USN ☐☐☐☐☐☐☐☐☐☐   **18MBAFM302**

Third Semester MBA Degree Examination, Dec.2019/Jan.2020
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.*

1   a. Distinguish between Economic and Financial Investment. **(03 Marks)**
    b. Explain the attributes that an investor should consider while evaluating an investment. **(07 Marks)**
    c. The returns of securities A and B are given below:

Probability	Security A	Security B
0.5	4	0
0.4	2	3
0.1	0	3

Give the security of your preference. The security has to be selected on the basis of return and risk. **(10 Marks)**

2   a. What are 'Derivatives'? Give examples. **(03 Marks)**
    b. A portfolio consists of 3 securities 1, 2 and 3. The proportions of these securities are $w_1 = 0.3$, $w_2 = 0.5$ and $w_3 = 0.2$. The standard deviations of returns on these securities (in percentage terms) are: $\sigma_1 = 6$, $\sigma_2 = 9$ and $\sigma_3 = 10$. The correlation coefficients among the security returns are $P_{12} = 0.4$, $P_{13} = 0.6$, $P_{23} = 0.7$. What is the standard deviation of portfolio return? **(07 Marks)**
    c. Prem is considering the purchase of a band currently selling at Rs.878.50. The bond has four years to maturity, with a face value of Rs.1000 and 8 percent coupon rate. The next annual interest payment is due after one year. The required rate of return is 10 percent.
       (i) Calculate the intrinsic value of the bond. Should Prem buy the bond? [PV/FA (10% 4yrs) = 3.170]
       (ii) What is the value of Bond if expected rate of return is 12%? **(10 Marks)**

3   a. Distinguish between Systematic Risk and Unsystematic Risk. **(03 Marks)**
    b. How is technical analysis different from fundamental analysis? **(07 Marks)**
    c. Arun buys a bond with four years to maturity. The bond has a coupon rate of 9 percent and is priced at Rs.100 in the market.
       (i) What is the duration of the bond?
       (ii) What will be the percentage change in the price of the bond, if the interest rate rises by 1 percent? **(10 Marks)**

4   a. What is Coupon Rate and Zero Coupon bond? **(03 Marks)**
    b. Explain the key macro economic variables and their impact on stock market. **(07 Marks)**
    c. Vardhman Limited's earnings and dividends have been growing at a rate of 18 percent per annum. This growth rate is expected to continue for 4 years. After that the growth rate will fall to 12 percent for the next 4 years. Thereafter, the growth rate is expected to be 6 percent forever. If the last dividend per share was Rs.2.00 and the investor's required rate of return on Vardhman's equity is 15 percent, what is the Intrinsic Value per Share? **(10 Marks)**

5 a. What is breadth of market? How is it used? **(03 Marks)**
  b. Distinguish between CAPM and Arbitrage Pricing Theory. **(07 Marks)**
  c. What is RSI? From the information given below, compute the RSI of company X's share.

Day	1	2	3	4	5	6	7	8	9	10
Price	300	304	319	317	319	333	331	332	348	346

(10 Marks)

6 a. What is an efficient frontier? **(03 Marks)**
  b. Explain the Single Index Model proposed by William Sharpe. **(07 Marks)**
  c. The returns on the equity stock of Auto Electricals Limited and the market portfolio over a 15 year period are given:

Return on Auto Electrical Ltd (%)	10	15	18	14	16	16	18	4	-9	14	15	14	6	7	-8
Return on market portfolio (%)	12	14	13	10	9	13	14	7	1	12	-11	16	8	7	10

What is the beta for Stock A?

(10 Marks)

7 a. What do you mean by Portfolio Revision? **(03 Marks)**
  b. What is Random Walk Theory? What does it project in its weak from, semi-strong form and strong form? **(07 Marks)**
  c. Pearl and Diamond are the two mutual funds. Pearl has a mean success of 0.15 and diamond has 0.22. The diamond has double the beta of pearl fund's 1.5. The standard deviations of Pearl and Diamond funds are 15% and 21.43%. The mean return of market index is 12% and its Standard Deviation is 7. The risk free rate is 8%.
   (i) Compute the Jensen Index for each fund.
   (ii) Compute the Treynor and Sharpe indices for the funds. Interpret the results. **(10 Marks)**

8 ***Compulsory:***
   A Financial Analyst is analyzing two investment alternatives, stock Z and stock Y. The estimated rates of return and their chances of occurrence for the next year are given below:

Probability of Occurrence	Rates of Return (%)	
	Y	Z
0.20	22	5
0.60	14	15
0.20	-4	25

   (i) Determine expected rates of return, variance and standard deviation of Y and Z.
   (ii) Is 'Y' comparatively riskless?
   (iii) If the Financial Analyst wishes to invest half in Z and another half in Y, would it reduce the risk? Explain.

(20 Marks)

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