Seat No.: ________ Enrolment No.______________

GUJARAT TECHNOLOGICAL UNIVERSITY

M.B.A -IIInd SEMESTER–EXAMINATION – MAY/JUNE- 2012

Subject code: 830203 **Date: 02/06/2012**

Subject Name: Security Analysis & Portfolio Management (SAPM)

Time: 02:30 pm – 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.**

Q.1 **(a)** A security analyst is responsible for making recommendations to clients about buying and selling stocks and making other investment decisions. What are the factors that should be taken into account while evaluating investment worthiness of a company? Discuss them briefly. **07**

(b) The Efficient Market Hypothesis states that no one can earn above normal returns consistently by using Technical Analysis or Fundamental Analysis. If this is true then Security Analysis is a fruitless attempt. What are your views on this? Discuss. **07**

Q.2 **(a)** As a rational investor what factors you would consider while taking investment decisions. **07**

(b) Calculate the expected return and the standard deviation of returns for a stock having the following probability distribution of returns. **07**

POSSIBLE RETURNS (IN %)	PROBABILITY OF OCCURRENCE
-25	0.05
-10	0.10
0	0.10
15	0.15
20	0.25
30	0.20
35	0.15

OR

(b) Explain the following terms: **07**

1. Support and Resistance
2. MACD
3. ROC
4. Short Selling

Q.3 **(a)** Consider two bonds A and B. They have following characteristics. **07**

	Bond-A	**Bond-B**
Face Value	Rs.100	Rs.100
Coupon Rate	14%	14%
Term to maturity	4 years	7 years
Current market price	Rs.100	Rs.100
Coupon payments	Annually	Annually

(i). What is YTM of Bonds A and B. If the market interest rates fall by 1 percentage, what would be the new market price of the bonds?

(ii). What is the percentage change in the price of two bonds? What did you notice regarding the percentage price change in case of bonds A and B identical in all respects except term to maturity?

(b) Call Options are said to be "At the money", "In the money" and "Out of money" depending on whether the exercise price is equal to, less than or greater than the current market price of the stock. In case of put options the opposite of this is true. Explain when a trader realizes profits in case of call as well as a put option with the help of examples. Ignore transaction costs **07**

OR

Q.3 (a) Calculate duration of the following bond **07**

Face value	:	Rs. 1000
Coupon rate	:	10% p.a.
Maturity period	:	5 years
Market YTM	:	11%

(b) A stock is currently selling for Rs. 60. The call option on the stock exercisable a year from now is available at an exercise price of Rs. 55. The stock can rise by 35%, and it can fall by 30%. The risk free rate of interest is 12 percent. What is the value of the call option? **07**

Q.4 (a) Given the following variance-covariance matrix for three securities, as well as the percentage of the portfolio that each security comprises. You are required to calculate the portfolio's standard deviation. **07**

Security	A	B	C	Proportion of investment
A	425	-190	120	0.35
B	-190	320	205	0.25
C	120	205	175	0.40

(b) Describe the procedure developed by Markowitz for choosing the optimal portfolio of risky assets. What are the problems encountered while using Markowitz model? **07**

OR

Q.4 (a) Explain Capital Asset Pricing Model with its assumptions. **07**

(b) Describe the anatomy of Sharpe's single index model **07**

Q.5 (a) Calculate Sharpe Ratio, Treynor Ratio and Jensen Ratio from the following information pertaining to three mutual fund portfolios: **07**

	Mutual fund portfolios		
Particulars	X	Y	Z
Beta	1.10	0.80	1.80
Return (%)	14.50	11.25	19.75
Standard deviation (%)	20	17.50	26.30

Assume that the risk free rate of return on govt. security is 6 percent and the market return is 12 percent.

(b) Discuss the role of different entities in a mutual fund operation. **07**

OR

Q.5 (a) Write a detailed note on Fama's Net Selectivity Measure. **07**

(b) What is an exchange traded fund? How is it constructed? **07**

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