INDIRA UNIVERSITY, PUNE

SCHOOL OF BUSINESS- MBA

Term End Examination (2025 Pattern) April- May – 2026- Semester – II

Course Name: Security Analysis and Portfolio Management **Max. Marks: 25**
Course Code: 25MBA245 **Time: 1:30 Hrs.**

Instructions

- **Attempt Any 1 (Either A or B) Question from Question 1 to Question 3 (Each Question carries 5 Marks)**
- **Question 4 - Compulsory (10 Marks)**

<table>
<tr><td>Q1.</td><td>Attempt Any 1 (Either A or B) Question (5 Marks)
A. Assume you are a financial advisor guiding a client who has recently received a lump sum amount and wants to invest it in long-term wealth creation. In this context, apply the different stages of the investment process to construct an effective investment strategy for the client.

B. An investor plans to invest in a diversified portfolio consisting of equity shares, bonds, and gold. However, the investor is concerned about various risks that may affect the returns and overall portfolio performance. As a financial advisor, make use of the concept of risk and explain the different types of risks that the investor may face. Also, identify how each type of risk can impact the portfolio and plan suitable measures to manage these risks.</td><td>CO3</td></tr>
<tr><td>Q2.</td><td>Attempt Any 1 (Either A or B) Question (5 Marks)
A. Alpha Industries Ltd. is a well-established manufacturing company with a steady dividend-paying history. Investors seek to estimate the intrinsic value of their shares using the Two-Stage Growth Model of the Dividend Discount Model (DDM), considering initial high growth followed by stable long-term growth.

The company paid a dividend of ₹2.20 per share during the current year. It is expected to pay ₹2.60 next year, followed by ₹3.20 and ₹3.80 in the subsequent two years. After this period, dividends are expected to grow at a constant rate of 9% per annum indefinitely. The required rate of return (discount rate) is 18% and the current market price is Rs. 65
Questions:
i. Examine the intrinsic value of Alpha Industries Ltd.’s share using the Two Stage Growth Model of Dividend Discount Model.
ii. Compare the calculated intrinsic value with the current market price and examine whether the share is overvalued, undervalued or fairly valued in the market.

B. XYZ Textiles Ltd. is a leading fabric manufacturer in India. Business analysts expect the company to grow at a stable rate. Based on this, the financial forecast of Free Cash Flow to Firm (FCFF) for the next five years is given below:</td><td>CO4</td></tr>
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Year	FCFF (₹ in Lakhs)
1	420
2	455
3	490
4	530
5	575

Additional Information

- WACC = 11%
- Terminal Growth Rate = 5%
- Total Debt = ₹1,000 lakh
- Cash & Cash Equivalents = ₹200 lakh
- Equity Shares Outstanding = 120 lakh shares
- Current Market Price = ₹85

Questions:

i. Determine the value of the company by adopting the Discounted Cash Flow (DCF) method.

ii. Examine the Intrinsic Value of Share using DCF Method.

iii. Comment on the valuation of the Shares of XYZ Textiles Ltd.

Q.3 **Attempt Any 1 (Either A or B) Question** **(5 Marks)** CO5

A. You are working as a Portfolio Manager at Zenith Investments, responsible for constructing an optimal equity portfolio. In the current market scenario, you aim to identify mispriced securities by comparing their actual returns with the returns predicted by the Security Market Line (SML) under the Capital Asset Pricing Model (CAPM) framework.

You have gathered the following data for a set of securities:

Security	Actual Return (%)	Beta
Reliance Industries	28%	1.6
HDFC Bank	15%	1.3
Infosys	22%	1.1
ITC Ltd.	11%	0.9
Market Index	14%	1
T-Bills	8%	0

Note:

- Market Index return represents the market return
- T-Bills return represents the risk-free rate

Questions:

i. Using CAPM, determine the expected return for each security.

ii. Compare the actual return with the expected return for each security and identify which securities are undervalued, overvalued, or fairly valued as per CAPM.

B. An investor has constructed a compact portfolio by investing in three major asset classes to balance risk and return. The investor now wants to evaluate the performance of each asset class using risk-adjusted performance measures, namely the Sharpe Ratio and the Treynor Ratio.

Portfolio Data

Asset Class	**Amount Invested (₹)**	**Portfolio Weight**	**Annual Return (%)**	**Standard Deviation (%)**	**Beta**
Equity Mutual Funds	8,00,000	0.4	15	18	1.1
Debt Mutual Funds	7,00,000	0.35	9	6	0.25
Gold ETF	5,00,000	0.25	12	10	0.15
Total	**20,00,000**	**1**			

Additional Information

- Risk-free rate (Rf) = 6%
- Market return (Rm) = 12%

Questions:

i. Determine the Sharpe Ratio for each asset class and recommend which asset class performs best based on total risk-adjusted return.

ii. Determine the Treynor Ratio for each asset class and recommend which asset class performs best based on systematic risk-adjusted return.

Q.4 **Compulsory Question** **(10 Marks)** CO5

Alpha Tech Ltd. is a prominent player in India's pharmaceutical sector and a constituent of the Nifty 50 index. As an investor, you aim to evaluate Alpha Tech's return performance and systematic risk over the last five years based on the data given below:

Year	**Alpha Tech Year-End Price (INR)**	**Dividend per Share (INR)**	**Nifty 50 Year-End Points**
2021	845.2	8	12,168.45
2022	920.5	9.5	13,981.75
2023	1185.75	11	17,354.05
2024	1102.4	12.5	18,105.30
2025	1256.8	14	17,003.75

Questions:

i. Determine the Annual Return of Alpha Tech Ltd. & Nifty 50
ii. Determine the Average Annual Return of Alpha Tech Ltd. & Nifty 50
iii. Determine the Beta of Alpha Tech Ltd.
iv. Based on the concept of systematic risk, interpret what does Alpha Tech's Beta indicate about its systematic risk compared to the market?
v. Evaluate whether Alpha Tech's average annual return is higher or lower than the market and interpret what does this imply?

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