

**Code No: MB1635/R16****MBA III Semester Regular Examinations, Nov-2017****SECURITY ANALYSIS AND PORTFOLIO MANAGEMENT****Time: 3 Hours****Max. Marks: 60**

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*Answer Any FIVE Questions  
All Questions Carry Equal Marks  
Question No. 8 is Compulsory*

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1. a The investment process involves a series of activities starting from the policy formulation Discuss. 8M  
b Define risk and distinguish between systematic and unsystematic risk. 4M
2. a Prem is considering the purchase of a bond currently selling at Rs 878.50. The bond has 4 years to maturity with a face value of RS 1000 and 8% coupon rate. The next annual rate payment is due after one year. The required rate of return is 10%. 6M
  - i) Calculate the intrinsic value of the bond. Should Prem buy the bond
  - ii) Calculate the yield to maturity of the bond
- b How are multiple year holding stock prices estimated with two stage and three stage growth models? 6M
3. a Discuss the strong from of EMH with empirical evidence 6M  
b Explain the concept of Elliot Wave theory. 6M
4. a Define Markowitz diversification and also explain the statistical method used by Markowitz to reduce the risks 6M  
b The following table provides information regarding portfolio return and risk 6M

Portfolio	Expected return E(R )	$\sigma$
1	10	4
2	12	7
3	13	5
4	16	12
5	20	14

- i) The treasury bill rate is 5%. Which portfolio is best?
- ii) Would it be possible to earn 12% return which SD of 4%
- iii) If SD is 12%, what would be the expected return?

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5. a Explain the Jensen index of portfolio performance 6M  
 b The following three portfolios provide the particulars given below 6M

Portfolio	Average annual return	Standard deviation	Correlation coefficient Market and portfolio
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 %.

- i) Rank these portfolios using Sharp's and Treynor's methods.  
 ii) Compare both the indices.
6. a Explain the Sharp index model. How does it differ from the Markowitz model 6M  
 b Vijayl enterprise has a beta of 1.5. The risk free rate is 7% and the expected return on the market portfolio is 14%. The company pays a dividend of Rs. 2.50 ps per share and the investor expects a growth in dividend of 12 % per annum for many years to come. Compute the required rate of return on the equity according to CAPM. What is the present market price of the equity share assuming the computed return is the required return? 6M
7. a i) Determine the price of RS 1000 Zero coupon bond with yield to maturity of 18% and 10 years to maturity. 6M  
 ii) What is YTM of this bond if the price is Rs 220?  
 b An investor wants to analyse his portfolio using Markowitz or Sharp techniques. His portfolio consists of 25 different stocks. He is not aware of the bits of information needed to evaluate the portfolio. He wants to adopt a technique which requires minimum information. As a portfolio manager, which method would you advice him to use? Give your reasons. 6M
8. Given the ever growing demand for power in the industrial and domestic sectors, investors like to add power company stocks to their portfolio. The power grid stocks were listed on the stock exchange in 2014. The face value of the share was Rs 10. The stock price closed on NSE at Rs 108.60 with market capitalization of Rs 15374.51 crore on 7<sup>th</sup> March 2016. The earnings per share according to 2014-15 profit and loss account was Rs 5.83. In the financial years 2013-14 and 2014-15, it had paid a dividend of Rs 1.5 and Rs 1.75. The company's earnings can be expected to grow at a compounded annual growth rate of 12-13 percent. Given the high demand for power transmission, the growth is expected to continue for another three years. 12M  
 Mr Anand and his brother wants to include a midcap stock from power companies. Both feel they could add the power grid stock to their portfolios. Mr Anand requires a return of 15 percent while his brother, an ambitious investor, is looking at a 20 percent return. Both of them plan to hold the stock for another three years. Does the power grid stock suit the portfolio of the brothers?