Seat No.: __________ Enrolment No.____________

GUJARAT TECHNOLOGICAL UNIVERSITY

MBA Semester –III Examination Dec. - 2011

Subject code: 2830203 **Date: 17/12/2011**

Subject Name: Security Analysis and Portfolio Management

Time: 10.30 am – 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.**

Q.1 **(a)** Define Investment. Differentiate between investment and speculation with suitable examples. **07**

(b) What is Efficient Market Hypothesis? Explain various forms of market efficiency with respect to Indian capital market. **07**

Q.2 **(a)** What are the basic assumptions and inputs required for CAPM? Distinguish between CML and SML. **07**

(b) Mr. Rakesh Zhunzhunwala purchases 500 shares of Unitech Ltd. at a price of Rs.35. He deposits Rs.7000 to execute this trade. Ignore brokerage cost and taxes. **07**

(a) Find out Initial Margin in percentage.

(b) Suppose Broker has asked him for maintenance margin of 25%. Find out Price below which the maintenance margin call has to be given.

(c) Suppose Price falls to Rs.25, how much amount should be deposited by him as a part of maintenance margin call?

OR

(b) The probability distribution of the rate of return on HCL and Infosys are as follows: **07**

State of Economy	Probability of Occurrence	Rate of Return (HCL)	Rate of Return (Infosys)
Boom	0.3	16	40%
Normal	0.5	11	10%
Recession	0.2	6	-20%

Which stock will you suggest to risk averse investor on the basis of calculation of expected rate of return and standard deviation of return?

Q.3 **(a)** The HERO MOTO CORP’s cash flow from operations before interest and taxes was Rs.2 million in the year just ended, and it expects that this will grow by 5% per year forever. To make this happen, the firm will have to invest an amount equal to 20% of pretax cash flow each year. The tax rate is 35%. Depreciation was Rs.200000 in the year just ended and is expected to grow at the same rate as the operating cash flow. The appropriate market capitalization rate for the unleveraged cash flow is 12% per year, and the firm currently has debt of Rs.4 million outstanding. Use the free cash flow approach to value the firm’s equity. **07**

(b) What is single index model? How it differs from Markowitz model? Explain with suitable examples. **07**

OR

Q.3 **(a)** The following information is available for ACC and TISCO. **07**

	Expected Return (%)	Standard deviation (%)
ACC	14	22
TISCO	20	35

The returns on the stocks are perfectly negatively correlated. What is the expected return of the portfolio comprising of ACC and TISCO when the portfolio is constructed to drive the standard deviation of portfolio return to zero?

(b) The following information is available: **07**

Stocks	Forecast Returns (%)	Std. Deviation (%)	Beta
ITC	24	22	0.7
HUL	19	20	0.5
RIL	11	39	1.2
SBI	15	39	1.2
Sensex	15	24	1.0
Risk free rate of return is 5%			

Calculate: (a) Expected return and Alpha for each stock
(b) Coefficient of Variation for each stock
(c) Give comments for choosing stocks on basis of (a) and (b).

Q.4 **(a)** What is Technical Analysis? Explain various continuation and reversal patterns for technical analysis. **07**

(b) Find the duration of a 7% coupon bond making annual coupon payments if it has 5 years to maturity and has a YTM of 7%. What is the duration if the YTM is 13%? **07**

OR

Q.4 **(a)** Explain the immunization and duration strategy used in Bond management with examples. **07**

(b) A company's bonds have a par value of Rs.100, mature in seven years, and carry a coupon rate of 12 percent payable semi annually. If appropriate discount rate is 16 percent, what price should the bond command in the market place? **07**

Q.5 **(a)** Write a short note on Du Pont Analysis. **07**

(b) The following information is available for Company ABC, PQR and XYZ: **07**

	ABC	PQR	XYZ
Expected ROE	13%	20.5%	21.1%
Expected EPS	2.27	4.00	4.67
Estimated DPS	1.86	2.00	2.00
Current Market Price	21.00	26.50	29.10

Answer the following questions:
(a) What is the expected dividend pay-out ratio?
(b) What are the expected growth rates of each?
(c) What is the intrinsic value of each share?

OR

Q.5 **(a)** Choose an industry and identify and analyze the factors that will determine its performance in next three years. **07**

(b) The following portfolios are being considered for investment. During the period under consideration, risk free rate of return is 10%. **07**

	Avg. Return	Std. Deviation	Beta
P	15	20	0.90
Q	17	24	1.10
R	19	27	1.20
Sensex	16	20	1.00

Compute and Rank the portfolios using;

a. the Sharpe measure for each portfolio and the market portfolio.

b. the Treynor measure for each portfolio and the market portfolio.

c. the Jensen measure for each portfolio and the market portfolio.

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