

USN

--	--	--	--	--	--	--	--	--	--

10MBAFM322/BF372

Third Semester MBA Degree Examination, Dec.2013/Jan.2014
Security Analysis and Port Folio Management

Time: 3 hrs.

Max. Marks:100

Note: 1. Answer any FOUR full questions from Q.No.1 to 7.
2. Q.No. 8 is compulsory.

- 1 a. What is book building? (03 Marks)
 b. Discuss the attributes that an investor should consider while evaluating an investment. (07 Marks)
 c. A stock costing Rs.120 pays no dividends. The possible prices that the stock might sell for at the end of the year with the respective probabilities are as below:

Price (Rs.)	Probability
115	0.1
120	0.1
125	0.2
130	0.3
135	0.2
140	0.1

- i) Calculate the expected return.
 ii) Calculate the standard deviation of returns. (10 Marks)

- 2 a. Explain the concept of systematic risk. (03 Marks)
 b. Discuss the different functions of lead managers, registrars and underwriters. (07 Marks)
 c. Monthly return data (in percent) for KPCL stock and the NSE index for a 10-month period are presented. Calculate the beta of KPCL stock:

Month	1	2	3	4	5	6	7	8	9	10
KPCL	9.43	0	-4.30	-18.90	-6.70	26.57	20.0	3.0	5.25	21.45
NSE index	7.41	-5.33	-7.35	-14.0	1.60	15.19	5.11	0.76	-1.0	10.44

(10 Marks)

- 3 a. Compare and contrast fundamental and technical analysis. (03 Marks)
 b. Write short notes on BSE sensex and S and P CNX nifty. (07 Marks)
 c. Computech Ltd. paid a dividend of Rs.3.20 per share recently. Forecasts suggest that earnings and dividends of the company are likely to grow at the rate of 21% over the next 5 years and at the rate 10% indefinitely. The required rate of return is 20% and present price is Rs.57. What is the estimated price according to the two-stage model? (10 Marks)
- 4 a. What are the implications of industry life cycle on investment decision-making? (03 Marks)
 b. Describe the chart patterns that help to identify the trend reversal. (07 Marks)
 c. The following information is available:

	Stock A	Stock B
Expected return	16%	12%
Standard deviation	15%	8%
Coefficient of correlation	0.6	

(10 Marks)

- 5 a. Anand owns Rs.1000 face value bond with 5 years to maturity. The bond has an annual coupon of Rs.75. The bond is currently priced at Rs.970. Given an appropriate discount rate of 10% should Anand hold or sell the bond. (03 Marks)
- b. Write short notes on weak form of the efficient market hypothesis along with the tests used for testing this form. (07 Marks)
- c. Consider a portfolio of 4 securities with following characteristics:

Security	Weights	α_i	β_i	Residual variance ($\sigma_{\epsilon_i}^2$)
1	0.2	2	1.2	320
2	0.3	1.7	0.8	450
3	0.1	-0.8	1.6	270
4	0.4	1.2	1.3	180

Calculate the return and risk of the portfolio under single index model, if the return on market index is 16.4% and the standard deviation of return on market index is 14%.

(10 Marks)

- 6 a. The single index model results in a substantial reduction in inputs required for portfolio analysis. Explain. (03 Marks)
- b. List the assumptions of capital asset pricing model. (07 Marks)
- c. Consider the following information for 3 mutual funds, A, B and C and the market:

	Mean return (%)	Standard deviation (%)	Beta
A	12	18	1.1
B	10	15	0.9
C	13	20	1.2
Market index	11	17	1.0

The mean risk-free rate was 6%. Calculate the Treynor measure, sharpe measure and Jensen measure for 3 mutual funds. (10 Marks)

- 7 a. What are zero-coupon bonds? (03 Marks)
- b. Discuss the risks to which debt instruments are subjected to. (07 Marks)
- c. The following information is available on a bond:
 Face value: Rs.100
 Coupon rate: 12% payable annually
 Years to maturity: 6
 Current market price: Rs.110
 What is the duration of bond? (10 Marks)

8

CASE STUDY

The economics cell of SAPM securities has developed the probability distribution for the state of economy and the equity researchers have estimated the rates of return under each state of economy. The information is presented in the table.

State of the economy	Probability	Stock	Stock	Market portfolio
Recession	0.2	22%	5%	9%
Average	0.6	14%	15%	13%
Boom	0.2	-4%	25%	18%

- a. Determine the expected rate of return and the standard deviation of return for stocks A, B and market portfolio. (06 Marks)
- b. What is the covariance between the returns on A and B? (05 Marks)
- c. Assume the risk-free rate of interest is 6%, determine the beta value for stocks A and B. (05 Marks)
- d. What is diversification, will it reduce total risk? (04 Marks)
