



DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

PGDM Program

TRIMESTER - IV (Batch: 2023-25)

END-TERM EXAMINATION, SEPTEMBER 2024

Course Name	Investment and Portfolio Management	Course Code	
Duration	Three Hours	Max. Marks	60

Instructions:

I. Please attempt any six questions. Marks are denoted against each question.

Q.1 Write short notes on: (any five)

[(Marks: 2*5=10) CO 5 & 6]

- ✓ a. Application of Elliot wave theory in trading
- ✓ b. Fibonacci relationships
- ✓ c. Sovereign Gold Bonds
- d. Basic principles of technical analysis
- ✓ e. Behavioral finance
- ✓ f. Concept of Support and Resistance and application in trading

✓ Q.2.a. Suppose we have three securities that each share the following assumptions:

Risk-Free Rate (r_f) = 2.5%

Expected Market Return = 8.0%

The β values for the three securities are as follows:

Beta (β), Company A = 0.5

Beta (β), Company B = 1.0

Beta (β), Company C = 1.5

Using the logic and interpretation of the Capital Asset Pricing Model (CAPM) calculate which security will yield the highest returns?
(7 Marks) CO 3

b. Mr. G. Rajvanshi is evaluating two investment options: an Equity Portfolio and a Fixed Income Portfolio. After conducting thorough research on both, he is unable to determine which is the superior choice. He opts to utilize the Treynor Ratio to aid in his decision-making process. The Equity Portfolio has generated a total return of 7.5%, while the Fixed Income Portfolio has yielded 5.25%. For the risk-free rate, you employ the return on Treasury Bills, which stands at 2%. The Equity Portfolio's Beta is calculated at 1.22, whereas the Fixed Income Portfolio's Beta is 0.7.



DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

Calculate the risk adjusted returns of the two investments using the Treynor's ratio and present the interpretation. (3 marks) CO 3

Q.3. a. Joy Ganguly is your friend. Approximately twelve months ago, he began monitoring the stock market. During that time, he came across a financial article in a magazine that emphasized the importance of diversification in investing as a strategy to minimise risk. With an initial investment of Rs. 20,000, he created a portfolio, allocating half to Green Inc., an energy sector company, and the other half to Alpa & Beta, a firm in the information technology industry.

The following statistics relate to these two investments:

	Green Inc.	Alpha & Beta
Return	7%	15%
Standard deviation	10%	20%

The correlation coefficient between the returns of Green Inc. and Alpha & Beta is 0.6. Joy requested you to calculate for him the extent to which the risk was reduced by the strategy.

(6 Marks) CO 5

b. An investor is considering adding a hedge fund allocation to a portfolio that has returned 18% over the last year. The current risk-free rate is 3%, and the annualized standard deviation of the portfolio's monthly returns was 12%. The investor believes that adding the hedge fund to the portfolio will lower the expected return to 15% for the coming year, but also expects the portfolio's volatility (standard deviation) to drop to 8% as a result. Applying the Sharpe's ratio calculation, recommend whether the investor should add the hedge fund to the portfolio. (4 marks) CO 5.

Q.4 What economic, industry and company factors would you be most interested in forecasting if you were an analyst assessing an investment decision in a major consumer durable-goods company? (10 Marks) CO 4

Q.5 From the following 18-day data calculate 7-day "Rate of Change" (ROC) indicator values and plot the graph. Please highlight the buying and selling signals highlighted by the ROC chart. (10 Marks) CO 6



DELHI SCHOOL OF BUSINESS

By Vivekananda Institute of Professional Studies - TC

Day	Closing Price	Day	Closing Price
3-Sep-24	70	21-Aug-24	80
2-Sep-24	72	20-Aug-24	79
30-Aug-24	73	19-Aug-24	78
29-Aug-24	70	16-Aug-24	76
28-Aug-24	74	14-Aug-24	75
27-Aug-24	76	13-Aug-24	77
26-Aug-24	77	12-Aug-24	78
23-Aug-24	75	9-Aug-24	76
22-Aug-24	78	8-Aug-24	75

CO Rel -1
Pof 7

✓ **Q.6.** Understanding asset classes is essential for investors to make informed investment decisions and build a well-diversified portfolio that aligns with their investment objectives and risk tolerance. Elaborate this statement and present in detail the popular asset classes from the Indian context. (10 marks) CO 1

✓ **Q.7** Recently many specialized types of mutual funds have appeared. Elaborate the types of mutual funds. Also present how mutual funds are distinguished from hedge funds. (10 marks) CO 2