COURSE NAME:	FINTRON
TOTAL DURATION:	45 Hrs
MODE OF DELIVERY	PHYSICAL CLASSROOM TRAINING AT RESPECTIVE COLLEGES
TRAINER TO STUDENT RATIO:	1:50
TOTAL MARKS:	75

TABLE 1	
OVERALL COURSE OBJECTIVE:	• Enable learners to evaluate investment opportunities and make informed investment decisions. • Manage and handle large, medium, and small financial management scenarios such as financial planning, cost of capital, investment decisions, working capital management, and risk management and should be able to make ideal financial decisions. • Calculate the Accounting Rate of Return, Payback Period, Net Present Value, Internal Rate of Return, and Profitability Index. • Analyze financial markets using technical analysis tools, including candlestick charts, support and resistance lines, and chart patterns. • Evaluate risk management strategies, including operating leverage, financial leverage, and combined leverage. • Evaluate and implement appropriate strategies into currency markets, exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates. Interpret the dynamics of commodity exchanges, trading instruments, and strategies and implement them in the live market. • Implementation of robo advisory in derivatives trading, coding logic for robo advisory based on technical analysis, data analysis, and machine learning in trading strategies.
LEARNING	• Identify the goals of Financial Management and their

OUTCOME:	importance for organizations. Demonstrate the process of Financial Planning and the steps involved
	• Recognize different types of charts and analyse their evolution. Utilize Candlestick charts for analysis, identifying bullish and bearish candle patterns
	• Evaluate the basics of options, moneyness, and payoff charts for options
	• Execute the mechanics of currency futures trading and pricing. Analyze the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading.
	• Develop coding logic for Robo Advisory based on Technical Analysis (TA). Apply data analysis and machine learning techniques in Derivatives Trading.

TABLE 2: MODULE-WISE COURSE CONTENT AND OUTCOME				
SL.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)
1.	**Unit 1: Financial Management**	**1.1: Introduction to Financial Management** Meaning and Definition of financial Management | Goals of Financial Management |Financial Planning | Steps in Financial Planning | Factors Affecting Financial Plans | Time Value of Money **1.2: Investment decisions** Introduction to Capital Budgeting | Importance of capital Budgeting | Capital Budgeting Process | Techniques of Capital Budgeting - Accounting	Identify the goals of Financial Management and their importance for organizations. Demonstrate the process of Financial Planning and the steps involved	9 hours

		Rate of Return | Pay Back Period | Net Present Value | Internal Rate of Return and Profitability Index		

1.3: Working Capital Management
Cost of Capital - Cost of Debt \| Cost of Preference Shares \| Cost of Equity Shares \| Cost of Retained Earnings \| Weighted Average Cost of Capital

1.4: Financial decision making
Introduction – Concepts of Working Capital \| Objective of Working Capital Management \| Need for Working Capital \| Operating Cycle \| Determinants of Working Capital \| Estimation of Working Capital.

1.5: Leverage and Risk Management
Leverages – Introduction \| Types of Leverages \| Measurement of Operating Leverage \| Financial Leverage and Combined Leverage

2.	**Unit 2: Technical and Renko Analysis**	**2.1: Introduction to Technical Analysis and Candle Charts** What is technical analysis? | Strengths and weakness of technical analysis | Importance of technical analysis | Types	Recognize different types of charts and analyse their evolution. Utilize Candlestick charts for analysis,	9 hours

		of charts and its evolution | Introduction to Candlestick (Bullish & Bearish candle) | Candlestick analysis |One candle pattern | Two candle pattern | Three candle pattern **2.2: Pattern study approach** What are support and resistance lines? | Head and shoulders | Double top and double bottom | Gap theory **2.3: Indicator Analysis** What does a technical indicator offer? | Types of indicators | Simple moving average | Exponential moving average | Trend following indicator **2.4: Introduction to Renko analysis** Construction Of Renko Charts | Brick Value | Time Frame | Brick Reversal Pattern **2.5: 5 Indicator logic for technical research** EMA crossover | SMA Crossover | BB + RSI | BB + ROC | Pivot Levels	identifying bullish and bearish candle patterns	
3.	**Unit 3: Derivatives and types of contracts**	**3.1: Derivatives and types of contracts** Basics of Derivatives | Derivatives Market - History & Evolution |	Evaluate the options, moneyness, and payoff charts for contracts	9 hours

