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14MBAFM303

Third Semester MBA Degree Examination, June/July 2018

Investment Management

Time: 3 hrs. Max. Marks:100

SECTION - A

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

1 What do you mean by investment management? **(03 Marks)**

2 What do you mean by Deep discount Bonds? **(03 Marks)**

3 Distinguish between systematic and unsystematic risk. **(03 Marks)**

4 From the following which amount is worth more at 16% Rs.1000 today or Rs.2100 after 5 years. **(03 Marks)**

5 What are the different sources of risk? **(03 Marks)**

6 List out the characteristics of the market portfolio. **(03 Marks)**

7 What are the determinants of risk premium? **(03 Marks)**

SECTION - B

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

1 Explain the assumptions of capital market theory. **(07 Marks)**

2 A company paid a cash dividend of Rs.4 per share on the stock during the current year. The earnings and dividends of the company are expected to grow at an annual rate of 8% indefinitely. Investor expects a rate of return of 14% on the company shares. What is a fair price for this company shares? **(07 Marks)**

3 A financial analyst if analyzing two investment alternatives of Cipla and Rambaxy. The estimated rates of return and their chance of occurrence for the next year are given below:

Probability	Rate of Return	
	Cipla (%)	Ranbaxy (%)
0.20	22	5
0.60	14	15
0.2	-4	25

Determine the expected rate of return, standard deviation of Cipla and Ranbaxy. **(07 Marks)**

4 What are the different types of bond market? **(07 Marks)**

5 Vivek considers Rs.1000 par value, bond bearing a coupon rate of 11% that matures after 5 years. He wants a minimum yield to maturity of 15%. The bond is currently sold @ Rs.870. Should he buy the bond? **(07 Marks)**

6 The following tables provides information regarding portfolio return and risk.

Port folio	1	2	3	4	5
Expected Return	10	12	13	16	20
σ	4	7	5	12	14

i) Treasury bills rate is 5%m which portfolio is best?
ii) Would it be possible to earn 12% return with σ of 4%?
iii) If σ is 12%, what would be expected return? **(07 Marks)**

7 Why stock market index is important and what are the factors affecting construction of stock? **(07 Marks)**

SECTION - C

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

1 The return and risk figures of 2 mutual funds and stock market index are given below:

Fund	Return (%)	Std. deviation (%)	Beta
MN	12	18	0.7
OP	19	25	1.3
Market index	15	20	1.0

Given risk free rate of return is 7%, what is the predictive ability of the bond as per Sharpe ratio and Tregnor ratio? **(10 Marks)**

2 The estimates of the standard deviation and correlation coefficients of three stocks are given below:

Stock	σ	Correlation with stock		
A	32	1.00	-0.80	0.40
B	26	-0.80	1.00	0.65
C	18	0.40	0.65	1.00

If a portfolio is constructed with 15% of stock 'A', 50% of stock 'B' and 35% of stock 'C'. Find out portfolio standard deviation? **(10 Marks)**

3 The following table gives data on 4 stocks:

Stocks	Alpha	Variable Systematic	Unsystematic
A	-0.06	5	4
B	0.1	2	6
C	0.00	3	1
D	-0.14	3	2

The market is expected to have a 12% return over a forward period with a return variance of 6%. Calculate the expected return for a portfolio consisting of equal proportion of stock A, B, C and D. **(10 Marks)**

4 Earnings and dividends have been growing at a rate of 18% P.A. This growth is expected to continue for 4 years, after that growth rate is expected to continue for 4 years. Later growth rate will fall to 12% for the next 4 years. Thereafter the growth rate is expected to be 6% forever, if the last dividend per share was Rs.2.00 and the investors required rate of return on equity is 15%. What is intrinsic value per share? **(10 Marks)**

5 Assume CAPM equilibrium model with unlimited borrowing and lending at the risk bar rate of interest. Compute the following Table:

Security	E(R)	σ	β	ei^n
A	0.15	-	2.0	10
B	-	0.25	0.75	0.04
C	0.09	-	0.50	0.14

(10 Marks)

6 Mr. Prageshwar received Rs.10 lakhs from his pension fund. He wants to invest in the stock market the treasury bill rate is 7% and σ_m^2 is 20. What is optimum portfolio assuming a short share was there?

Stock	A	B	C	D	E	F
R_i	20	18.0	16	12	10	15
β	0.75	1.3	1.3	0.75	0.60	1.8
σ_{ei}^2	25	16	9	16	9	36

(10 Marks)

7 The historical rates of return of 2 securities over the past 10 years are given. Calculate the covariance and correlation of the 2 securities.

Year	1	2	3	4	5	6	7	8	9	10
Security 1	12	8	7	14	16	15	18	20	16	22
Security 2	20	22	24	18	15	20	24	25	22	20

(10 Marks)

SECTION - D
CASE STUDY – [Compulsory]

Mr. Vignesh an auditor wants to invest in stocks and will do so only after assessing the systematic and unsystematic risks of his investment. His friend, a stock market broker suggested TATA, HCL and INFO company stock for investment. He provides following information about the stock to Mr, Vignesh, of market index is expected to have a return of 0.20 and variance of 0.20, which single stock would Mr. Vignesh prefer to own from the risk and return point of view?

Following table gives the market information regarding TATA, HCL, INFO companies.

Stock	α	β	σ_{ei}^2
TATA	0.07	1.52	0.19
HCL	0.09	0.81	0.06
INFO	-0.02	1.41	0.15

If he invests equally in all three stocks, what will be his risk and return profile? **(20 Marks)**

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