Exam Name & Syllabus version	Update/Development	Action Effective From/To	Date Posted
Technology in Investment Management V10	The following updates have been made to the workbook edition. Chapter 6, Section 2.1.1 second bullet point has been amended to read: • On the value date of the **end leg**, the securities are returned to the lender and the collateral is returned to the borrower. At the same time, the lender is paid a lending fee, and the borrower is paid interest on the collateral. MCQ, Answers to Multiple Choice Questions, A3 has been amended to read: **3. Answer: B Chapter 6, Section 2.1** The business purpose of a stock loan is to enable one party to lend securities to another. The transaction has a start leg and an end leg. On the value date of the start leg, the lender delivers securities to the borrower in exchange for cash or other collateral. The purpose of the collateral is to provide the lender with security in case the borrower does not return the securities that were borrowed. On the value date of the end leg, the securities are returned to the lender and the collateral is returned to the borrower.	11/05/2021 – 10/05/2022	19/07/2021
Technology in Investment Management V10	The following update has been made to the workbook edition. Chapter 7, Section 3.1.1, third table, third and fourth row has been amended to read: | General Ledger Account Category	Accounting Convention	Finance Sector Examples
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Revenue	Credit	Net interest income, ie, interest received less interest paid
		Fees for client advice
Expenses	Debit	Salaries and other employee benefits
		Rent, property taxes, heat, light, power, etc
		All other expenses of running the business		11/05/2021 – 10/05/2022	07/09/2021
Technology in Investment Management V10	The following updates have been made to the workbook edition. Chapter 2, Section 1.4.12 has been amended to read: For both professional and retail clients (where firms provide services other than investment advice) MiFID II requires firms to provide a basic written agreement setting out the essential rights and obligations of the firm. There is no MiFID II obligation to provide client agreements to professional clients or when no investment advice is being given.	11/05/2021 – 10/05/2022	28/09/2021

Chapter 3, Section 3.2 has been amended to read:

Following the passing of the Financial Services Act 2012, clearing houses are now recognised by the Bank of England. As at December 2020, the Bank recognises the following UK clearing houses:

Chapter 3, Section 4.1 second paragraph has been amended to read:

This section describes the major services that are offered by the two market-leading suppliers of real-time market data – Refinitiv and Bloomberg – and also deals with some of the technology implications of using and distributing this data throughout the firm. Refinitiv was founded in 2018 having previously been known as Thomson Reuters. Blackstone Group and Thomson Reuters jointly owned the Refinitiv business. It is today a subsidiary of the London Stock Exchange Group (LSEG) having been acquired in January 2021.

Chapter 3, Section 4.2 has been amended to read:

4.2 Functionality Provided by the Information Vendors

There are a number of information vendors available in the market, with Bloomberg and Refinitiv being two of the most popular and best-known. However, all facilities provided can be broken down into three groups – namely:

1. **Pre-trade – liquidity and price discovery** – both vendors act as 'consolidators' of market information; and as a result a securities firm can use the vendors' screens to discover the best price across a number of exchanges and trading venues. In addition, both vendors display relevant data from the OTC and FX markets. Refinitiv supplies round-the-clock news and real-time prices from over 2,000 market makers and brokers, covering 175 currencies. Pre-built calculators allow for complex analysis. Refinitiv provides official daily market fixings for over 50 currencies.
2. **Pre-trade – analytics** – both vendors supply analytical tools to perform 'what if' scenario analysis and to price complex derivative instruments and strategies.
3. **Trade execution and post-trade services** – both firms provide facilities for conversational dealing (ie, dealing using instant-messenger type services) and also link traders, brokers, dealers and execution venues through an order-routing hub. Order-routing hubs are discussed in chapter 4. Refinitiv's Trade Notification Service (TNS) is a real-time messaging hub for confirming FX trade information back to counterparties.

Chapter 3, Section 4.3.1 bullet points have been amended to read:

The timelines for reporting are as follows:

• **RTS1** – shares, depositary receipts, exchange-traded funds, certificates, and other similar financial instruments and on transaction execution obligations in respect of certain shares on a trading venue or by a

systematic internaliser – as near to real time as possible, but within one minute of execution.
• **RTS2** – bonds, structured finance products, emission allowances, and derivatives – as near to real time as possible, but within five minutes of execution.

