COURSE NAME:	Investment analysis and Portfolio Management
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:	1. Comprehend the fundamentals of investment analysis and asset valuation. 2. Learn portfolio construction techniques and the principles of diversification. 3. Develop skills to assess and manage risk within a portfolio. 4. Gain insights into performance measurement and portfolio evaluation. 5. Apply financial theories to real-world investment scenarios

| LEARNING OUTCOME: | 1. Demonstrate knowledge of investment analysis and portfolio management principles. 2. Construct a diversified portfolio based on risk tolerance and investment objectives. 3. Evaluate portfolio performance using industry-standard metrics. 4. Apply risk management strategies to protect against market volatility. 5. Make informed investment decisions based on financial analysis and market trends. |

TABLE 2: MODULE WISE COURSE CONTENT AND OUTCOME				
SL.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)

1	Introduction to Investment Analysis	- Asset classes: Stocks, bonds, real estate, alternatives - Risk-return trade-off - Investment theory	- Analyze asset classes to understand risk-return dynamics. - Evaluate trade-offs in portfolio management to develop strategies for different investor profiles.	9
2	Valuation Techniques and Investment Analysis	- Overview of equity, fixed income, and derivatives - Valuation techniques (DCF, P/E, P/B) - Fundamental analysis	- Critique valuation methods to assess intrinsic value. - Develop investment strategies based on valuation outputs and market trends.	9
3	Portfolio Construction and Optimization	- Modern Portfolio Theory (MPT) - Efficient frontier - Strategic and tactical asset allocation	- Design diversified portfolios aligning with investor goals. - Analyze the impact of asset allocation on risk-return optimization.	9

4	Risk Management and Performance Evaluation	- Identifying portfolio risks - Derivatives for hedging - Performance metrics: Sharpe ratio, alpha, beta	- Evaluate risk management strategies to mitigate market volatility. - Construct portfolio performance reports using industry-standard metrics.	9
5	Advanced Topics in Investment Analysis	- Behavioral finance and biases - Alternative investments - Global portfolio management	- Analyze behavioral biases influencing investment decisions. - Create globally diversified portfolios incorporating alternative assets.	9

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

LEARNING OUTCOME	ASSESSMENT CRITERIA	Performance Criteria	USE CASES
Analyze and Evaluate Mutual Fund Strategies	- Categorize mutual fund strategies (10%) - Examine key investment strategies (25%) - Evaluate historical performance	- Perform comparative analysis of mutual fund strategies. - Use metrics like CAGR, Sharpe Ratio, and Alpha to justify strategy effectiveness.	Use Case 1: Analyze equity, debt, and hybrid mutual fund strategies in India, using historical data and metrics to assess

		- Generate actionable recommendations based on evaluation.	effectiveness and alignment with SEBI regulations.
	(20%) - Justify alignment with SEBI regulations (15%) - Prioritize insights and recommendations (20%) - Validate reporting quality (10%)		
Evaluate and Innovate Asset Allocation Approaches	- Deconstruct asset allocation principles (10%) - Analyze the Yale Endowment Fund's strategy (25%) - Critique historical performance (20%) - Compare strategies with peer funds (15%) - Assess liquidity and risk considerations (20%) - Formulate insights (10%)	- Evaluate the rationale behind asset allocation decisions. - Assess diversification benefits using Sharpe Ratio and Standard Deviation. - Develop strategies incorporating ESG and alternative investments.	Use Case 2: Propose an asset allocation plan inspired by Yale's strategy, evaluating its applicability to institutional investors with varied risk-return objectives and liquidity constraints.
Design and Evaluate Equity Valuation Models	- Analyze valuation principles (10%) - Construct valuation methods (25%) - Critique financial performance data	- Create models like DCF, P/E Ratio, and EV/EBITDA. - Evaluate the financial health and industry context of a company. - Generate valuation-based	Use Case 3: Develop valuation models for Reliance Industries, analyzing financial trends and recommending

