

Security Analysis & Portfolio Management

Date: 13.6.2008

Marks: 100

Time: 3.00 pm to 6.00 pm

SECTION – A

Answer any THREE from the following SIX questions. Each answer carries 20 marks.

Q. 1. A pension fund manager is considering three mutual funds. The first is a stock fund, the second is a long term government and corporate bond fund, and the third is a T-bill money market fund that yields a rate of 8 per cent. The probability distribution of the risky funds is as follows:

	Expected Return	Standard Deviation
Stock Fund	20%	30%
Bond Fund	12%	15%

The correlation between the fund returns is 0.10

What are the investment proportions in the minimum-variance portfolio of the Stock Fund and Bond Fund.

Q. 2. The returns on the share of Delite Industries and Sensex for the past five years are given below:

Sensex (%)	Delite (%)
-12.5	-5.1
1.7	6.7
7.2	7.1
11.5	18.9
6.3	11.9

Calculate the average return on the Delite's share and Sensex. What is Delite's beta?

Q.3. Assume that the following hold:

Risk free rate	: 7 per cent
Expected return on the market	: 13 per cent
Standard deviation of the market	: 20 per cent

Calculate the expected return and risk (standard deviation) for the following portfolios:

(a). 60 per cent of the investable wealth in the market portfolio, 40 per cent in the risk less assets.

(b). 125 percent of the investable wealth in the marketable portfolio

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Q. 4. Determine the risk and return for an equally weighted portfolio of assets X, Y, and Z with the following inputs.

$$E(R_x) = 15\%$$

$$\sigma_x = 18\%$$

$$E(R_y) = 17\%$$

$$\sigma_y = 20\%$$

$$E(R_z) = 20\%$$

$$\sigma_z = 25\%$$

Coefficient of correlation between X and Y = 0.50
 Coefficient of correlation between Y and Z = 0.20
 Coefficient of correlation between X and Z = -0.50

Q.5. Mr. P has been managing the portfolio of a large mutual fund for the last two years. He found that his portfolio had earned a return of 70.60% and had a beta of 1.121. During the same period, the return on the market as a whole was 41.40%. Assuming that the risk-free rate was 12%, compute the Treynor measure for the portfolio and comment on P's performance according to this measure.

Q. 6.

Time	Security ABC Ltd	
	Opening Price	Dividend
1	57.75	-
2	59.85	-
3	59.37	0.725
4	55.50	-
5	56.25	-
6	59.00	0.725
7	60.25	-

You are required to compute the risk (standard deviation) and return of company ABC Ltd.

SECTION – B

Answer any TWO from the following FOUR questions. Each answer carries 20 marks.

Q. 7. Briefly explain the process of investment management.

Q.8. What is Fundamental Analysis? Explain the techniques of Fundamental Analysis.

Q.9. Critically evaluate the role of SEBI in protecting the interest of investors in India.

Q.10. Explain any three concepts from the below:

- a. Performance evaluation of portfolio
- b. Portfolio evaluation
- c. Diversification of risk
- d. Capital Asset Pricing Model.
- e. Company Analysis
