GUJARAT TECHNOLOGICAL UNIVERSITY
MBA Integrated– SEMESTER –VII-EXAMINATION – WINTER-2023

Subject Code:2577121   **Date: 06-12-2023**
Subject Name: Security Analysis and Portfolio Management
Time:10:30 AM TO 01:30 PM   **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. Figures to the right indicate full marks.
4. **Use of simple calculators and non-programmable scientific calculators are permitted.**

Q.1 **(a)** What is an Investment? Discuss the various marketable and non-marketable investments available to investors. **07**

(b) During the past five years, the returns of a stock were as follows: **07**

Year	1	2	3	4	5
Return	0.07	0.03	-0.09	0.06	0.1

Compute the following:

Arithmetic mean, Geometric mean, Variance and Standard deviation.

Q.2 **(a)** Explain Capital Asset Pricing Model with an example. **07**

(b) A Rs 100 par value bond bears a coupon rate of 12 percent and matures after 6 years. Interest is payable semi-annually. Compute the value of the bond if the required rate of return is 16 percent, compounded semi-annually. **07**

OR

(b) The following information is available on a bond: **07**

Face value: Rs 100 & Current market price: Rs 110

Coupon rate: 12 percent payable annually

Years to maturity: 6

What is the duration of the bond?

Q.3 **(a)** Define Technical Analysis. What is the difference between technical analysis and fundamental analysis? **07**

(b) What do you mean by Efficient Market Hypothesis, Also Explain the forms of Market Efficiency **07**

OR

Q.3 **(a)** Compare and contrast Capital Market Line (CML) and Security Market Line (SML). **07**

(b) Explain, in brief, the EIC Framework and its implications for investors. **07**

Q.4 (a) Explain Dow Theory and trends associated with the theory in details. **07**

(b) What is Bond Duration? Explain the rules of Duration. **07**

OR

Q.4 (a) What is risk? Explain different kind of risk associated with investments in detail. **07**

(b) The returns of two assets under four possible states of nature are given below: **07**

State of nature	Probability	Return on asset A	Return on asset B
1	0.1	5%	0%
2	0.3	10%	8%
3	0.5	15%	18%
4	0.1	20%	26%

What is the standard deviation of the return on Asset A and Asset B?

Q.5 (a) Suppose the following historical returns have been earned for the stock market and the stock of company Verma Ltd. **07**

Period	Return on Market	Return on Verma Ltd.
1	-5%	-12%
2	4%	6%
3	8%	12%
4	15%	20%
5	9%	6%

Calculate Beta for Verma Ltd.

(b) Write a note on Sharpe's Single index model **07**

OR

Q.5 (a) Consider the following information for three mutual funds, P, Q, and R, and the market. The mean risk-free rate was 6 percent. **07**

Particulars	Mean return (%)	Standard deviation (%)	Beta
P	12	18	1.1
Q	10	15	0.9
R	13	20	1.2
Market Index	11	17	1

Calculate the Treynor measure & Sharpe measure

(b) Critically Explain Arbitrage Pricing Theory **07**

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