	(20%) - Evaluate macroeconomic impacts (15%) - Develop insights and recommendations (20%) - Validate reporting quality (10%)	recommendations for portfolio management.	strategies for growth, value, or dividend investing.
Analyze and Innovate Approaches to Valuing High-Growth Companies	- Differentiate valuation challenges (10%) - Test valuation methods (25%) - Evaluate company performance (20%) - Analyze external factors like market trends (15%) - Formulate recommendations (20%) - Support insights with reporting (10%)	- Compare traditional and forward-looking valuation techniques like PEG and EV/Revenue. - Analyze challenges like market volatility and innovation dependence. - Innovate valuation strategies for high-growth stocks.	Use Case 4: Evaluate Tesla's valuation and propose a new model addressing growth challenges, including reliance on innovation and market projections.
Critique and Develop Global Portfolio Allocation Strategies	- Examine Black-Litterman model inputs (15%) - Analyze global asset allocation (25%) - Evaluate portfolio performance (20%) - Incorporate	- Develop a globally diversified portfolio using Black-Litterman principles. - Incorporate subjective investor views and objective market data. - Evaluate	Use Case 5: Design a global asset allocation strategy using the Black-Litterman model, considering macroeconomic risks and market constraints.

	geopolitical and market risks (15%) - Generate strategic recommendations (15%) - Defend insights (10%)	performance using Sharpe Ratio and Tracking Error.	
Evaluate Risk Management Frameworks and Propose Enhancements	- Analyze portfolio risks (15%) - Assess risk mitigation tools (25%) - Evaluate effectiveness of hedging techniques (20%) - Judge compliance with regulations (15%) - Prioritize insights and improvements (15%) - Support with evidence (10%)	- Apply tools like VaR and stress testing to manage portfolio risks. - Critique risk strategies for interest rate, credit, and market risk. - Propose enhancements for regulatory compliance and operational efficiency.	Use Case 6: Analyze SBI's investment portfolio and propose enhancements to risk management strategies, focusing on liquidity, market, and regulatory compliance.
Analyze and Innovate Currency Risk Management Practices	- Examine currency risk exposures (15%) - Assess hedging strategies (25%) - Critique effectiveness (20%) - Evaluate regulatory and economic impacts (15%) - Propose	- Analyze hedging techniques like forwards, swaps, and options. - Assess effectiveness using Hedge Effectiveness Ratios. - Innovate strategies to address emerging challenges like	Use Case 7: Evaluate Goldman Sachs' currency risk management strategies and propose optimized practices considering technological innovations and evolving market conditions.

	improvements (15%) - Defend insights with evidence (10%)	geopolitical risks and blockchain innovations.	
Critique Behavioral Biases in Investment Strategies and Innovate Behavioral Solutions	- Analyze biases influencing investments (15%) - Evaluate integration of behavioral principles (25%) - Judge effectiveness of current strategies (20%) - Generate actionable solutions (20%) - Justify recommendations (10%) - Support with insights (10%)	- Critique biases like loss aversion, overconfidence, and mental accounting. - Innovate portfolio strategies addressing these biases. - Propose enhancements like robo-advisors or gamified investing tools.	Use Case 8: Assess behavioral finance principles in Vanguard's investment strategies and propose innovative solutions to improve investor outcomes through technology and education.
Analyze Retail Investment Trends and Recommend Behavioral Interventions	- Deconstruct retail investor biases (15%) - Evaluate their market impact (25%) - Assess cultural and economic factors (20%) - Propose strategies to address biases (20%) - Validate solutions with	- Analyze biases like herding and anchoring in Indian retail markets. - Develop strategies like financial literacy campaigns and robo-advisory platforms. - Propose regulatory frameworks to enhance investor behavior.	Use Case 9: Study biases among Indian retail investors and recommend targeted strategies, such as education campaigns or advisory tools, to improve investment decision-making and diversification.

	evidence (10%) - Support with insights (10%)		