		Market Participants | Types of Derivatives Market | Significance of Derivatives	Derive the future segment pricing for equity and Index	
		3.2: Futures and Forwards segment Futures and Forwards Contracts | Payoff charts for Futures Contract | Futures pricing | Commodity, equity & Index Futures | Uses of Futures		
		3.3: Options segment Basics of Options | Characteristics of Options | Moneyness of Options | Payoff charts for Options		
		3.4: Open interest and Greeks methodology Option chain and Open Interest | Introduction of Greeks in Options segment | Trading Psychology in NFO segment		
		3.5: NISM Equity Derivatives series VIII Dealers Module NISM Equity Derivatives series VIII Dealers Module overview | Role of an Equity Dealer | Do's Don't of an Equity dealer		
4.	**Unit 4: Currency and Commodity Derivatives**	**4.1: Introduction to Currency Market** Currency Markets | Exchange Rate | Fixed and Floating Exchange	Execute the mechanics of currency futures trading and pricing. Analyze	9 hours

| | | Rate Regime \| Factors affecting Exchange Rates \| Quotes and Tick size \| Spreads \| Spot Transaction and Forward Transaction

4.2: Currency Future trading mechanism
Forward Contracts \| Futures Contracts \|Pricing of Futures Contracts

4.3: Commodity Trading system
Commodity Exchanges \| Trading Participants and their Roles \| Trading Instruments in the Commodity Market \| Trading Strategies in the Commodity Market \| Risk Management in Commodity Trading \| Settlement and Delivery in Commodity Trading

4.4: Global Financial Market-CFD
Global Financial Market \| CFDs \| Advantages and Disadvantages of CFD Trading \| Popular Commodities for CFD Trading \| Regulatory Environment for CFD Trading \| Trading Platforms for CFDs \| MT4 – Meta Trader4 Trading technology. | the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading. | |
| 5. | **Unit 5: Robo Advisory in Derivatives** | **5.1: Introduction to Robo Advisory in Derivatives** | Develop coding logic for Robo Advisory based | 9 hours |

		Introduction to Robo Advisory | Benefits of Robo Advisory in Derivatives | Challenges and Risks | Types of Derivative Strategies in Robo Advisory | Legal and Regulatory Considerations	on Technical Analysis (TA). Apply data analysis and machine learning techniques in Derivatives Trading.	
		5.2: Coding logic for Robo advisory based on TA Data Collection | Data Preprocessing | Logical Codes | Signal Generation | Risk Management | Back testing | Execution | Real-time Monitoring **5.3: Data Analysis and Machine Learning in Derivatives Trading** Machine Learning Basics | High-frequency vs. low-frequency trading | Predictive modeling using machine learning **5.4: Future Trends and Developments** Digital Transformation | Blockchain and cryptocurrencies | Peer-to-peer lending and crowdfunding | Reg Tech (regulatory technology) | Chatbots and virtual assistants **5.5: Regulatory and Ethical Advisory** Securities regulations and compliance | Licensing and registration requirements |		

			Regulatory bodies overseeing robo-advisors | Ethical guidelines for automated financial advice		

TABLE 3: OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USE CASES

LEARNING OUTCOME	ASSESSMENT CRITERIA	PERFORMANCE CRITERIA	USE CASES
Design the process of Financial Planning and the steps involved	• Make an ideal financial decision • Manage and handle large, medium, and small financial management scenarios such as financial planning, cost of capital, investment decisions, working capital management, and risk management	Constructs a detailed financial plan, considering strategic decision-making and risk analysis while ensuring optimal allocation of resources and consistent ROI outcomes.	**Use Case 1:** Navigating Turbulence: A Case Study on Jet Airways' Rise, Challenges, and Strategies in the Aviation Industry. **Use Case 2:** Revitalizing Wings: A Strategic Analysis of Tata's Takeover of Air India in the 21st Century.
Recognize different types of charts and analyze their evolution. Utilize Candlestick charts for analysis, identifying bullish and bearish candle patterns	• Calculate the Accounting Rate of Return, Payback Period, Net Present Value, Internal Rate of Return, and Profitability Index • Evaluate investment opportunities and make	Synthesizes chart analysis with advanced financial calculations, providing actionable insights into market trends and constructing accurate visual data representations to support	**Use Case 1:** Navigating Market Volatility: A Real-Time Analysis of Equity Derivatives Strategies in the Post-Pandemic Era **Use Case 2:** Unveiling the Orchestrated Deceit: Scam Unfolding in the MCX Spot

