protection Fund Regulations
22. NCCPL Procedure, 2003
23. NCCPL Regulations, 2003
24. NCEL General Regulations (May, 2007)
25. Commodity Exchange and Futures Contracts Rules (March, 2005)
26. Regulations Governing Over the Counter Market (September, 2009)
27. Regulations Governing Risk Management of KSE Ltd. (March, 2013)
28. Regulations Governing System Audit of Brokers of Exchanges, 2004
29. SECP Act, 1997
30. Securities (Leveraged Market and Pledging) Rules, 2011
31. Securities Act, 2015
32. Securities and Exchange Rules, 1971
33. Short Selling Regulations, 2002
34. Stock Exchange Members (Inspection of Books and Record) Rules, 2001