TABLE 4: LIST OF FINAL PROJECTS (PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME)	
SL.NO	**FINAL PROJECT**
1	Analysing Risk and Return for Asset Classes
2	Financial Instruments Analysis
3	Equity Valuation Techniques
4	Bond Valuation and Yield Analysis
5	Portfolio Diversification Analysis
6	Strategic Asset Allocation
7	Derivatives for Risk Management
8	Portfolio Performance Measurement
9	Behavioural Finance in Investment Decisions
10	Alternative Investments Analysis
11	Global Portfolio Management
12	Yield Curve Analysis
13	Performance Attribution Analysis
14	Investment Strategies for Mutual Funds
15	Building an Efficient Portfolio
16	Risk Management using Value at Risk (VaR)

17	Tactical Asset Allocation
18	ESG Investments
19	Valuation Challenges in Growth Stocks
20	Asset Allocation for Retirement Planning

TABLE 5: COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 75)					
ASSESSMENT CRITERIA	Learning Outcome	Fair (1–5)	Good (6–10)	Excellent (11–15)	TOTAL MARKS
Understanding of Mutual Funds	Analyze and evaluate mutual fund strategies.	Limited understanding of mutual fund strategies; minimal use of metrics and analysis tools; lacks clarity in presenting findings.	Demonstrates a moderate understanding of mutual fund strategies; applies relevant metrics like Sharpe Ratio with some errors; provides partial insights but lacks depth.	Comprehensive analysis of mutual fund strategies; accurate application of metrics like CAGR and Sharpe Ratio; delivers actionable and well-supported recommendations.	15
Valuation Techniques	Design and evaluate equity and bond valuation models.	Basic understanding of valuation techniques; incorrect application	Demonstrates adequate understanding of valuation methods; applies	Demonstrates advanced knowledge of valuation methods; applies multiple	15

		of DCF or P/E; lacks insights into financial data interpretation.	techniques like DCF and P/E correctly but with limited depth; provides surface-level insights into financial performance.	valuation techniques accurately; offers detailed and insightful interpretations of financial data and market impacts.	
Portfolio Construction	Design diversified and optimized portfolios.	Constructs portfolios with limited diversification and unclear alignment with risk-return objectives; lacks use of theoretical frameworks like Modern Portfolio Theory (MPT).	Develops diversified portfolios with adequate alignment to risk-return profiles; applies MPT principles but with moderate optimization; provides partial analysis of portfolio performance.	Designs well-diversified and optimized portfolios; applies MPT and risk-return concepts effectively; delivers clear and actionable insights for portfolio construction tailored to various investor profiles.	15
Risk Management Strategies	Evaluate and propose enhance	Limited identification of risks; uses risk	Identifies key risks effectively; applies risk	Comprehensive identification and	15

	ments to portfolio risk management frameworks.	management tools like VaR or stress testing incorrectly; lacks recommendations for strategy improvement.	management tools with moderate accuracy; provides general recommendations without deep justification.	evaluation of risks; accurate use of tools like VaR and stress testing; offers innovative and practical recommendations for improving risk management frameworks.	
Behavioural Finance Integration	Critique biases in investment strategies and develop behavioral solutions.	Basic understanding of behavioral biases; fails to connect biases to investment outcomes; limited or vague suggestions for mitigating biases.	Adequate understanding of behavioral biases; connects biases to investment outcomes with some clarity; offers moderately effective solutions like financial literacy or advisory tools.	Advanced critique of behavioral biases; demonstrates strong connections between biases and portfolio outcomes; proposes innovative solutions, such as AI-driven advisory platforms or gamified tools, with well-supported justifications	15

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Global Portfolio Allocation	Analyze and innovate global asset allocation strategies using advanced models.	Limited analysis of global allocation strategies; fails to apply advanced models like Black-Litterman effectively; lacks insights into geopolitical and market risks.	Analyzes global allocation strategies with moderate success; applies Black-Litterman or similar models with limited precision; provides general recommendations for risk management.	Comprehensive analysis of global allocation strategies; applies advanced models like Black-Litterman accurately; delivers detailed insights and innovative recommendations incorporating geopolitical and market risk considerations.	15