		strategic decisions	Exchange in India
	• Construct Renko Charts	strategic decisions.	
Evaluate the basics of options, moneyness, and payoff charts for options	• Analyze the psychology in NFO Segments before trading • Using technical analysis tools, including candlestick charts, support and resistance lines, and chart patterns to analyze the financial market	Evaluates trading psychology and applies technical tools effectively to identify key market movements, assessing trading outcomes under volatile conditions with precision.	**Use Case 1:** Impact of COVID-19 on Crude Oil Prices – A Real-Time Case Study on the Unprecedented Dive into Negatives **Use Case 2:** The Unprecedented Plunge: A Case Study on Broker Losses Due to Negative Commodity Pricing in Crude Oil During the COVID-19 Pandemic
Execute the mechanics of currency futures trading and pricing. Analyze the commodity market, including exchanges, instruments, and trading strategies. Recognize the risk management and settlement processes in commodity trading.	• Implement strategies in trading platforms CFDs • Evaluate appropriate risk management strategies into currency markets, exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates • Interpret the dynamics of commodity exchanges and trading	Develops actionable strategies integrating trading mechanics and risk mitigation, demonstrating advanced interpretation of exchange rate impacts and commodity dynamics in real-time scenarios.	**Use Case 1:** Strategic Currency Risk Management through Currency Derivatives: A Case Study of SLK Software Solutions **Use Case 2:** SEBI Investigation on Options Trading: A Case Study on Loss-Making Transactions

	instruments in the live market		
Develop coding logic for Robo Advisory based on Technical Analysis (TA). Apply data analysis and machine learning techniques in Derivatives Trading.	• Prepare coding logic for robo advisory based on technical analysis, data analysis, and machine learning in trading strategies • Implementation of robo advisory in derivatives trading	Designs and executes efficient coding logic for robo advisory tools, incorporating machine learning algorithms and financial analytics, resulting in optimal derivatives trading performance.	**Use Case 1:** Unlocking Financial Success: A Strategic Case Study on Maximizing Returns with Advanced Options Strategies **Use Case 2:** Revolutionizing Investment Strategies on the Impact of Robo-Advisory in Derivatives Trading

TABLE 4: LIST OF FINAL PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME	
SL. NO	**FINAL PROJECT**
1.	Utilizing R, perform a comprehensive analysis of the Net Present Value (NPV) in capital budgeting for a hypothetical project. Include time value of money considerations and demonstrate how R can be used to calculate and visualize NPV. Discuss the significance of NPV in investment decision-making.
2.	Choose a set of stocks and conduct a thorough analysis using R. Import relevant financial data, visualize multiple stocks, and apply technical analysis techniques. Highlight the differences in stock prices and discuss the implications. Provide insights into the comparison analysis and how R facilitates stock market analytics.
3.	Perform bond valuation using R, considering different types of bonds. Illustrate the steps involved in bond valuation and showcase how R can be utilized for this purpose. Extend the analysis to explore more advanced aspects of bond valuation and discuss their impact on investment decisions.
4.	Implement the Capital Asset Pricing Model (CAPM) in R, emphasizing the basic concepts of finance. Code the CAPM equation in R, plot the development of prices, and explore the creation of portfolios with multiple risky assets. Discuss the implications of portfolio weights and the construction of possible portfolios.

