

Third Semester MBA Degree Examination, June/July 2014

Security Analysis and Portfolio Management

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FOUR full questions from Q.No.1 to Q.No.7.

- 2. Question No. 8 is compulsory.
- 3. Use of PV Tables permitted.

1 a. What is Kerb trading?

(03 Marks)

- b. The rate of return on a particular stock during the past years is 16 percent. This is assumed to continue for the next 5 years and after that, rate of return is assumed to have a growth rate of return is assumed to have a growth rate of 10 percent indefinitely. The dividend expected for the current year is ₹2. If the required rate of return is 20%, estimate the stock price according to the two stage model. (07 Marks)
- c. Write a note on various investment alternatives available to a modern investor.

(10 Marks)

2 a. What is corner portfolio?

(03 Marks)

b. Differentiate between investment and speculation.

(07 Marks)

c. An investor wants to invest in the following stocks in equal proportion:

Stock	α	β	σ_{ei}^2
A	1.27	1.50	50
В	1.02	1.05	40
C	2.48	1.37	20
D	0.47	0.86	35

The market variance is 25. The markets expected return is 20 percent. Calculate the portfolio risk and return. (10 Marks)

- a. Mr. Abhyuday purchased the shares of ABC Ltd. for ₹180 each and sold them after a year for ₹220. During the year, he had received a dividend of ₹5 per share on the above stock. Calculate his holding period return.
 - b. Explain the trading and settlement procedure followed in the Indian capital market equity segment. (07 Marks)
 - c. A stock market analyst has analyzed the stock market and given his opinion regarding AB Steel Co. and the market in the following table:

Crowth	Likely return (%)		Probability	
Growth	AB Steel Co.	Market	Flooability	
Boom	20	24	0.4	
Fair	13	15	0.5	
Depression	5	-7	0.1	

The treasury bills yield a return of 6%. Would you advice buying this stock, if the beta of the stock is estimated to be 0.8?

(10 Marks)

4 a. What is rupee cost averaging?

(03 Marks)

b. Explain the different types of risks prevailing in the financial market.

(07 Marks)

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c. The following table gives the details regarding the expected return, beta and residual variance of various stocks.

Stock	Expected return	Beta	Residual Variance
Α	15	1.0	30
В	12	1.5	20
C	11	2.0	40
D	8	0.8	10
Е	9	1.0	20
F	14	1.5	10

Mahesh, an investor, wants to create an optimal portfolio with no short sales. If the risk free rate is 5 percent and market return variance is 10, which stocks should he choose, to construct an optimal portfolio?

(10 Marks)

5 a. What is immunization?

(03 Marks)

- b. "RSI is a powerful technical tool in predicting stock price movements". Do you agree? Explain. (07 Marks)
- c. With the given details, evaluate the performance of different funds using Sharpe, Treynor and Jensen performance evaluation techniques.

Fund	Return	Standard Deviation	Beta
Α	10	4	1.3
В	8	5	1.2
C	12	4	0.9
Market	6	3	

Risk free rate of return is 4%.

(10 Marks)

6 a. What is dematerialization?

(03 Marks)

b. List the factors considered in Industry analysis.

- (07 Marks)
- c. Explain the concept of efficient market theory. What are the various forms of market efficiency? (10 Marks)
- 7 a. Write a note on various bond value theorems.

(05 Marks)

b. Stocks X and Y display the following returns over the past 3 years:

Year	Returns (%)	
i Gai	Stock X	Stock Y
2009	10	16
2010	18	12
2011	08	14

- i) Find each stock's expected rate of return and standard deviation.
- ii) Calculate the coefficient of correlation between stocks X and Y.
- iii) Applying mean variance criterion, which stock is most suitable for investment?
- iv) What is the expected return and risk of a portfolio made up of 40% in X and 60% in Y?

(15 Marks)

8 Case Study:

Mr. Praveen is considering investing in a ₹5000 face value, 8% coupon bond with a maturity period of 4 years. The bond is currently yielding 6%.

a. If the current price of the bond is ₹5250, can Praveen buy it?

(05 Marks)

b. Calculate the duration for the bond.

(05 Marks)

c. Calculate modified duration for the bond.

(05 Marks)

d. If the current price of the bond is ₹5100, what is its yield to maturity?

(05 Marks)