

GUJARAT TECHNOLOGICAL UNIVERSITY
MBA SEMESTER- III - EXAMINATION-SUMMER-2024

Subject Code: 4539221**Date: 30/04/2024****Subject Name: Security Analysis and Portfolio Management****Time: 02:30 PM TO 05:30 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.

- Marks**
- Q.1** Define the following terms: **14**
- (a) Systematic risk
 - (b) Buy and hold strategy.
 - (c) Breadth and depth of market
 - (d) SML and CML
 - (e) Portfolio Revision
 - (f) Duration of bond
 - (g) PE Ratio

- Q.2** (a) Explain the concept of fundamental Analysis. Also explain the major macroeconomic variable that affects the stock market. **07**
- (b) The information about two company's stock is given as under: **07**

State of the Economy	Probability of Occurrence	Rate of Return on SRF (%)	Rate of Return GRF (%)
Boom	0.3	16	40
Normal	0.5	11	10
Recession	0.2	6	-20

What is the expected return and standard deviation of return? Which stock investor should invest in? Why?

OR

- (b) What do you mean by technical Analysis? Explain the various approaches of technical Analysis. **07**
- Q.3** (a) What do you mean by efficient market hypothesis? Explain the various forms of efficiency. **07**
- (b) Discuss various bond portfolio management strategies. **07**

OR

- Q.3** (a) Explain the Portfolio management process? **07**
- (b) The following information is available. **07**

	Stock A	Stock B
Expected Return	16%	12%
Standard Deviation	15%	8%
Coefficient of correlation	0.60	

- (i) What is the covariance between stocks A and B?
(ii) What is the expected return and risk of a portfolio in which A and B have weights of 0.6 and 0.4.

- Q.4** (a) Explain the Capital Asset Pricing Model with assumptions in detail. **07**
(b) Consider the following information for three mutual funds, A, B, and C, and the market. **07**

	Mean return (%)	Standard deviation (%)	Beta
Fund A	12	18	1.1
Fund B	10	15	0.9
Fund C	13	20	1.2
Market Index	11	17	

The mean risk-free rate was 6 percent. Calculate the Treynor measure and Sharpe measure for the three mutual funds and the market index.

OR

- Q.4** (a) Describe the procedure developed by Markowitz for choosing the optimum portfolio of risky assets. **07**
(b) The returns of two assets under four possible states of nature are given below: **07**

State of nature	Probability	Return on stock A (%)	Return on stock B (%)
1	0.10	5	0
2	0.30	10	8
3	0.50	15	18
4	0.10	20	26

- (i). What is the standard deviation of the return on stock A and Stock B?
(ii). What is the covariance between the returns on Stock A and B?
(iii). What is the coefficient of correlation between the returns on stock A and B?

Q.5 CASE STUDY:

The following table gives an analyst's expected return on two stocks for particular market return. Risk free rate is 7%.

Market Return	Aggressive Stock	Defensive Stock
6%	2%	8%
20	30	16

- (a) What are the betas of the two stocks? **07**
(b) What is the expected return on each stock if the market return is equally likely to be 6% or 20%? **07**

OR

- Q.5** (a) If the risk-free rate is 7% and the market return is equally likely to be 6% or 20% what is the SML? **07**
(b) What are the alphas of the two stocks? **07**