5.	Perform fundamental analysis using R, focusing on financial ratios. Choose a company and analyze its financial health by calculating and interpreting key ratios. Discuss the significance of these ratios in assessing a company's performance and make recommendations based on the fundamental analysis conducted in R
6.	As a technical Analyst, analyze the historical stock prices of a company using candlestick charts. Identify and interpret different candlestick patterns, including bullish and bearish candles, and explain their significance in predicting price movements. Discuss how a trader or investor can use candlestick analysis for decision-making.
7.	Choose a stock or market index from Nifty Next50 Index and conduct a technical analysis to identify support and resistance lines. Explain the importance of recognizing these patterns in the context of trading strategies.
8.	Develop and back test a trading strategy using the 2 indicator logics: EMA crossover, SMA crossover, provide a detailed rationale for each strategy, including entry and exit criteria. Analyze the historical performance of these strategies and discuss potential improvements or modifications.
9.	As a Technical advisor for short term investment of 30-60 days investment horizon, identify 3 company for each of these technical logic BB + RSI, BB + ROC and Pivot Levels. and take screenshot of the charts using Investing.com and prepare a detailed report.
10.	Construct a Renko chart for a specific stock or currency pair. Define and explain the concepts of brick value, time frame, and brick reversal pattern in Renko analysis. Evaluate the advantages and disadvantages of using Renko charts compared to traditional candlestick charts for technical analysis.
11.	Develop a comprehensive analysis of the derivatives market, focusing on its history, evolution, and the types of contracts involved. Identify the key participants in the derivatives market and analyze the significance of derivatives in risk management. Provide a report on how derivatives are used in different market scenarios.
12.	Choose a specific commodity, equity, or index and compare the features of futures and forward contracts. Construct payoff charts for futures contracts and explain the pricing mechanism for futures. Investigate the uses of futures in hedging, speculation, and arbitrage, providing real-world examples.
13.	Create moneyness chart for different Option strike prices for both CALL and PUT options with practical examples.
14.	You a derivative trader, analyze the concept of open interest in the options market and its implications for traders. Introduce the Greeks (Delta, Gamma, Theta, and Vega) and explain how they impact option pricing and risk. Provide a trading performance psychology report

	associated with options trading, focusing on the NFO segment.
15.	Explore the commodity market, including commodity exchanges, trading participants, and various instruments traded in this market. Analyze trading strategies employed in the commodity market and discuss the role of risk management in commodity trading. Provide insights into settlement and delivery processes in commodity trading.
16.	Analyze the regulatory environment for governing CFD trading globally and explore different trading platforms, with a specific emphasis on Meta Trader 4 (MT4) technology.
17.	Analyze the global financial market with a focus on Contracts for Difference (CFDs) and the advantages and disadvantages of CFD trading. Identify popular commodities for CFD trading and execute the process with a predictive model
18.	Analyze the currency market, exploring the concepts of exchange rates, fixed and floating exchange rate regimes, and factors affecting exchange rates. Discuss the quotes and tick size, spreads, and differences between spot and forward transactions. Provide examples to illustrate how changes in these factors impact currency trading.
19.	Develop a coding logic for robo advisory based on technical analysis based on the classroom training. Outline the steps involved in data collection, preprocessing, and the logical codes used for signal generation. Discuss the importance of risk management in robo advisory and describe the processes of backtesting, execution, and real-time monitoring.
20.	Compare high-frequency and low-frequency trading strategies. Develop a predictive model using machine learning for derivatives trading, considering historical data.

TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 75)					
Assessment Criteria	Learning Outcomes	Fair (1-5)	Good (6-10)	Excellent (11-15	Total Marks
Design the process of Financial Planning and the steps involved	Synthesize comprehensive financial plans for varied scenarios.	Outlines and organizes financial planning steps with minimal application to scenarios.	Constructs moderately detailed plans; applies concepts to resolve medium-complexity scenarios with partial accuracy.	Integrates and evaluates diverse financial elements; demonstrates strategic problem-solving in complex scenarios.	15

Recognize and utilize charts for financial analysis	Construct and interpret advanced charts like Renko and candlestick for market insights.	Differentiates basic chart patterns and interprets trends with limited accuracy.	Evaluates and analyzes chart patterns; applies tools to calculate and justify investment decisions.	Creates sophisticated chart interpretations; critiques market trends and predicts outcomes using advanced tools.	15
Evaluate options basics and payoff charts in trading	Analyze payoff charts and assess trading strategies using technical tools.	Identifies options and payoff chart types but applies them with minimal effort.	Explores moneyness, assesses tools like candlestick patterns, and formulates trading decisions with moderate clarity.	Designs and critiques payoff strategies; synthes1izes trading psychology and advanced tools to optimize performance.	15
Execute currency futures trading and risk management	Formulate advanced trading strategies and assess risks in currency and commodity markets.	Explains basic risk management processes and applies them with limited depth.	Implements moderately effective trading strategies; evaluates market risks and trends with moderate proficiency.	Designs and appraises robust trading strategies; demonstrates critical insight into risk mitigation and market trends.	15
Develop coding logic for Robo Advisory in trading	Create and validate Robo Advisory logic using machine learning and	Develops basic coding logic with minimal integration of ML and data	Formulates functional algorithms; applies technical analysis and evaluates data	Innovates and validates complex algorithms; integrates ML and data-driven	15

	data analysis for trading strategies.	analysis in trading strategies.	sets to enhance trading decisions.	insights to transform trading strategies.	