20MBAFM303

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Third Semester MBA Degree Examination, Jan./Feb. 2023
Investment 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 P.V. tables permitted.*

1   a. List the features of a Good Investment. **(03 Marks)**
    b. Explain the different money market instruments available in India. **(07 Marks)**
    c. Explain the methods of floating securities in Primary market. **(10 Marks)**

2   a. Explain S & P BSE SENSEX. **(03 Marks)**
    b. Discuss the types of Risk. **(07 Marks)**
    c. A portfolio consists of three securities X, Y and Z. These securities have the following risk , return and correlation coefficients.

Security	Expected Return (%)	Standard Deviation	Correlation Coefficients
X	31	31	XZ : - 0.60
Y	17	22	YZ : 0.60
Z	18	24	XZ : 0.30

Determine the risk and return of the portfolio consisting of 40% of X, 35% of Y and 25% of Z. **(10 Marks)**

3   a. If a preferred stock's annual dividend is Rs 4 and the required return is 10%, what is the worth of the preferred stock today? **(03 Marks)**
    b. Two bonds A and B have a par value of Rs 10,000 and YTM of 9%. Both mature after 4 years. A pays annual coupon of 10% and B pays 7.5% annual coupon. Calculate the duration and volatility of bonds A & B. **(07 Marks)**
    c. Paramount Ltd paid a dividend of Rs 2.75 during the current year. Forecasts suggest that earnings and dividends of the Company are likely to grow at the rate of 8% over the next five years and at the rate of 5% thereafter. Investors have traditionally required a rate of return of 20% on these shares. Determine the present value of stock. **(10 Marks)**

4   a. List the basic tenets of Dow Theory. **(03 Marks)**
    b. Discuss the forms of efficient market hypothesis and the different tests of market efficiency. **(07 Marks)**
    c. The following three portfolios provide the particulars given below :

Portfolio	Average Annual return (%)	Standard deviation	Correlation coefficient
A	18	27	0.8
B	14	18	0.6
C	15	8	0.9
Market	13	12	-

Risk free rate of interest is 9%.
Rank these portfolio using Sharpe and Treynor measures and compare them. **(10 Marks)**

5 a. Explain Markowitz Efficient Frontier. (03 Marks)
  b. Determine 9 day Relative Strength Index (RSI) for the following data :

Date	Feb 4	6	7	8	11	12	13	14	18	19
Price (Rs)	300	304	319	317	319	333	331	332	348	346

  (07 Marks)

  c. An investor owns a portfolio composed of five securities with the following characteristics :

Security	Beta	Standard deviation of random error term	Proportion
1	1.35	5	0.10
2	1.05	9	0.20
3	0.80	4	0.15
4	1.50	12	0.30
5	1.12	8	0.25

  If the standard deviation of the market index is 20%, determine the total risk of the portfolio. (10 Marks)

6 a. List the assumptions of Markowitz Model. (03 Marks)
  b. Explain the utility of economic analysis and state the economic factors considered for this analysis. (07 Marks)
  c. Following information is available in respect of market :

Security	Expected Return (%)	Beta
A	22.20	1.75
B	15.80	1.90
C	18.00	1.10
D	9.00	0.95
E	25.80	2.00
T Bill	8.00	-
SENSEX	15.00	1.00

  Which of the securities are underpriced or overpriced in terms of Security Market Line (SML)? (10 Marks)

7 a. Explain Rolling Settlement. (03 Marks)
  b. Discuss the different types of charts used in Technical Analysis. (07 Marks)
  c. Z Company stock is currently selling at Rs 25 per share. The stock is expected to pay Re. 1 as dividend per share at the end of the next year. It is reliably estimated that the stock will be available for Rs 29 at the end of one year.
  i) If the forecast about the dividend and price are accurate , is it advisable to buy at the present price? The required rate of return is 20%.
  ii) If the investor required 15% return when the dividend remains constant what should be the price at the end of the first year? (10 Marks)

8 **CASE STUDY (Compulsory)** :

  Sigma Steel (SS) and Chi Cements (CC) are listed on the stock exchange for the last several years. The stocks behave in tandem depending upon the state of economy but to verifying degrees. An analyst has conducted a study to find out how the interrelationship of the returns of the two stocks is. He segregated different economic conditions as – Excellent , Good , Normal and Poor and calculated the returns offered by each firm during such periods. He further estimated that the likelihood of state of the economy for the next 10 years. Summary of his findings is as follows :

Situation	Probability	Returns (%)	
		SS	CC
Excellent	0.15	20	15
Good	0.15	15	12
Normal	0.50	12	9
Poor	0.20	-3	-1

Determine the following :

a. The expected return of each stock. **(05 Marks)**
b. Standard deviation of each stock. **(05 Marks)**
c. Covariance and coefficient of correlation between returns of Sigma Steel (SS) and Chi Cements (CC). **(05 Marks)**
d. Expected return and risk of the portfolio consisting of 40% of Sigma Steel (SS) and 60% of Chi Cements (CC). **(05 Marks)**

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