Seat No.:	Enrolment No.

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA - SEMESTER-III • EXAMINATION – WINTER 2013

•		de: 2830203 Date: 21-12-2013	3
_	: 14:30	me: Security Analysis and Portfolio Management (SAPM) 0 pm – 17:30 pm Total Marks: 70)
	1. Att 2. Ma	tempt all questions. Ake suitable assumptions wherever necessary. gures to the right indicate full marks.	
Q.1	(a)	Define investment avenue and Briefly describe the features of any three investment avenues available in financial market.	07
	(b)	What are the key differences between an investment and a speculation?	07
Q.2	(a) (b)	Discuss the Relationship between Diversification and Portfolio Risk? Write a Short note on Capital Asset Pricing Model. OR	07 07
	(b)	What do you mean by risk? Explain Systematic and Non Systematic Risk.	07
Q.3	(a)	What is Macroeconomic Analysis? Discuss any three variables / indicators used to describe the state of economy.	07
	(b)	Write a short note on Industry Life Cycle Stages. OR	07
Q.3	(a) (b)	Define and Differentiate Technical analysis from Fundamental analysis. Explain the Major Characteristics of the Bond.	
Q.4	(a)	$R_2 = 16\%$, $R_3 = 24\%$, $R_4 = -2\%$, $R_5 = 12\%$, $R_6 = 15\%$. What is the	
	(b)	expected return and standard deviation of returns for this stock? A stock earns the following returns over a five year period: $R_1 = 0.30$, $R_2 = -0.20$, $R_3 = -0.12$, $R_4 = 0.38$, $R_5 = 0.42$, $R_6 = 0.36$. Calculate the following: (a) arithmetic mean return, (b) cumulative wealth index, and (c) geometric mean return.	07
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Q.4	(a)	The probability distribution of the rate of return on a stock is given below: State of the Economy Probability of Occurrence Return Boom 0.20 30 % Normal 0.50 18 % Recession 0.30 9 % What is the standard deviation of return?	07

Q.4 (b) A pension fund manager is considering three mutual funds. The first is a stock fund, the second is a long term bond fund, and the third is a T-bill Money market fund that yields a risk free rate of 8%. The probability distribution of the risky funds i.e. stock and bond fund is as follows:

	Expected Return	Stand. Deviation
Stock fund	20%	30%
Bond Fund	12%	15%

The Correlation between the fund returns is 0.10.

- 1. What are the investment proportions in the minimum-variance portfolio of the two risky funds
- 2. What is the expected return and standard deviation of return of such portfolio?
- Q.5 (a) The risk free rate is 8% and the expected return is on the market 07 portfolio is 16%. A firm considers a project that is expected to have a beta of 1.3.
 - 1. What is the required rate of return on the project as per CAPM?
 - 2. If the expected return / IRR of the project is 19%, should it be accepted? What is the alpha of this project?
 - **(b)** The following information is available.

The following information is available.		
	Stock A	Stock B
Expected return	24%	35%
Standard deviation	12%	18%
Coefficient of correlation		_
between the two stocks is 0.60		

- a) What is the covariance between stocks A and B?
- b) What is the expected return and risk of a portfolio in which *A* and *B* are equally weighted?

OR

Q.5 (a) Consider the following information for three mutual funds, *L*, *M*, and *N*, 07 and the market.

	Mean return (%)	Standard deviation (%)
L	15	20
M	12	11
N	18	15
Market inde	x 13	14

The mean risk-free rate was 8 percent. Calculate the Treynor measure, Sharpe measure, Jensen measure for the three mutual funds and the market index.

(b) The risk-free return is 9 percent and the expected return on a market portfolio **07** is 12 percent. If the required return on a stock is 14 percent, what is its beta?

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