Chapter 3, End of Chapter Questions, Q8 has been amended to read:

8. What services does Refinitiv provide to FX traders?
Answer Reference: *Section 4.2*

Chapter 4, section 3.2.1 third and fourth bullet points have been amended to read:

• **Foreign exchange** – usually, the sell-side firm acts as principal. Traditionally, this has been a telephone market where the firm that received the order would phone other banks to establish the best rate. In recent years a number of FX web portals have been developed. Refinitiv also offers an automated dealing service, Refinitiv FX Trading .
• **OTC derivatives such as swaps** – usually, the sell-side firm acts as principal. Traditionally, this has been a telephone market where the firm that received the order would phone other banks to establish the best rate. In recent years, a number of OTC web portals have been developed.

Chapter 4, section 3.4.2 third bullet point has been amended to read:

3. **Support for investment decision-taking** – including portfolio modelling and 'what-if' scenario analysis: comparing portfolios to a model, generating proposed trades and examining their impact on portfolios and cash balances. This may involve the ability to integrate in-house data with external data supplied by Refinitiv, Bloomberg or others. Buy-side firms that deal with the private investor, in particular, need systems with facilities that can assess the impact of a particular potential trade on the client's income tax and capital gains tax liability.

Chapter 5, section 1.3 table, second row has been amended to read:

| Some reference data elements may be fed from consistent and reliable external sources, eg, Bloomberg, Refinitiv, exchanges and clearing houses. | All other systems in the configuration will also need to be enhanced to integrate with the RDR. This may be costly and complex, and in some cases may be impractical; usually this is because the firm does not have the ability to amend the source code of a packaged application, which means these systems will need to be manually updated. |

Chapter 5, section 1.4.2 table, last row has been amended to read:

| RIC code | IBM.N | The coding system used by Refinitiv. Reuters Instrument Code (RIC). | Yes – Refinitiv allocates RIC codes to listed futures and options. |

Chapter 5, section 1.10.2 second bullet point has been amended to read:

• If Firms A and B wish to trade bonds with each other, then their counterparty agreement can refer to **International Capital Market Association** (ICMA)'s GMRA 2011 template. (Under English law the GMRA 2011 can be used.)

Chapter 6, section 4.1.1 a paragraph has been amended to read:

Definitions
Accrual is an accounting term. It is defined as a method of accounting in which each item is entered as it is earned or incurred, regardless of when actual payments are received or made. **Accrued interest** is defined as the interest that has accumulated on a transaction since the last interest payment date or start date, up but not including the value date.

Chapter 7, section 2.2.1 second paragraph has been amended to read:

Some of this data will also be fed into the individual trade capture systems, where it will be used in either automated or manual trading decision support. Suppliers of market data include Refinitiv, Bloomberg and the major stock exchanges.

Chapter 8, section 1.1 last paragraph has been amended to read:

Head of Information Security
This individual reports to the CIO and is responsible for the overall direction of all security functions associated with applications, voice and data communications and computing services within the firm. The holder must be aware of the implications of the EU's General Data Protection Regulation (GDPR) and previously the **Data Protection Act 1998 (DPA)** in the UK, or equivalent other countries.

MCQ, Q22 has been amended to read:

22. What is the default frequency of production of periodic statements of account for retail clients of an investment firm if there is no trading activity?

MCQ, Answers to Multiple Choice Questions A12 has been amended to read:

12. Answer: D Chapter 5, Section 1.3
One of the problems involved in managing the technology infrastructure of a large institution is that there may be a large number of individual business application systems in the configuration, all of which hold some of this large amount of reference data, and some of the information may be duplicated across the different systems. Where there is duplication of reference data, there is a danger that errors creep in. To overcome these issues, some firms have built separate reference data repositories (RDRs) that take in data from reliable sources, such as Bloomberg or Refinitiv, as

	well as manually updated reference data, and then feed this to all the other systems in the configuration.		
	MCQ, Answers to Multiple Choice Questions A22 has been amended to read: **22. Answer: C Chapter 5, Section 4.1** Statements must be sent to clients every six months, but the client is entitled to insist on one being sent every three months. Where there are no transactions in the period, an annual statement is permitted.		